

The Care Economy? Gender, Economic Restructuring, and Job Polarization in the U.S. Labor Market

American Sociological Review
78(3) 390–416
© American Sociological
Association 2013
DOI: 10.1177/0003122413487197
<http://asr.sagepub.com>



Rachel E. Dwyer^a

Abstract

The U.S. job structure became increasingly polarized at the turn of the twenty-first century as high- and low-wage jobs grew strongly and many middle-wage jobs declined. Prior research on the sources of uneven job growth that focuses on technological change and weakening labor market institutions struggles to explain crucial features of job polarization, especially the growth of low-wage jobs and gender and racial differences in job growth. I argue that theories of the rise of *care work* in the U.S. economy explain key dynamics of job polarization—including robust growth at the bottom of the labor market and gender and racial differences in job growth—better than the alternative theories. By seeing care work as a distinctive form of labor, care work theories highlight different dimensions of economic restructuring than are emphasized in prior research on job polarization. I show that care work jobs contributed significantly and increasingly to job polarization from 1983 to 2007, growing at the top and bottom of the job structure but not at all in the middle. I close by considering whether the care economy will continue to reinforce job polarization, or whether it will provide new opportunities for revived growth in middle-wage jobs.

Keywords

social inequality, care work, gender inequality, job polarization, work and occupations

The U.S. job structure has become increasingly polarized between the best and worst jobs. High- and low-wage jobs grew rapidly in the 1990s and 2000s, but middle-wage jobs grew slowly (Autor, Katz, and Kearney 2006; Wright and Dwyer 2003). Middle-wage jobs grew much more robustly in earlier economic booms in U.S. history, including the 1960s expansion that was so important to building the middle class (Wright and Dwyer 2003). Sociological scholarship has given surprisingly little attention to job polarization, however. Most research on the subject comes from economists, even though sociologists have long been concerned with divisions between good and bad jobs in the U.S. economy

(Bernhardt et al. 2001; Hodson and Kaufman 1982; Kalleberg 2011; Kalleberg, Reskin, and Hudson 2000; Kalleberg, Wallace, and Althausen 1981). Sociologists have recently made significant contributions to understanding rising wage and income inequality (Kim and Sakamoto 2008; Moller and Rubin 2008; Mouw and Kalleberg 2010; Western, Bloome, and Percheski 2008), but job polarization is a

^aThe Ohio State University

Corresponding Author:

Rachel E. Dwyer, Department of Sociology, 238
Townshend Hall, 1885 Neil Avenue, Columbus,
Ohio 43210

E-mail: dwyer.46@sociology.osu.edu

distinct feature of growing economic disparities in U.S. society that has implications not only for resource inequalities but also for disparities in labor processes and the organization of work.

The most prominent theory of job polarization within economics contends that unequal job growth resulted from effects of computerization that increased demand for high-wage jobs and deskilled middle-wage jobs, an elaboration of the skill-biased technological change approach that dominates economic theories of rising wage inequality (Autor et al. 2006). Institutionalists challenge skill-biased technological change accounts of job polarization by highlighting variation in job growth patterns across time and place that indicate social arrangements have been at least as important as technological change in shaping changes in job structure in the United States and Europe (Doussard, Peck, and Theodore 2009; Milkman and Dwyer 2002; Oesch and Menes 2011; Wright and Dwyer 2003). Yet despite their differences, both approaches fall short in explaining key features of job polarization, especially the strong growth of low-wage jobs and gender and racial differences in job growth, and leave open a number of pressing questions, including what if anything can be done to bridge the deepening trough between the highest and lowest paid jobs in the economy.

In this article I argue that some of the unanswered puzzles about job polarization can be explained by the growth of *care work* jobs, a different dimension of economic change than studies of economic restructuring typically emphasize. Care work is labor that contributes to the well-being or development of other people that is often face-to-face and requires skills in interaction and communication (England 1992). Care work jobs grew significantly over the period of job polarization, but research on care work has not considered its role in the changes to the job structure, while research on job polarization rarely focuses on the role of care work in the transformation of the U.S. economy. I argue that growth in care work jobs contributed significantly to job polarization at the turn of

the twenty-first century. I show that care work theories provide alternative mechanisms that explain several job polarization dynamics that prior research has struggled to explain, in part by focusing on the role of gender and racial inequality in structuring the U.S. labor market. Economic change in the new economy can be characterized in many ways: monikers like the knowledge economy, the creative economy, and the service economy are common lenses that shape what we notice and understand about the organization of the economy. I highlight that the new economy is also a care economy, with particular hazards and opportunities for the future of work and economic disparities in the United States.

THEORIES OF JOB POLARIZATION

Prior research on uneven job growth mainly explores the question of whether job polarization emerged because of technological change or because of changes in labor market institutions. These theoretical traditions are largely in competition with each other, but both have been unsuccessful in accounting for several crucial features of job polarization. I will argue that care work theories better explain these features.

Skill-Biased Technological Change

A number of economists argue that computerization produced job polarization due to the differential effects of computer technology on jobs with different skill levels. The original argument, developed in a large literature on rising wage inequality in the 1990s, held that computerization enhanced high-skill workers' productivity, creating growing demand for highly educated workers and increasing the wage premium for education (for a review, see Lemieux 2008). The emergence of job polarization in the 1990s challenged this view, because the skill-biased technological change theory could not explain the divergent trajectories of middle- and low-skill jobs—low growth in middle-wage jobs and high

growth in low-wage jobs (Card and DiNardo 2002).

In the 2000s, several studies attempted to account for both the growth of low-skill jobs and the decline in middle-skill jobs by extending the skill-biased technological change account to consider the effect of computerization across the entire distribution of skill. Autor and colleagues (Autor et al. 2006; Autor, Levy, and Murnane 2003) argue that technological effects on jobs vary along two dimensions of job skills: (1) routine/non-routine and (2) cognitive/manual (see also Goos and Manning 2007; Goos, Manning, and Salomons 2009). Routine jobs can be replaced by computer technology, but non-routine jobs cannot (at least under current technological conditions). Cognitive jobs are generally enhanced by computer technology, but manual jobs are not. Classifying jobs along both dimensions produces four categories, which Autor and colleagues argue closely align with the pattern of job polarization. Non-routine cognitive jobs, like the professions, are enhanced by computer technology, making them more productive and in demand and explaining job growth at the top of the employment structure. Routine cognitive jobs like clerical work and routine manual jobs like manufacturing are often deskilled or replaced by computerization, explaining the slow growth of middle-wage jobs. Non-routine manual jobs like low-skill services are neither easily replaced nor especially enhanced by computers. Because these jobs are typically low paid, they account for much of the growth at the bottom of the wage structure: they are not replaced by computers and thus growing, but are not enhanced by computers and thus remain low paid (Autor et al. 2003).¹

Even the revised skill-biased technological change account falls short in explaining crucial features of job polarization, however, including some features that prompted the revision in the first place.² At least four key issues remain unresolved.

First, the growth of low-skill jobs is still largely assumed rather than explained. The

decline of middle-wage jobs raised relative demand for low-wage jobs, but we have no explanation for where primary demand for those jobs came from. The growth of non-routine manual jobs is almost a residual—these jobs cannot be replaced by computerization, they have always been low paid, and so they grow at the bottom (Autor et al. 2006). Not being easily routinized may explain why these jobs have not been replaced, but not why they have grown faster than other jobs.

Second, and related, the low pay of non-routine manual jobs is also largely assumed rather than explained, further weakening the explanation of growth at the bottom of the wage structure. Non-routine manual jobs are in fact heterogeneous and some fall in the middle of the wage structure (e.g., some construction jobs). It therefore remains unclear why employment growth is more robust at the bottom than the middle for non-routine manual jobs.

Third, increasing wage returns to skill in the 1990s—when the strongest evidence for job polarization emerged—largely went to very highly educated workers with postgraduate degrees, rather than to workers with only a college degree (Autor et al. 2003). Jobs that require postgraduate degrees typically earn very high wages, yet research on job polarization shows that jobs grew strongly in the upper-middle range of wages, including many workers with only college degrees (Wright and Dwyer 2003). The historical development of job polarization thus appears to be out of step with the historical evolution of differential returns to skill.

Fourth, even the revised version of skill-biased technological change still overlooks the gendered and racialized structure of the U.S. labor market (Card and DiNardo 2002). The job polarization literature identifies important differences between male and female wage and job growth trends and is sensitive to how women's rising labor force participation affected wage trends (e.g., Autor et al. 2006, 2008; Goos and Manning 2007). Most of this reasoning focuses on how changing gender relations affected the supply of

available workers; it largely ignores how changing gender relations shaped economic restructuring by affecting demand for different types of jobs, organization of different types of work, and pay received for different skills.

Institutionalist Explanations of Job Polarization and Deindustrialization

A range of scholars, including sociologists, geographers, labor economists, and political scientists argue that the skill-biased technological change argument is hampered by an excessive focus on one single mechanism, thus overlooking political and institutional factors affecting the labor market. This work falls under a loose umbrella of what we may consider institutionalist analyses of labor markets because of their emphasis on the political and organizational structure of modern economies. Cross-national studies find variability in patterns of job growth in countries with quite similar economic foundations, suggesting that technological effects on skill are insufficient to explain change in job structures (Fernández-Macías 2012; Oesch and Menes 2011). Studies of job polarization in the United States find variability in job growth across metropolitan areas that may be linked to differences in labor market institutions across localities (Doussard et al. 2009; Milkman and Dwyer 2002; Sassen 2001).

Institutionalists also argue that changes in job requirements involve conflict and contestation rather than flowing directly from technical considerations, following in the tradition of Braverman's ([1974] 1998) work on deskilling. Changes in technology occur within organizations that have particular histories and structures that affect managers' and workers' power to negotiate change (Braverman [1974] 1998; Fernandez 2001). Institutionalists focus on the crucial role of deindustrialization in job polarization in the United States and elsewhere, analyzed as the result not only of technological change but also political realignments that disadvantaged unions and shifted the balance of power between capital and workers (Doussard et al.

2009; Harrison and Bluestone 1988; Kalleberg 2011; Osterman 2008; Wright and Dwyer 2003). Technological change sets important parameters for the evolution of job skill, but deskilling and degrading work is only one possible outcome—jobs can also be redefined to preserve sufficient skill to maintain decent wages—and institutional structures often determine which path is followed (Kalleberg 2011). In fact, job polarization has been less pronounced where economic policy has protected middle-wage jobs, maintained unions, and encouraged new industrial development rather than only service-sector growth (Fernández-Macías, Storrie, and Hurley 2012; Kenworthy 2008).

Institutionalist approaches to explaining job polarization have effectively challenged the argument that there is a single canonical explanation for job polarization in skill-biased technological change; this work demonstrates the importance of structural features of economic organization in addition to technological change. Yet institutionalist approaches overlook some of the same issues that challenge technology-based explanations of job polarization. With a strong focus on manufacturing, the growth of low-wage service jobs is largely taken for granted, and again, ends up as a residual leftover after deindustrialization decimated the middle (for a notable exception, see Sassen 2001). Institutional approaches do raise questions about the assumption that non-routine manual work is necessarily low paid, but this work focuses much more on jobs that disappeared through deindustrialization rather than growing jobs. Institutional theories also provide few clues to the relatively robust growth among upper-middle-wage jobs. Finally, although institutional theories note gender and racial differences in job growth and sometimes link these differences to employment policies that differentially affect women and men (e.g., availability of subsidized child care), this work pays little attention to how the gender and racial structuring of the labor market itself produces different patterns of job growth (Fernández-Macías et al. 2012; Wright and Dwyer 2003). I thus turn to theories of

care work, which take gender and racial labor market dynamics as their central focus.

CARE WORK: A NEGLECTED SOURCE OF JOB POLARIZATION

Care work jobs provide a particular type of service that contributes to the health, well-being, or development of other people (England 1992; Duffy 2005). Care is different from other services in that it involves labor that was once provided mainly within families and kin networks rather than in market exchange. Care often requires more relational and interactive skills than do other service jobs, skills that are highly associated with women's work. These features of care work set it apart from other jobs, including other services. Perhaps most important, the historical development of care work jobs has been bound up with changes in gender relations. Care work theories thus predict polarized job growth for reasons other than the technological change and institutional restructuring emphasized in previous research. Like institutionalist theories, care work theories argue that technological change alone cannot explain economic trends; rather, cultural and political influences also shape the demand for and rewards of jobs. Unlike institutionalist theories, care work theories depict changes in the U.S. labor market as highly influenced by gender and racial dynamics and suggest that polarized job growth may have developed, in part, because of changes in the social organization of care in U.S. society.

The provision of care work is further complicated because it has properties of a public good, another distinctive feature of caring labor. As Folbre (2002, 2006) argues, caring labor produces wide benefits even for those who do not provide it and do not bear its costs—the whole society benefits from well-raised children or a healthy population, for example. Because some individuals who benefit from care work can avoid paying for it, markets tend to undercompensate (and underproduce) care work; indeed, low-skill care

work jobs collect some of the lowest wages in the U.S. economy, and even high-skill care work jobs often receive lower pay than similarly skilled jobs outside of care work (England, Budig, and Folbre 2002). Government investment can raise compensation for care work by spreading out the costs of care to a wider set of beneficiaries, but care work in the United States is only partially state-subsidized and the rise of neoliberal policies has pushed some types of care into the market and contributed to pressures to keep wages down even in the public sector (Duffy 2011).³

The wage gap between female-dominated care work and male-dominated jobs is further exacerbated by gender discrimination. Scholars of care work argue that cultural ideas about the people expected to do a particular job affect the values attached to different skills; this follows Braverman's ([1974] 1998) work on deskilling but focuses on female-dominated jobs rather than the male-dominated manufacturing jobs he highlighted (Duffy 2011; England 1992; Steinberg 1990). The skills involved in caring labor have been ignored and devalued because standard measures of skill, developed for traditionally male occupations, undervalue the types of skills required in care jobs, especially relational skills (England 1992; Steinberg 1990). Care work jobs are even more likely than other female-dominated jobs to be devalued because of their association with mothering and the expectation that care is not so much a skill as a natural component of a woman's character (England et al. 2002). Even scholars who challenge the theory of gender devaluation expect that women's greater responsibilities for care work result in gender differences in labor market behavior that lead women to prefer jobs that have less job-specific human capital and therefore pay less than the jobs men typically hold (Tam 1997).

With this conceptualization of the distinctiveness of caring labor, care work scholars highlight dimensions of economic change often overlooked in other research, including the historical process through which care jobs were incorporated into the U.S. labor market and the methods care workers have used to

achieve greater labor market power. Most prior research on care work emphasizes the suppressed compensation of all care work jobs across skill, but there were also polarizing pressures that divided most care work jobs into either very low-wage labor or (semi-)professional higher-wage labor as care was increasingly provided in markets.

Labor market care work grew as a result of two interrelated but distinct transformations in the social organization of care: women's increasing labor force participation, which resulted in families increasingly purchasing care services, and the rationalization and institutionalization of care as best handled by nonfamilial experts and organizations, a Weberian process that accompanied changing standards and technologies of care (Duffy 2011; Sassen 2011). Rising economic inequality and an aging population also fueled this trend; affluent and aging families increasingly purchased care labor provided by low-wage workers instead of producing it themselves (Milkman, Reese, and Roth 1998; Moller and Rubin 2008; Sassen 2001). Duffy argues that two types of care work jobs grew due to these pressures—nurturant care work and reproductive labor. Nurturant care work includes jobs in teaching, child care, and health care that demand skills in relating to people and knowledge about human bodies and capacities and often involve face-to-face interaction. Reproductive labor jobs often involve interaction too, but they entail much more physical labor, such as cooking and cleaning. The concept of reproductive labor originated in Marxist economics attempts to understand women's unpaid work in the home as required to maintain and reproduce the capitalist workforce, but later thinkers developed the idea to describe the manual care of maintaining bodies and homes as distinct from more relational nurturant care work (Glenn 1992; Secombe 1974). Some scholars restrict their conceptualization of care work to nurturant jobs, but Duffy (2005, 2007) warns that this ignores the importance of manual labor in care and privileges the kinds of jobs held by white women over the jobs held by minority women.

The division between nurturant and reproductive labor jobs already suggests polarizing pressures in care work job growth, and these polarizing tendencies were reinforced as care workers achieved labor market power more often through professionalization rather than unionization (Ravitch 1974; Starr 1982). Care workers faced a number of obstacles to unionization, including male-dominated unions, cultural beliefs (even among care workers) that unionization was incompatible with devotion to the people receiving care, and structural obstacles such as large numbers of care workers being excluded from fair labor legislation (especially private household workers) (Duffy 2011).⁴ Unionization also became a less viable strategy in recent decades with attacks on labor rights and declining union power (Lopez 2004).

Professionalization strategies require a delimitation of skilled and unskilled labor that divided care workers and advantaged some workers at the expense of others (Weeden 2002). A key example is nursing, where registered nurses worked to improve their position by cutting off the lowest-skilled parts of their work and limiting access to the highest-skill technical work (Duffy 2011). These divisions were often reinforced and naturalized by racial and ethnic divisions: professional care work was disproportionately done by white women, and nonprofessional care work was disproportionately done by racial and ethnic minorities. As a result, the lowest-wage care work jobs have little labor market power to achieve higher wages. At the same time, skilled female care workers faced obstacles to fully professionalizing their work, due to competition with male-dominated professions, and often stalled at semi-professional status (e.g., RNs compared to doctors) (Duffy 2011). Roadblocks to professionalization reinforced the other factors that suppress the pay of skilled care work. The professional strategies through which care workers sought labor market power also left them vulnerable to managerial degradation via cost-cutting; workers who might otherwise have shared interests were divided (Duffy 2011).

The division between high- and low-wage care work jobs in some ways parallels the division between cognitive and manual work in

the skill-biased technological change argument, but care work theories emphasize that this resulted from a particular political and cultural definition of care work and its status as a public good, rather than from the technical requirements of care. As a result, care work theories offer more explicit explanations for some of the puzzles concerning the patterns of job polarization that prior research has left unresolved.

Why are jobs growing at the bottom of the wage structure? Care work theories argue that low-wage care jobs grew because of women's increasing labor force participation and changes in the organization of care—which produced a direct source of demand for low-wage jobs—rather than simply assuming these jobs grew because they were not replaced by computer technology (England 2005; Folbre 2006). Three factors ensured the incorporation of care work into the labor market would result in growth in very low paid jobs: (1) care work is an undercompensated public good, (2) some care work jobs achieved labor market power through professionalization that left many low-paid care workers with little labor market power, and (3) cost-cutting efforts in the public sector redefined direct care as menial, unskilled work.

Why are upper-middle-wage jobs growing along with low- and high-wage jobs? Care work is polarized between jobs with more or less labor market power. Many higher-wage care work jobs are not the highest paid professions in the economy, because care is a public good devalued by its association as women's work. Female-dominated care work jobs (e.g., teaching) tend to receive wages in the upper-middle range and male-dominated or (increasingly) gender-balanced care work jobs (e.g., doctoring) receive wages closer to the top (England et al. 2002). Growing demand for caring labor combined with the mechanisms that affect its pay lead to the expectation that upper-middle-wage jobs will grow robustly, especially for women.

Why is job growth different for men and women, and for different racial groups? Care work theories bring gender and racial inequality centrally into explanations of how the transformation of the U.S. economy contributed to job polarization. Understanding the role of

care work in job growth is key to understanding gender and racial dynamics in job growth: care work has been a crucial element of economic restructuring and is disproportionately performed by women and racial minorities.

Did non-routine manual jobs grow in the middle of the wage structure as well as at the bottom? Care work theories challenge the assumption that non-routine manual work is necessarily low paid. Care work scholars argue that jobs providing the most direct care are culturally devalued because they are considered women's natural and unskilled work, undercompensated because they provide a public good, and have little labor market power to achieve higher wages. Other similarly low-education jobs in manufacturing and construction have higher pay than care work in part because they are male-dominated occupations that were historically unionized or in unionized sectors, but care work may provide more opportunities for growth in the middle in the future.

HYPOTHESES

I expect the rise of care work is a major overlooked factor in job polarization. I do not argue that care work (or any one factor) is the single explanation for the rise of job polarization; rather, I remain within the institutionalist perspective that holds job polarization is due to multiple intersecting forces. Care work theory and research lead to two hypotheses about care work and job polarization.

Hypothesis 1: care work contributed significantly to job polarization. Care work jobs grew significantly and were polarized between high- and low-wage jobs from the 1980s to the 2000s. This leads to two corollary expectations addressing the puzzles remaining from previous research.

Hypothesis 1a: care work contributed significantly to growth in low-wage jobs. Women's increased labor force participation and changes in the social organization of care spurred demand for services such as housecleaning, food preparation, and health care aides. These jobs earn low wages because they are devalued as women's work and disadvantaged by low labor market power.

Hypothesis 1b: care work contributed significantly to growth in upper-middle-wage jobs. Women's increased labor force participation and changes in the social organization of care spurred demand for health and educational care jobs such as nursing and teaching, which require a college degree. Skilled care work is often less well-paid than other similarly skilled professions because of public good limitations and gender devaluation. This suggests skilled care work grew in the upper-middle of the job structure as well as at the very top.

Hypothesis 2: care work contributed significantly to gendered and racialized patterns of job polarization. I expect care work was a major contributing factor to different patterns of job growth by gender and race. This leads to two corollary expectations addressing the other two puzzles remaining from previous research.

Hypothesis 2a: care work contributed significantly to job growth for women and minority workers. Care work was one of the major drivers of job growth for women workers, white and non-white, but care work was less important for men, thereby contributing to differential patterns of job growth for women and men. Care work is also highly differentiated by race because minority women and men disproportionately work in low-paying care work jobs, and white women and men dominate high-paying care work jobs.

Hypothesis 2b: some middle-wage non-routine manual jobs grew in the middle of the wage distribution. The low pay of non-routine manual care developed due to cultural and institutional factors that affected the valuation of different forms of work, not because non-routine manual labor necessarily receives low pay. It is thus likely that some male-dominated non-routine manual jobs grew in the middle of the job wage structure because they were subject to different cultural and institutional arrangements from care work.

DATA AND MEASURES

Data

I used the Current Population Survey (CPS) annual out-going rotation group (ORG) files,

the main source for analyses of job polarization and wage inequality in the United States (Autor et al. 2003; Kim and Sakamoto 2008; Mouw and Kalleberg 2010). Under the auspices of the U.S. Bureau of Labor Statistics (BLS), the survey collects detailed wage data for a large sample of households. I used extracts prepared by the National Bureau of Economic Research for 1983 through 2007 and restricted the sample to jobs held by employees age 18 to 65 years, as do other studies using CPS employment data. The CPS does not collect earnings data for the self-employed comparable to data for employees; it is thus difficult to create similar wage estimates for this segment of the labor force. The analyses apply the BLS weight constructed for the earnings sample of the ORG.

Measures

I defined jobs as cells in an occupation by industry matrix, following similar definitions in prior work on the U.S. job structure (e.g., Cohen and Huffman 2003; England, Reid, and Kilbourne 1996; Wright and Dwyer 2003). Cross-classification of occupation and industry captures variation in job circumstances better than occupation alone because of significant variability in details of work tasks and requirements across sectors. Industrial sector still determines much about jobs' skills, earnings, and work conditions, even within occupations (Tomaskovic-Devey and Skaggs 2002). Inequality has increased within occupational categories since 1980, and some within-occupation inequality may be due to between-industry differences (Kim and Sakamoto 2008; Mouw and Kalleberg 2010).

Occupations. The CPS follows the Census coding scheme for occupations, which is adjusted over time as the employment structure changes. During the 1983 to 2007 period, the CPS had two coding regimes—one in the 1980s and 1990s based on the 1980 Census (with a few changes in 1990) and another starting in 2000. I used a Bureau of Labor Statistics crosswalk to make the 2000 occupational

categories comparable to the 1980s/1990s categories (Meyer and Osborne 2005). To limit the number of small cells, I aggregated occupations into about 100 categories instead of the more than 300 in the BLS scheme.

Sectors. The coding scheme for industry changed much less over time than did the scheme for occupation. I coded industries into 23 categories. The 23-category classification was based on the standard 22-category scheme but split “business and repair services” into two separate sectors.

Care work. I defined care work jobs as all nurturant and reproductive labor occupations in any industry. Care work jobs are defined as occupation-by-industry cells, as in the definition of jobs overall, and for the same reason that there are significant wage differences between care work occupations in different industries, but in this case I selected only occupations that involve caring tasks, following England (1992) and Duffy (2005, 2007).⁵ These classifications were developed using *Dictionary of Occupational Titles* (DOT) data about job tasks and skills performed in different occupations. Nurturant care work involves direct labor to enhance the health, well-being, or development of other people, such as in health care, teaching, child care, and elder care. Nurturant care work is generally performed face-to-face and requires relational skills such as listening, communicating, and teaching. Reproductive labor includes jobs that support operations of daily life such as food service, domestic service, and house-keeping. Reproductive labor jobs involve more physical labor and less interaction than do nurturant care jobs. For the main analyses I combined all care work jobs; in supplemental analyses I separated nurturant and reproductive labor jobs, and I report the results when relevant. Table A1 in the Appendix lists the detailed occupations included in the care work classifications. Care work occupations are most common in service sectors, including health services, personal services, and educational services, but appear in many other industries as well.

Job median wages. I measured job earnings using hourly wages, which for salaried workers is weekly earnings divided by usual hours worked per week. I converted earnings into constant dollars using the standard Bureau of Labor Statistics CPI-U-X1 series. I calculated job median earnings using data from all years in the analysis period. I used median instead of mean earnings to avoid concerns about top-coding in the CPS, and to limit the effect of outliers on wage calculations. Studying medians also has the advantage of focusing attention away from growth in top wages, capturing what is happening in the majority of the job structure. Combining years creates a very large sample for analysis, making estimates of job median wage more valid and reliable than those using a single year. This procedure also minimizes the effect of historical changes in job wages. If earnings change in a cell over the period of analysis, the job’s rank-order position in the hierarchy of job quality is based on a weighted average of earnings over the period (weighted by the number of people in the job in each year of the CPS sample). I conducted a number of sensitivity analyses calculating wages using 1983 data only, and measuring employment weighted by hours worked; in each case I found a similar pattern of results.⁶

Following most recent studies of job polarization and wage inequality, my estimates of job median wages exclude imputed data on earnings calculated by the Census Bureau for the Current Population Survey (Autor et al. 2006; Hirsch and Schumacher 2004; Mouw and Kalleberg 2010). Missing data on earnings increased in the CPS over the analysis period, from about 14 percent of the sample in the 1980s to over 30 percent of the sample in the 2000s. The CPS imputes missing earnings data, but the imputation procedure uses a highly aggregated occupation coding (only 14 categories); many workers’ wages would thus be misallocated with the more detailed occupational coding used here. Because my analysis ranks occupations at a fairly aggregate level (as I discuss in the next section), missing data are not as serious as for other studies that involve more detailed

occupational comparisons (cf. Mouw and Kalleberg 2010). Indeed, I conducted sensitivity analyses including imputed data and the overall pattern of results was largely the same. I excluded imputed earnings from the main analysis to retain consistency with other studies of job polarization.⁷

Analytic Strategy

In the main analysis, I followed Wright and Dwyer (2003) and grouped jobs into quintiles of median job wage and compared growth across quintiles, a transparent method of identifying job polarization between the best and worst jobs. First, I rank-ordered jobs from the lowest to highest median hourly wage and then grouped them into quintiles, each containing about 20 percent of employment in 1983. I then calculated net change in the number of jobs in each quintile from 1983 to 2007, indicating where job growth was concentrated. All estimates of job size and net change in employment levels include observations missing wages but with otherwise complete data on employment status, occupation, and industry. I did not drop small cells because they contributed little to the overall pattern of change, and any errors introduced by the small sample in estimates of wages or employment levels were likely randomly distributed (England et al. 1996). Sensitivity analyses dropping very small jobs showed almost identical patterns of results. Table 1 reports examples of large jobs in each quintile.

I analyzed patterns of job growth separately by sex and race as well as by occupational and sectoral groups as defined earlier. I constructed consistent racial categories of non-Hispanic white, non-Hispanic black, non-Hispanic other race, and Hispanic all races (using the Census language). The category non-Hispanic other race is heterogeneous but largely made up of Asian populations, which were not separately identified in the CPS-ORG before 1989.

I also conducted regression analyses of job wages on job growth to test whether analyses were sensitive to the definition of quintiles

and to facilitate other sensitivity analyses. Job polarization can be expressed in a regression equation as a nonlinear quadratic effect of wages on employment growth. I expected a U-shaped quadratic in which the highest levels of job growth occurred in jobs with the highest and lowest wages, with lower levels of growth for middle wages (a linear effect, in comparison, would show job growth increasing or decreasing steadily along the whole range of wages). I modeled a quadratic effect by including continuous measures of job wage and job wage squared, as in the following equation (Goos and Manning 2007):

$$\Delta n_j = \beta_0 + \beta_1 w_j + \beta_2 w_j^2,$$

where Δn_j is the change in log employment in job j , w_j is the log median wage of job j , and w_j^2 is the squared log median wage of job j . I logged measures of employment levels and wages to dampen the influence of extreme values and reduce skew. I also conducted analyses of change in logged employment shares for different categories of jobs. All regressions were weighted by the size of the job in 1983, so they estimate the job's effect on overall levels of employment growth (rather than growth at the level of individual jobs), which varies considerably by the size of the job (Goos and Manning 2007; Kim and Sakamoto 2008). I estimated the regression with robust standard errors because there is heteroscedasticity in the residuals even after weighting by job size.

One limitation here is this analysis excludes second (or third or more) jobs, as do most analyses of job polarization and earnings inequality. For individuals who hold more than one job, the CPS collects most data for the "primary" job—defined as the job where a worker typically works the most hours—and did not regularly collect data on second jobs until 1994. Still, multiple jobholding is fairly uncommon, with only about 5 to 6 percent of workers in the CPS reporting multiple jobs in a given year. Almost all multiple jobholders hold only two jobs (92 percent in 2009) and about 18 percent of second

Table 1. Large Jobs in Quintiles of Job Median Wages, 1983 to 2007

Quintile	Median Wage	Occupation	Industry
Lowest	\$6.59	Wait servers	Retail trade
	\$6.84	Cooks	Retail trade
	\$8.23	Health aides	Other medical service
2nd	\$10.26	Operators	Nondurable manufacturing
	\$10.67	Assemblers	Durable manufacturing
	\$10.76	Secretaries	FIRE
3rd	\$12.92	Bus and truck drivers	Transportation
	\$12.87	Carpenters	Construction
	\$11.34	Secretaries	Other professional service
4th	\$16.12	Elementary teachers	Educational service
	\$16.64	Police and fire	Public administration
	\$15.47	Sales reps.	FIRE
Top	\$19.07	College teachers	Educational service
	\$23.84	Managers	Durable manufacturing
	\$27.44	Lawyers and judges	Other professional service

Note: Wages reported in 2000 dollars. FIRE = finance, insurance, and real estate.

jobs involve some form of self-employment (Hipple 2010). I conducted supplemental analyses including second jobs for the 2000s expansion (the only expansionary period with full data on second jobs) and results were highly similar.

This approach captures net job expansion, thereby representing the combined effect of the emergence of new jobs and the elimination of old jobs. Note that net change is different from the number of job openings. Even a declining job category may have many openings as workers retire or move on to other jobs.

RESULTS

Pattern of job growth. To understand the role of care work in job polarization, it is useful to start with a view of the overall pattern of job growth. Figure 1 shows net change in the number of jobs in five quintiles of employment, ranked by job median wage in 1983. Consistent with prior research, employment growth from the beginning of the 1980s

expansion to the end of the 2000s expansion was clearly polarized between the highest and lowest wage jobs. Jobs grew strongly in the lowest and highest quintiles but little in the second and third quintiles. The pattern was weighted to the top, with more growth in the top quintile than in the bottom quintile, and significant growth in the fourth quintile, about double the growth in the second quintile.

Job polarization occurred for both men and women, but in different patterns that have received little attention in prior research. Figure 2 shows job growth by gender for 1983 to 2007; we see a common polarization experience but with two key gender differences in the pattern of growth. First, the trough in the middle is deeper for women than for men, with almost no growth for women in the second and third quintiles, whereas jobs held by men grew somewhat more robustly in those quintiles. This growth pattern differs from the underlying distribution of men and women across quintiles (where women skew toward the bottom quin-

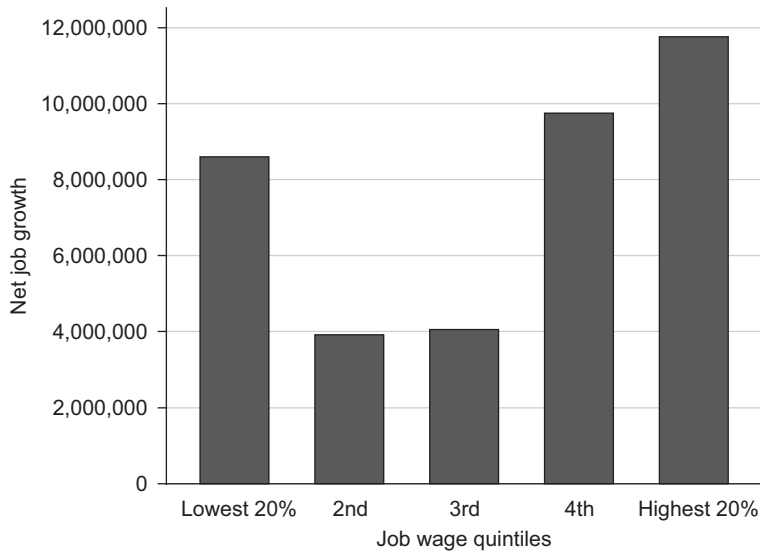


Figure 1. Job Growth by Job Wage Quintile, 1983 to 2007

Source: CPS data.

Note: Job quintiles generated from job median wage.

tiles and men skew toward the top); it is thus not simply a reflection of where men and women are concentrated in the employment structure. Discussions of declining middle-wage jobs in the U.S. economy highlight the devastating impact of deindustrialization, which disproportionately affected male workers, but women's employment prospects were also diminished in the middle. Second, women saw more top-heavy job growth than did men, especially more growth in the fourth quintile. These findings are consistent with research showing that job polarization affected both men and women (Autor 2010) and with research on wage inequality over this time period showing that women made gains relative to men overall, but inequality grew within gender, especially among women (McCall 2007, 2008).

Care work and job polarization. I have argued that research on care work may help resolve some unsettled questions about job polarization, including the gender differences in job growth illustrated in Figure 2. I find support for most of my expectations derived from care work theories.

Care Work Contributed Significantly to Job Polarization

Care work jobs grew substantially from 1983 to 2007, and as Hypothesis 1 predicted, they grew in a strongly polarized pattern. Figure 3 shows the polarized pattern of employment growth in care work jobs, concentrated at the top and bottom of the job wage structure. Care work job growth was more heavily weighted to the bottom quintile than to the top, with strong growth in the fourth quintile and weaker growth in the second and third quintiles. Within care work jobs, nurturant jobs were split between the top and bottom, although weighted to the top, and growth in reproductive labor jobs was almost entirely in the bottom quintile. Reproductive labor jobs made up 60 percent of the growth in care work in the bottom quintile, and growth in the other quintiles was almost all from nurturant jobs.

Regressions of job wages on job growth show similar patterns of results for care work, as well as for jobs overall and for men and women, indicating that results are robust beyond the definition of job wage quintiles.

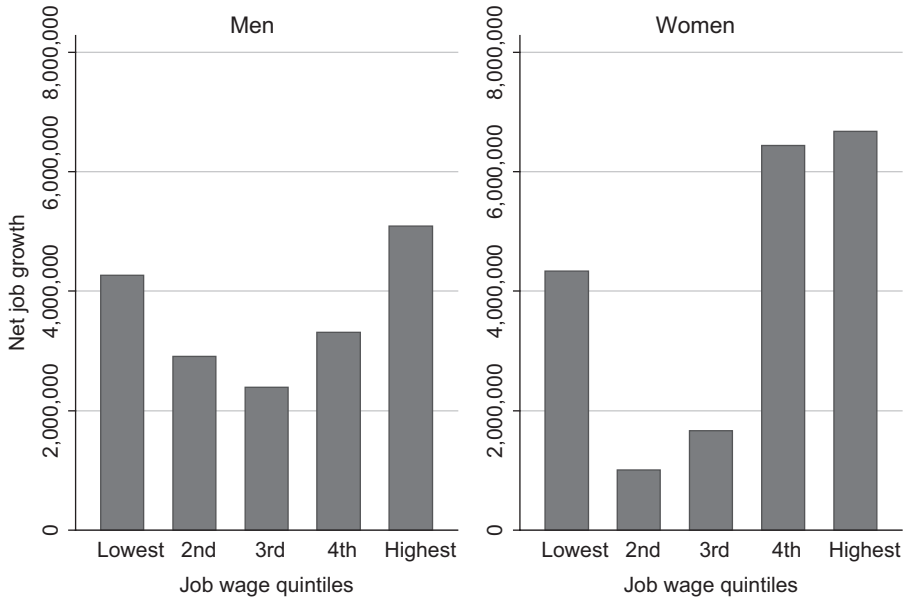


Figure 2. Job Growth by Job Wage Quintile, Men and Women, 1983 to 2007
Source: CPS data.
Note: Job quintiles generated from job median wage.

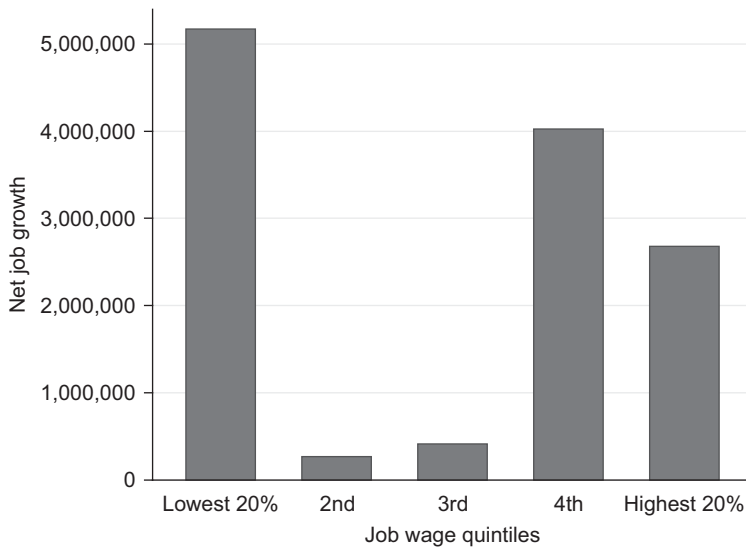


Figure 3. Growth in Care Work Jobs, 1983 to 2007
Source: CPS data.
Note: Job quintiles generated from job median wage.

Table 2. Regression of Job Median Wage on Change in Employment Level

	All	Men	Women	Care Jobs
Job median wage	-2.180 (.002)	-2.538 (.003)	-2.876 (.003)	-1.419 (.004)
Job median wage squared	.475 (.000)	.475 (.001)	.696 (.001)	.341 (.001)
Constant	2.545 (.003)	3.544 (.004)	3.000 (.003)	1.792 (.005)

Note: Analyses are weighted by the size of the job in 1983. Dependent variable is change in log employment level; independent variables are the log of job median wages and the square of log median wages. All coefficients are significant at the $p < .001$ level.

Table 2 shows polarized job growth in all analyses, with the linear term for wages negative and the quadratic term positive. The downward sloping part of the quadratic term contains jobs with a substantial portion of workers for each group, as the foregoing graphs would indicate. Both men and women experienced polarized job growth over this period, but in the different pattern discussed earlier. The curve for men is more U-shaped, with the inflection point at \$14.46, whereas the curve for women is more J-shaped, with an inflection point at \$7.89. (The inflection point is the bottom of the curve, defined as $\beta_1 / -2 \beta_2$ and converted to wages from log wages by taking the exponent.) Men's growth was thus more weighted toward the bottom, and women showed a more top-heavy growth pattern. Care work job growth is highly congruent with job growth for women overall, being similarly polarized and having an inflection point at \$8.00. This similarity reinforces the importance of care work for women's job prospects.

Care work also grew as the corollaries to Hypothesis 1 predicted, accounting for the strong growth at the bottom and upper-middle of the wage structure, which previous research has not adequately explained. As Hypothesis 1a predicted, care work jobs contributed more to growth in the bottom quintile from 1983 to 2007 than did any other occupational group. Care work jobs contributed 60 percent of the growth in the bottom quintile, making up a large majority of the expanding low-wage labor (calculated comparing results in Figures

1 and 3). This is consistent with care work theories stressing the importance of care in the transformation of the U.S. economy. These jobs include child care, elder care, and personal care for sick people as well as cleaning and cooking jobs. Nurturant labor jobs, such as child care workers and health care aides, made up about 20 percent of total growth at the bottom; reproductive labor jobs, such as domestic service and food service, made up over 40 percent of total growth at the bottom. The remainder of growth in the bottom quintile came from other service jobs and clerical work. Some scholars describe interactive service work as requiring many of the same skills as care work, which suggests growth in other service jobs may be part of the rise of care in the U.S. economy (Sherman 2007). The growth in clerical work makes up a smaller percentage than do the others (only about 10 percent of growth at the bottom), but it may be significant because these occupations are female-dominated and often entail routine cognitive work, which is particularly susceptible to replacement and downskilling by computerization (Autor et al. 2003; Goos and Manning 2007). Indeed, clerical work did decline significantly in the middle quintile, consistent with Mouw and Kalleberg's (2010) finding that a decline in secretarial work contributed to rising between-occupation wage inequality. Still, the growth of care work and interactive service work far outpaced growth in clerical jobs, supporting the argument that even the revised skill-biased technological change theory better explains growth at the top than growth at the bottom.

Care work jobs also grew strongly at the top, especially in the fourth quintile, as Hypothesis 1b predicted. Care work accounted for over 40 percent of job growth in the fourth quintile, including allied health professions, elementary teachers, and secondary teachers. Care work jobs made up about 20 percent of growth in the top quintile, including physicians, registered nurses, and some postsecondary instructors. Care work clearly contributes to the top-heavy pattern of job polarization, although with growth divided between the top two quintiles. Jobs in the fourth quintile generally require a college degree, and these jobs grew even as increasing wage returns to education shifted to workers with postgraduate degrees at the very top of the wage structure. These findings are consistent with care work theories that expect rising demand for professional and semi-professional care work due to changes in the social organization of care and expect this demand is concentrated in the upper-middle range of wages because of the status of skilled care work as a public good disproportionately held by women.

Care work also became more important to job polarization over time. Care work jobs grew in a polarized pattern across all three expansions in the 1980s, 1990s, and 2000s, but care work increased as a percentage of job growth from the 1980s to the 2000s, supporting the expectation that rising demand for care work contributed to growing job polarization. The share of job growth attributable to care work increased by more than 20 percentage points in the bottom quintiles and grew by about 15 percentage points in the fourth and top quintiles.⁸ Care work made up 56 percent of growth in the bottom quintile in the 1980s, 63 percent in the 1990s, and 74 percent in the 2000s (author's calculations). In the fourth quintile, care work increased from 23 to 38 percent of growth from the 1980s to the 2000s; in the top quintile, it increased from 13 to 27 percent of growth. This pattern of results is consistent with theories that rising demand for care work resulted from the movement of some caring labor from family to market provision, women's increasing

labor force participation, and the professionalization and rationalization of care in modern economies. Care work job growth clearly contributed significantly to job polarization, and in patterns that support expectations that demand for low-wage and upper-middle-wage jobs was driven in part by changes in the social organization of care.

Care work jobs also became an *increasing share* of jobs in the top and bottom quintiles, with higher growth rates than other jobs in those quintiles. This provides further evidence that care work contributed significantly to job polarization, especially to high growth at the top and bottom of the employment structure. Table 3 reports care work job growth along a range of measures, including change in employment shares. The initial distribution of care in 1983 was polarized and then care work became more polarized over time as the care work employment share increased in the bottom and top two quintiles by more percentage points than in the middle quintiles (comparing the share of care work jobs in 1983 to the share in 2007). The care work employment share increased from 48 to 52 percent in the bottom quintile, 23 to 30 percent in the fourth quintile, and 15 to 18 percent in the top quintile. A change in employment share indicates job growth disproportionate to the job's initial distribution across the wage structure. Indeed, care work jobs had a higher growth rate than other jobs at the top and bottom by a significant margin. In the bottom quintile, care work jobs grew 65 percent and other jobs grew 40 percent (a differential of 25 points); in the fourth quintile, care work jobs grew 105 percent and other jobs grew 45 percent (a differential of 60 points); and in the top quintile, care work jobs grew 107 percent and other jobs grew 65 percent (a differential of 42 points). Care work's increasing employment share in the bottom and top quintiles (see Table 3) highlights its growing weight and suggests it may become even more significant during future job expansions.

In contrast, care work job growth was less significant in the second and middle quintiles, although it did not see a precipitous decline

Table 3. Job Growth across Job Wage Quintiles, Various Measures for All, Care Work, and Other Jobs, 1983 to 2007

Measure	Jobs	Lowest Quintile	2nd Quintile	3rd Quintile	4th Quintile	Highest Quintile
Number of jobs in 1983	All	16,497,277	16,488,949	16,517,539	16,475,589	16,462,867
	Care work	8,004,485	2,150,624	867,309	3,837,711	2,498,392
	Others	8,492,792	14,338,325	15,650,230	12,637,878	13,964,475
Number of jobs in 2007	All	25,098,946	20,406,250	20,567,797	26,226,053	28,222,969
	Care work	13,176,775	2,418,829	1,281,094	7,862,914	5,176,129
	Others	11,922,171	17,987,421	19,286,703	18,363,139	23,046,840
Share of jobs in 1983	Care work	48%	13%	5%	23%	15%
	Others	51%	87%	95%	77%	85%
Share of jobs in 2007	Care work	52%	12%	6%	30%	18%
	Others	48%	88%	94%	70%	82%
Net change	All	8,601,669	3,917,301	4,050,258	9,750,464	11,760,102
	Care work	5,172,290	268,205	413,785	4,025,203	2,677,737
	Others	3,429,379	3,649,096	3,636,473	5,725,261	9,082,365
Growth rate	All	52%	24%	25%	59%	71%
	Care work	65%	12%	48%	105%	107%
	Others	40%	25%	23%	45%	65%
	Care – Others	25	–13	25	60	42
Percent of growth	Care work	60%	7%	10%	41%	23%
	Others	40%	93%	90%	59%	77%

Note: “Others” includes all jobs except care work jobs.

like so many other middle-wage jobs. Despite being such a high growth job category, care work actually declined in the second quintile: the care work growth rate was 13 points lower than for other jobs, and the care work employment share fell from 13 to 12 percent as a result. Care work did become a larger share of middle quintile jobs and also had a higher growth rate than did other jobs in the middle quintile (with a differential of 25 points, the same size as the differential in the bottom quintile). However, the middle quintile accounted for the smallest initial share of care work jobs of any quintile, so this higher growth rate worked on a small base of jobs. In the middle quintile, the care work employment share increased by one percentage point but contributed only 10 percent to total growth. Taking the second and middle quintiles together, care work’s share remained essentially stable in the lower middle of the job structure (with a decline of one percentage point in the second quintile and an increase of one percentage

point in the middle quintile), while increasing in the top and bottom quintiles. Care work job growth in the middle quintile is important, however, given that so many other jobs declined precipitously in the second and middle quintiles. This is suggestive evidence that care work may provide possibilities for reviving job growth in the middle. To do so, care work in the middle quintiles would need to grow at much faster rates to become a significant share of middle-wage jobs in the future. I will highlight evidence of possibly increased care work job growth in the middle quintile later in the discussion.

Care Work Contributed Significantly to Gender and Racial Differences in Job Polarization

As Hypothesis 2 predicted, care work jobs were a very significant source of job growth for women of all races—much more so than for men—and these jobs were divided by

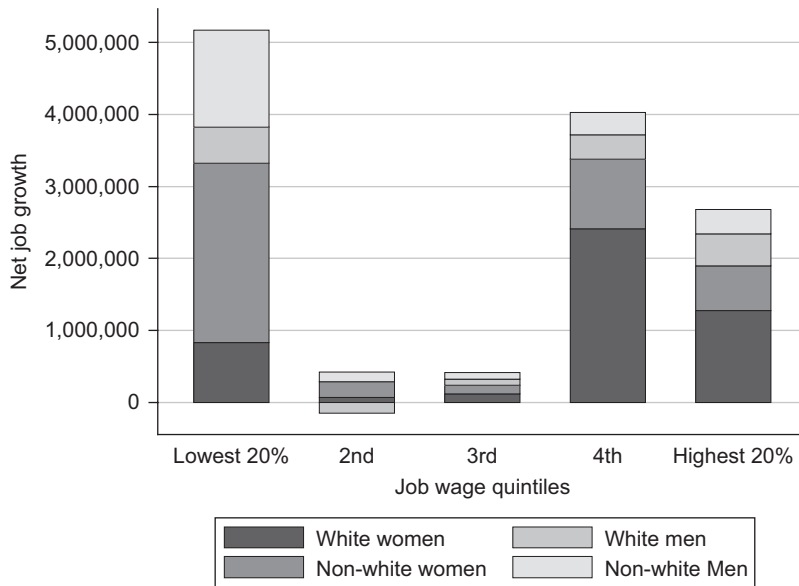


Figure 4. Growth in Care Work Jobs by Gender and Race, 1983 to 2007

Source: CPS data.

Note: Job quintiles generated from job median wage.

race. The best care work jobs concentrated among white women and men; the worst care work jobs concentrated among racial minorities, especially black and Hispanic women. Figure 4 shows growth in care work from 1983 to 2007 like in Figure 3, but this time separated by gender and race. The two darker grey portions of the bars show care work job growth for white and non-white women; the two lighter grey portions show care work job growth for white and non-white men. Because care work is differentiated by gender and race, it may affect differences in wages, benefits, and working conditions between demographic groups. Results suggest care work job growth has the potential to reinforce some aspects of gender and racial inequality, but reduce these inequalities in other ways.

Starting with patterns by gender, the majority of growth in care work jobs occurred among women, even at the top of the job wage distribution, as Hypothesis 2a predicted. Here we see the integration of women into previously male-dominated occupations such as physician and professor, as well as women's continued dominance in nursing and elementary and secondary teaching positions.

At the bottom, care work job growth was strong among women in child care and health aide jobs. White women predominate more at the top and minority women at the bottom. These results reinforce the argument that gender and racial inequality shaped the location of care work jobs in the wage structure, in part through the divergent wages of reproductive labor and nurturant care jobs.

The pattern of change in care work growth rates and employment shares by gender is a bit more complex: care work job growth appears to have deepened gender inequality in the labor market along some dimensions of change, but reduced gender inequality along other dimensions. Table 4 reports patterns of care work job growth for women and men separately, showing within-gender change in employment shares, growth rates, and percent of overall growth from 1983 to 2007. Women saw their share of care work jobs, relative to their share of non-care work jobs, increase in the bottom four quintiles but decrease in the top quintile. Men saw their share of care work jobs increase in the bottom quintile as well, but men also saw increasing shares of care work jobs in the top quintile. Women and men

Table 4. Job Growth across Job Wage Quintiles within Gender, Various Measures for All, Care Work, and Other Jobs, 1983 to 2007

Measure	Jobs	Lowest Quintile	2nd Quintile	3rd Quintile	4th Quintile	Highest Quintile
Women						
Share of jobs in 1983	All	66%	54%	43%	36%	30%
	Care work	54%	12%	7%	45%	36%
	Others	46%	88%	93%	55%	64%
Share of jobs in 2007	All	61%	49%	43%	47%	41%
	Care work	60%	14%	9%	49%	32%
	Others	40%	86%	91%	51%	68%
Growth rate	All	40%	11%	23%	110%	134%
	Care work	56%	26%	45%	128%	106%
	Others	20%	9%	22%	95%	149%
	Care – Others	36	17	23	33	–43
Percent of growth	Care work	77%	28%	14%	52%	28%
	Others	23%	72%	86%	48%	72%
Men						
Share of jobs in 1983	All	34%	46%	57%	64%	70%
	Care work	38%	14%	4%	11%	6%
	Others	62%	86%	96%	89%	94%
Share of jobs in 2007	All	39%	51%	57%	53%	59%
	Care work	40%	10%	4%	13%	9%
	Others	60%	90%	96%	87%	91%
Growth rate	All	76%	39%	25%	31%	44%
	Care work	87%	–2%	53%	54%	109%
	Others	69%	45%	24%	28%	40%
	Care – Others	18	–47	28	26	69
Percent of growth	Care work	43%	–1%	8%	19%	15%
	Others	57%	101%	92%	81%	85%

Note: “Others” includes all jobs except care work jobs.

had similar growth rates in care work in the top quintile, but women saw a much faster growth rate in non-care work jobs in the top quintile compared to men and to women in care work jobs. Men in care work had a faster growth rate in the bottom quintile than did women in care work, but because men made up a smaller initial share than women, women still increased their share at the bottom by a larger margin. Care work growth rates for both women and men were highest at the top and bottom, although in different patterns: women’s care work growth rate was highest in the fourth, then top, then bottom quintile;

men’s rate was highest in the top, then bottom, then fourth quintile.

Care jobs were also a larger portion of overall job growth for women than for men, making up 77 percent of total job growth in the bottom quintile for women, more than 30 percentage points higher than the share for men. Even for men, however, low-wage care work grew substantially. In the fourth quintile, care work made up 52 percent of women’s job growth, compared to only 19 percent for men, about the same gender gap as at the bottom. In the top quintile, care work accounted for more of women’s job growth

(28 percent) than men's (15 percent), although women's share of care work at the top declined. These gender differences were similar for white and non-white workers.

How do these within-gender patterns of care work job growth relate to the overall pattern of job growth by gender? Looking at the employment share of *all* jobs for women and men reported in Table 4, employment shares across quintiles equalized across gender over time. In both 1983 and 2007, women were more concentrated in jobs at the bottom than at the top of the employment structure, and men were more concentrated in jobs at the top than at the bottom. However, women's share of jobs decreased at the bottom and increased at the top, while men's share decreased at the top and increased at the bottom. Even though women and men both saw polarized job growth, women made gains relative to men.

The pattern of job growth *within care work* by gender was somewhat less equalizing than job growth overall, however: women saw an increasing share of care work jobs in the bottom quintile but a declining share at the top. At the same time, care work contributed to the more equalizing pattern of job growth through women's increasing share of care work in the fourth quintile and men's increasing share in the bottom. These growth patterns helped pull women's and men's employment shares overall toward convergence. This pattern aligns with other research showing that labor market convergence by gender was driven partly by men's declining fortunes, especially at the bottom (Bernhardt, Morris, and Handcock 1995; McCall 2007). Women's care work job growth was also stronger than men's in the second and middle quintiles, which may indicate women's potential for greater job growth in the middle in the future, even though men saw more job growth in the middle overall (see Figure 2). Care work's role in women's labor market opportunities thus leads to significant class disparities: care work dominates bottom quintile growth for women but also provides women opportunities in the higher quintiles, especially the fourth quintile, and to a smaller but still promising degree in the middle quintiles.

A considerable amount of care work growth in the bottom quintile occurred among minority workers, especially minority women, reinforcing the point that inequalities among women are a significant feature of job polarization. Figure 4 shows that job growth in care work was also divided significantly by race, for both men and women, as Hypothesis 2a predicted. For white women, growth in care work jobs was much more likely in the top two quintiles than in the bottom quintile of job wages, and care work job growth for minority women was concentrated in the lowest-wage jobs. Care work job growth for non-white men was also concentrated at the bottom, accounting for 43 percent of their growth in the bottom quintile. In absolute terms, care work jobs grew more at the bottom for non-white men than for white women over this period.⁹ In contrast, white men in care work jobs were disproportionately in high-wage jobs and quite underrepresented at the bottom. Separate analyses of non-white workers (not shown) indicate that black and Hispanic workers saw much more growth at the bottom than did other race workers (who were mainly from Asian populations), with other race men particularly weighted to the top.

The evidence presented so far supports expectations derived from care work theories that the rise of caring labor contributed significantly and increasingly to job polarization. Care work jobs grew strongly at the bottom and in the upper-middle quintiles, consistent with theories of gendered devaluation and lower labor market power in care work jobs. The split between high- and low-wage care work jobs is also, however, at least somewhat consistent with the revised skill-biased technological change account of a division between cognitive and manual non-routine labor. Are non-routine manual jobs relegated to the bottom of the wage structure, as the skill-biased technological change approach tends to assume? The pattern of men's job growth suggests they are not. Indeed, 75 percent of men's job growth in the middle quintile was in non-routine manual jobs in construction and transportation. Figure 5 shows that job growth in construction and

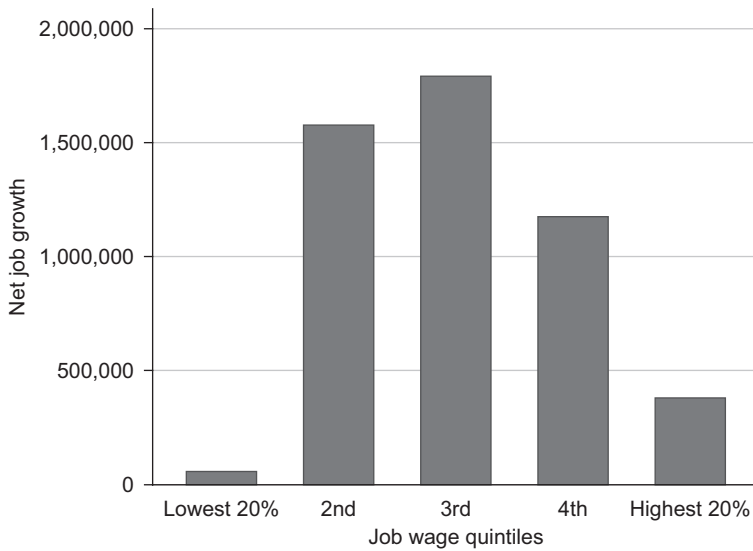


Figure 5. Growth in Construction and Transportation Jobs, 1983 to 2007

Source: CPS data.

Note: Job quintiles generated from job median wage.

transportation occupations from 1983 to 2007 was strikingly *not* polarized but was concentrated in middle-wage occupations. This growth was also robust in the second and fourth quintiles, but the top and bottom quintiles had very little growth. These jobs accounted for half of the growth in the middle quintile from 1983 to 2007 and one-third of growth in the second quintile, with significantly higher growth rates than other jobs in the second and third quintiles (author's calculations). As a result, construction and transportation jobs made up an increasing share of jobs in the lower-middle quintiles, increasing from 13 to 18 percent in the second quintile and from 27 to 31 percent in the middle quintile.

Clearly, some non-routine manual jobs obtain mid-level wages, as Hypothesis 2b predicted. The skill-biased technical change hypothesis—that job growth at the bottom is due to jobs not replaceable by computers being at the bottom of the wage structure—ignores the key role of gender inequality and labor market power in the position of jobs in the wage structure. Male trades have often been strongly unionized, and male-dominated jobs have not been subject to the same gender biases in evaluation as female-dominated jobs (England 1992). The contrast between male

trades and female care work helps explain gender differences in patterns of job growth, especially the stronger growth in the second and third quintiles for men compared to women (reported in Figure 2). Of course, construction is highly cyclical and manufacturing is in decline and so the stronger growth among men compared to women in the second and middle quintiles needs to be understood in a context of ongoing employment challenges in male-dominated occupations. The relatively strong growth rate of care work in the middle quintile also hints at the possibility of improved fortunes for women (and potentially men) in care work jobs in the middle.

These findings suggest that as care work becomes a key growth center in the U.S. economy, it will play a significant role in whether racial and gender inequalities decline or intensify, and in how inequalities between women develop. As England (2010) observed, the gender revolution in U.S. work has been uneven: professionals and college-educated women have seen declining occupational segregation, while working-class women face about the same levels of segregation in the 2000s as they did in the 1950s. Wage inequality has also grown among women, with a particularly sharp divide between college-

educated and non-college-educated women, and between white and minority women (McCall 2001, 2007, 2008). The divergent growth pattern of female-dominated care work highlights another facet of the uneven gender revolution in the U.S. economy. Professional and semi-professional care work has been a strong source of job opportunities for college-educated women, but less educated women have been relegated to the lowest-paid care occupations. Racial minorities, especially minority women, are particularly likely to fall into the lowest-paid positions. To the extent that care work is undercompensated as a public good, this may raise new racial and ethnic tensions in U.S. society as an older white population increasingly needs care, and the care providers will be drawn from an increasingly diverse pool of young workers. Service work may naturalize and reinforce class and racial inequalities by indicating who is entitled to other people's labor, and who offers care, service, and deference (Glenn 1992; Sherman 2007). The better prospects for female care work at the top of the job wage scale, however, may provide a road map for improving lower-wage care work jobs. Evidence of care work job growth for women in the middle quintile also raises the possibility of shifting away from polarized growth toward a more equalized and equalizing pattern.

Summary. Care work theories provide alternative and stronger explanations for some dimensions of job polarization that have remained puzzles for the skill-biased technological change and institutionalist approaches. In particular, care work theories help solve the four puzzles identified early in the article. First, the robust growth of low-wage care work identified here is consistent with care work theories that changes in the social organization of care in U.S. society raised demand for these jobs. This more direct account of demand contrasts with skill-biased technological change and institutionalist accounts that see low-wage service work as a remainder after technological change reduced the demand for other jobs.

Second, these results are consistent with the argument that growth in the upper-middle range of job wages was significantly driven by the conflicted and public goods status of female-dominated professional and semi-professional care work. Third, care work theories make these strides in understanding job polarization because they concentrate on the role of gender and racial inequality in the U.S. labor market, and care work is important to explaining differential job growth by gender and race. Fourth, findings of differential job growth patterns for different types of non-routine manual work challenge the idea that non-routine manual work is necessarily low-wage. Instead, these findings are more consistent with care work theories that care work is undervalued both as a public good and because it is traditionally produced by women. Our understanding of job polarization is enriched by adding the transition to care work in the U.S. economy to the other factors that contribute to uneven job growth.

DISCUSSION AND CONCLUSIONS

This study presents new evidence on the significant role of care work in job polarization in the U.S. economy. Care work contributed substantially to job polarization from 1983 to 2007 and made up the largest group of jobs fueling growth at the bottom of the wage structure over this period. Multiple intersecting forces in the U.S. economy contributed to job polarization, but I argue that care work theories provide distinct mechanisms for some features of job polarization that prior research has overlooked—and expectations derived from these theories were largely supported. Recognizing care work's role in job polarization contributes to the institutionalist argument that job polarization is due not only to technology but also to the political, cultural, and organizational structures of labor markets. This approach also emphasizes the crucial role of changing gender relations in economic restructuring, an important and largely neglected factor.

At the same time, these findings highlight the importance of inequality *among* women and the ways economic restructuring has benefited college-educated women far more than low-skilled women. As McCall (2001, 2007, 2011) argues, economic restructuring and changing class inequality put significant parameters around the possibilities for changing gender and racial stratification. For example, occupational segregation by gender has been slower among women without college degrees than for college-educated women because, in part, the higher paying male-dominated low-skill jobs have been in decline (McCall 2007). Findings here reinforce this point by showing that a large percentage of growing jobs at the bottom were in traditionally female care work occupations; indeed, even men saw increasing shares of employment in care work. These patterns may indicate some level of gender integration, but mainly among minority men and in very low-wage jobs. Seen in this light, care work is implicated in growing and persistent class inequalities as well as the evolution of gender inequalities.

Further research will be required to better understand the class dynamics of care work. It would be useful to assess whether care work is as polarized by alternative measures of job tasks and job quality—especially educational level and skill—as it is by median wages. It will also be important to study the timing of the evolution of job polarization and care work job growth; here I have examined the summary trend from the 1980s to the 2000s, but job polarization was especially pronounced in the 1990s and there has been little detailed research on polarization in the 2000s (Autor 2010; Mishel et al. 2013; Wright and Dwyer 2003). These additional inquiries will be especially important for understanding the relationship between polarized care work job growth and growing wage inequality over the same period. From the 1980s to the 2000s wage inequality increased most for the upper half of the wage distribution (as indexed by the ratio of wages at the 90th versus 50th percentile), but remained relatively

stable or declining in the bottom half of the distribution (the ratio of wages at the 50th versus 90th percentile) since the late 1980s (Autor et al. 2008). This pattern of wage change is in some ways consistent with the pattern of care work job growth. Job polarization fueled in part by care work job growth involved strong demand at the top of the distribution, consistent with the increase in the 90/50 ratio, and strong demand at the bottom of the distribution, combined with less demand in the middle, kept inequality in the bottom half steady. However, individual-level wage trends diverge from aggregate job-level wages in complex patterns that need further study, and here the timing of trends in wage inequality and job polarization may be particularly important (Autor et al. 2008; Kim and Sakamoto 2008; Mouw and Kalleberg 2010; Wright and Dwyer 2003). Even so, if the care economy continues on its current trajectory, its dynamics may increasingly affect wage inequality dynamics. In particular, to the extent that care is undercompensated due to its characterization as a public good, care work wage growth may be suppressed (Folbre 2002, 2006).

Collective action of care workers themselves will also be important. The strong growth of care work occupations in the fourth quintile is particularly instructive: teaching and health jobs in this quintile were once fairly low paid but moved up the wage scale through professionalization and unionization (Kessler-Harris 2001; Ravitch 1974). Could low-wage care work jobs go through similar processes to provide decent paying jobs and help resuscitate job growth in the middle of the U.S. job structure? Recent policy discussions emphasizing “high road” strategies to produce decent care work jobs suggest this may be possible. These strategies include pressure for higher standards by professional associations, clients, and citizens and valuing the skills involved in care work (Albelda et al. 2009; Gatta, Boushey, and Appelbaum 2009; Kalleberg 2011; Osterman and Shulman 2011). McCall (2007) proposes that apprenticeship programs linking lower-wage to

higher-wage care work (e.g., health care aides to nurses) may be a particularly promising path toward upward mobility for low-skill women. This alternative path to professionalization might prove more equitable by avoiding costly college credentials and exclusionary boundaries around different skill levels.

The significance of care work in job growth and job polarization also raises important questions about the future of the U.S. economy. If rising demand for care shaped the new economy, will care dominate the next economy even more as the population ages and computers take over many of the routine tasks of industrial economies? Recent studies encourage policymakers to invest in the economy's human infrastructure through spending on health care, education, and early childhood care, not only to build health and skills but also to promote economic development (Albelda et al. 2009; Heckman and Masterov 2007; Rolnick and Grunewald 2003). Because care is a public good, care work job growth may in fact be lower than the actual demand for care; greater state investment would thus provide a reliable source of good jobs. Investing in human infrastructure would also balance job growth strategies across demographic groups. Employment policies often focus on restoring manufacturing and encouraging physical infrastructure investments, which disproportionately improve job prospects for male workers. Investments in human infrastructure, on the other hand, are more likely to produce jobs for women as well as men (Antonopoulos et al. 2010; Baily 2010).

To understand the future of the care economy, research should continue to investigate the mechanisms that drive care work job growth and polarization. It will be important to study the demand for care work across levels of education and experience as well as wages to inform questions about how to meet the growing demand for care with well-trained workers (Autor et al. 2008). A comparative approach studying different patterns of care work job growth in different places would contribute to understanding the political and institutional factors that affect demand for care (Doussard et al. 2009; Fernández-Macías et al. 2012; Kenworthy 2007; Milkman and Dwyer 2002; Oesch and Menes 2011). Demand will surely increase for some kinds of health care as the population ages, but there will also be pressures to limit health care costs. The demand for child care workers and preschool teachers will also depend on institutional shifts, as more states and the federal government get involved in early childhood care. Dilemmas in funding and organizing care will likely only become more pressing as our population ages and generational divides increasingly coincide with class and race differences (Esping-Anderson 2009). The analysis here suggests that economic growth and the kinds of job opportunities available in the U.S. economy will increasingly be affected by political and institutional debates over the quality and provision of care, and by the way that caring labor evolves between the workers and organizations that increasingly provide care and the individuals and families who need it.

APPENDIX

Table A1. Care Work Classification

Nurturant Care Work	Reproductive Labor
Physicians	Housekeepers, maids, butlers, stewards
Dentists	Private household cleaners and servants
Veterinarians	Waiter/waitress
Optometrists	Cooks, variously defined
Podiatrists	Food counter and fountain workers
Other health and therapy	Kitchen workers
Registered nurses	Waiter's assistant
Respiratory therapists	Misc. food prep workers
Occupational therapists	Supervisors, cleaning and building service
Physical therapists	Janitors
Speech therapists	Barbers
Therapists, n.e.c.	Hairdressers and cosmetologists
Physicians' assistants	Laundry workers
Early childhood teachers	
Elementary teachers	
Secondary teachers	
Postsecondary instructors	
Special education teachers	
Teachers, n.e.c.	
Vocational and educational counselors	
Librarians	
Psychologists	
Social workers	
Recreation workers	
Clergy and religious workers	
Dental hygienists	
Licensed practical nurses	
Teachers' aides	
Dental assistants	
Health aides, except nursing	
Nursing aides, orderlies, and attendants	
Welfare service aides	
Child care workers	

Note: Nurturant care work and reproductive labor include all occupations defined in either England and colleagues (2002) or Duffy (2005).

Acknowledgments

Earlier versions of this article were presented at the 2010 American Sociological Association meetings, the Institute for Work and Employment Research at MIT, and Northwestern University. The author thanks participants in those sessions as well as Steven Lopez, Erik Olin Wright, Ofer Sharone, Vincent Roscigno, and the *ASR* editors and anonymous reviewers.

Notes

1. A similar line of reasoning argues that outsourcing contributes to job polarization because routine

cognitive and manual jobs can be outsourced but non-routine jobs are more difficult to send abroad (Blinder 2007). Generally, we have more evidence in support of changes in returns to skill than support for the effect of outsourcing on employment growth in the United States (Autor et al. 2006; Morris and Western 1999).

2. I focus here on claims related to uneven job growth specifically rather than the claims about the relationship between uneven job growth and wage inequality. The canonical model of technological change purports that all these trends point in the same direction, but there are divergences between the evolution of the employment structure and

- the evolution of wage inequality and my concern here is with the shifts in the job structure (Mishel, Schmitt, and Shierholz 2013).
3. The employment sector might affect care work wages, although it is not entirely clear whether the public or private sector would offer better compensation. Public and nonprofit organizations might have fewer resources than private organizations, but private organizations might receive fewer subsidies from the state or philanthropic sources.
 4. When unionization did occur, it was mainly pursued along with or after professionalization strategies, as seen with public school teachers (Ravitch 1974).
 5. A broader definition of care jobs could include care-support occupations or all jobs within care industries (Albelda, Duffy, and Folbre 2009). I followed classifications in England and colleagues (2002) and Duffy (2005) to retain continuity with most prior research on care work. Supplemental analyses of care industry job growth show similar findings as presented here, although this warrants further investigation in future research.
 6. The overall pattern is the same for the entire period from 1983 to 2007, but there is somewhat more growth at the bottom and somewhat less growth at the top using 1983 wages. This may result from the tendency of growing, in demand jobs to see higher wages, producing a slight upward bias in results that combine all years over this long of a period. The main analysis thus likely produces conservative estimates of job growth at the bottom of the wage structure.
 7. There are no indicators for which observations have imputed wage data in the 1994 ORG file. Sensitivity analyses excluding 1994 data show the same results.
 8. Care work was polarized before the 1990s and 2000s, but it became an increasingly important component of job growth in that period due to the simultaneous decline of middle-wage jobs and increasing demand for care (Handel 2007; Morris and Western 1999).
 9. In the bottom quintile, most of the growth for non-white men, and a significant amount of growth for non-white women, was in reproductive labor jobs such as cooking and cleaning. This supports Duffy's (2005, 2007) argument that classifications including only nurturant labor overlook racial disparities in care work.
- ## References
- Albelda, Randy, Mignon Duffy, and Nancy Folbre. 2009. *Counting on Care Work: Human Infrastructure in Massachusetts*. Amherst: University of Massachusetts.
- Antonopoulos, Rania, Kijong Kim, Thomas Masterson, and Ajit Zacharias. 2010. "Investing in Care: A Strategy for Effective and Equitable Job Creation." Working Paper No. 610. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College.
- Autor, David H. 2010. *The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings*. Washington, DC: Center for American Progress and The Hamilton Project.
- Autor, David H., Lawrence F. Katz, and Melissa S. Kearney. 2006. "The Polarization of the U.S. Labor Market." *American Economic Review: Papers and Proceedings* 96:189–94.
- Autor, David H., Lawrence F. Katz, and Melissa S. Kearney. 2008. "Trends in U.S. Wage Inequality: Revising the Revisionists." *Review of Economics and Statistics* 90:300–323.
- Autor, David H., Frank Levy, and Richard J. Murnane. 2003. "The Skill Content of Recent Technological Change: An Empirical Exploration." *Quarterly Journal of Economics* 118:1279–1333.
- Baily, Martin Neil. 2010. "The Next Economy and the Growth Challenge for the United States." Brookings Institution, Growth through Innovation Program, Washington, DC.
- Bernhardt, Annette, Martina Morris, and Mark S. Handcock. 1995. "Women's Gains or Men's Losses? A Closer Look at the Shrinking Gender Gap in Earnings." *American Sociological Review* 101:302–328.
- Bernhardt, Annette, Martina Morris, Mark S. Handcock, and Marc A. Scott. 2001. *Divergent Paths: Economic Mobility in the New American Labor Market*. New York: Russell Sage.
- Blinder, Alan. 2007. "How Many U.S. Jobs Might be Offshorable?" Working Paper No. 142. Princeton University Center for Economic Policy Studies, Princeton, NJ.
- Braverman, Harry. [1974]1998. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.
- Card, David and John E. DiNardo. 2002. "Skill-Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles." *Journal of Labor Economics* 20:733–83.
- Cohen, Philip N. and Matt L. Huffman. 2003. "Individuals, Jobs, and Labor Markets: The Devaluation of Women's Work." *American Sociological Review* 68:443–63.
- Doussard, Marc, Jamie Peck, and Nik Theodore. 2009. "After Deindustrialization and Economic Inequality in 'Postindustrial' Chicago." *Economic Geography* 85:183–207.
- Duffy, Mignon. 2005. "Reproducing Labor Inequalities: Challenges for Feminists Conceptualizing Care at the Intersections of Gender, Race, and Class." *Gender & Society* 19:66–82.
- Duffy, Mignon. 2007. "Doing the Dirty Work: Gender, Race, and Reproductive Labor in Historical Perspective." *Gender & Society* 21:313–36.
- Duffy, Mignon. 2011. *Making Care Count: A Century of Gender, Race, and Paid Care Work*. New Brunswick, NJ: Rutgers University Press.
- England, Paula. 1992. *Comparable Worth: Theories and Evidence*. New York: Aldine.

- England, Paula. 2005. "Emerging Theories of Care Work." *Annual Review of Sociology* 31:381–99.
- England, Paula. 2010. "The Gender Revolution: Uneven and Stalled." *Gender & Society* 24:149–66.
- England, Paula, Michelle Budig, and Nancy Folbre. 2002. "Wages of Virtue: The Relative Pay of Care Work." *Social Problems* 49:455–73.
- England, Paula, Lori L. Reid, and Barbara Stanek Kilbourne. 1996. "The Effect of the Sex Composition of Jobs on Starting Wages in an Organization: Findings from the NLSY." *Demography* 33:511–21.
- Esping-Anderson, Gosta. 2009. *The Incomplete Revolution: Adapting Welfare States to Women's New Roles*. Cambridge, UK: Polity.
- Fernandez, Robert. 2001. "Skill-Biased Technological Change and Wage Inequality: Evidence from a Plant Retooling." *American Journal of Sociology* 107:273–320.
- Fernández-Macías, Enrique. 2012. "Job Polarization in Europe? Changes in the Employment Structure and Job Quality, 1995–2007." *Work and Occupations* 39:157–82.
- Fernández-Macías, Enrique, Donald Storrie, and John Hurley, eds. 2012. *Transformation of the Employment Structures in the EU and USA*. New York: Palgrave Macmillan.
- Folbre, Nancy. 2002. *The Invisible Heart: Economics and Family Values*. New York: New Press.
- Folbre, Nancy. 2006. "Demanding Quality: Worker/Consumer Coalitions and 'High Road' Strategies in the Care Sector." *Politics and Society* 34:11–31.
- Gatta, Mary, Heather Boushey, and Eileen Appelbaum. 2009. "High-Touch and Here-to-Stay: Future Skills Demands in US Low Wage Service Occupations." *Sociology* 43:968–89.
- Glenn, Evelyn Nakano. 1992. "From Servitude to Service Work: Historical Continuities in the Racial Division of Paid Reproductive Labor." *Signs* 18:1–43.
- Goos, Marten and Alan Manning. 2007. "Lousy and Lovely Jobs: The Rising Polarization of Work in Britain." *Review of Economics and Statistics* 89:118–33.
- Goos, Marten, Alan Manning, and Anna Salomons. 2009. "Job Polarization in Europe." *American Economic Review: Papers and Proceedings* 99:58–63.
- Handel, Michael. 2007. "Computers and the Wage Structure." *Research in Labor Economics* 26:155–96.
- Harrison, Bennett and Barry Bluestone. 1988. *The Great U-Turn: Corporate Restructuring and the Polarizing of America*. New York: Basic Books.
- Heckman, James J. and Dimitriy V. Masterov. 2007. "The Productivity Argument for Investing in Young Children." *Review of Agricultural Economics* 29:446–93.
- Hipple, Steven F. 2010. "Multiple Jobholding during the 2000s." *Monthly Labor Review* July:21–32.
- Hirsch, Barry T. and Edward J. Schumacher. 2004. "Match Bias in Wage Gap Estimates Due to Earnings Imputation." *Journal of Labor Economics* 22:689–722.
- Hodson, Randy and Robert L. Kaufman. 1982. "Economic Dualism: A Critical Review." *American Sociological Review* 47:727–39.
- Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*. New York: Russell Sage.
- Kalleberg, Arne L., Barbara F. Reskin, and Ken Hudson. 2000. "Bad Jobs in America: Standard and Non-standard Employment Relations and Job Quality in the United States." *American Sociological Review* 65:256–78.
- Kalleberg, Arne L., Michael Wallace, and Robert P. Althaus. 1981. "Economic Segmentation, Worker Power, and Income Inequality." *American Journal of Sociology* 87:651–83.
- Kenworthy, Lane. 2007. "Inequality and Sociology." *American Behavioral Scientist* 50:584–602.
- Kenworthy, Lane. 2008. *Jobs with Equality*. Oxford, UK: Oxford University Press.
- Kessler-Harris, Alice. 2001. *In Pursuit of Equity: Women, Men, and the Quest for Economic Citizenship in 20th Century America*. Oxford, UK: Oxford University Press.
- Kim, ChangHwan and Arthur Sakamoto. 2008. "The Rise of Intra-Occupational Wage Inequality in the United States, 1983 to 2002." *American Sociological Review* 73:129–57.
- Lemieux, Thomas. 2008. "The Changing Nature of Wage Inequality." *Journal of Population Economics* 21:21–48.
- Lopez, Steven. 2004. *Reorganizing the Rust Belt: An Inside Study of the American Labor Movement*. Berkeley: University of California Press.
- McCall, Leslie. 2001. *Complex Inequality: Gender, Class, and Race in the New Economy*. New York: Routledge.
- McCall, Leslie. 2007. "Increasing Class Disparities among Women and the Politics of Gender Equity." Pp. 15–34 in *The Sex of Class*, edited by D. S. Cobble. Ithaca, NY: Cornell University Press.
- McCall, Leslie. 2008. "What Does Class Inequality among Women Look Like? A Comparison with Men and Families." Pp. 293–323 in *Social Class: How Does it Work?*, edited by A. Lareau and D. Conley. New York: Russell Sage Foundation.
- McCall, Leslie. 2011. "Women and Men as Class and Race Actors: Comment on England." *Gender & Society* 25:94–100.
- Meyer, Peter B. and Anastasiya M. Osborne. 2005. "Proposed Category System for 1960–2000 Census Occupations." BLS Working Paper no. 383. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics.
- Milkman, Ruth and Rachel E. Dwyer. 2002. "Growing Apart: The 'New Economy' and Job Polarization in California, 1992–2000." *The State of California Labor* pp. 3–35.
- Milkman, Ruth, Ellen Reese, and Benita Roth. 1998. "The Macrosociology of Paid Domestic Labor." *Work and Occupations* 25:483–510.
- Mishel, Lawrence, John Schmitt, and Heidi Shierholz. 2013. "Assessing the Job Polarization Explanation of Growing Wage Inequality." Working Paper. Washington, DC: Economic Policy Institute.

- Moller, Stephanie and Beth A. Rubin. 2008. "The Contours of Stratification in Service-Oriented Economies." *Social Science Research* 37:1039–1060.
- Morris, Martina and Bruce Western. 1999. "Inequality in Earnings at the Close of the Twentieth Century." *Annual Review of Sociology* 25:623–57.
- Mouw, Ted and Arne L. Kalleberg. 2010. "Occupations and Wage Inequality in the United States." *American Sociological Review* 75:402–431.
- Oesch, Daniel and Jorge Rodriguez Menes. 2011. "Upgrading or Polarization? Occupational Change in Britain, Germany, Spain, and Switzerland, 1990–2008." *Socio-Economic Review* 9:503–531.
- Osterman, Paul. 2008. "Improving the Quality of Low-Wage Work: The Current American Experience." *International Labor Review* 147:115–34.
- Osterman, Paul and Beth Shulman. 2011. *Good Jobs America: Making Work Better for Everyone*. New York: Russell Sage.
- Ravitch, Diane. 1974. *The Great School Wars: New York City, 1805–1973*. New York: Basic Books.
- Rolnick, Arthur and Rob Grunewald. 2003. "Early Childhood Development: Economic Development with a High Public Return." *The Region: Banking and Policy Issues Magazine* December:6–12.
- Sassen, Saskia. 2001. *The Global City: New York, London, Tokyo*. Princeton, NJ: Princeton University Press.
- Secombe, Wally. 1974. "The Housewife and Her Labour Under Capitalism." *New Left Review* 83:3–24.
- Sherman, Rachel. 2007. *Class Acts: Service and Inequality in Luxury Hotels*. Berkeley: University of California Press.
- Starr, Paul. 1982. *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry*. New York: Basic Books.
- Steinberg, Ronnie J. 1990. "Social Construction of Skill: Gender, Power, and Comparable Worth." *Work and Occupations* 17:449–82.
- Tam, Tony. 1997. "Sex Segregation and Occupational Gender Inequality in the United States: Devaluation of Specialized Training?" *American Journal of Sociology* 102:1652–92.
- Tomaskovic-Devey, Donald and Sheryl Skaggs. 2002. "Sex Segregation, Labor Process Organization, and Gender Earnings Inequality." *American Journal of Sociology* 108:102–128.
- Weeden, Kim. 2002. "Why Do Some Occupations Pay More than Others? Social Closure and Earnings Inequality in the United States." *American Journal of Sociology* 108:55–101.
- Western, Bruce, Deirdre Bloome, and Christine Percheski. 2008. "Inequality among American Families with Children, 1975 to 2005." *American Sociological Review* 73:903–920.
- Wright, Erik Olin and Rachel E. Dwyer. 2003. "The Patterns of Job Expansions in the United States: A Comparison of the 1960s and 1990s." *Socio-Economic Review* 1:289–325.

Rachel E. Dwyer is Associate Professor of Sociology at The Ohio State University. She studies the causes and consequences of rising economic inequality in the United States in diverse social contexts. Current projects include studies of labor market inequality, neighborhood disparities, and the growing importance of debt and debt-holding in U.S. society. Her articles on these issues have appeared in *Social Forces*, *Social Problems*, *City & Community*, and *Social Science Research*.