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CONTINUITY AND CHANGE IN THE AMERICAN CLASS STRUCTURE: WORKPLACE OWNERSHIP AND AUTHORITY RELATIONS FROM 1972 TO 2010

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Abstract

This study investigates changes in the American class structure—defined in terms of workplace ownership and authority relations—and trends in status group disparities in class attainment from 1972 to 2010. Although theory and prior research suggest a variety of appreciable changes in class structure and class attainment, data from the General Social Survey indicate that the sizes of different classes remained fairly stable during this time period and that status group disparities in access to ownership and authority persisted largely intact. The 1970s witnessed a decline in the proportion of workers and growth in the proportion of managers and proprietors, but these trends reversed in the 1980s. As a result, by the late 2000s, the ownership and authority structure of the U.S. economy closely resembled that of the early 1970s. Racial and gender disparities in class attainment also did not change significantly over time: blacks and women remained underrepresented (relative to whites and men) in positions of ownership and authority throughout this period. Even after controlling for an extensive set of human capital characteristics, family constraints, and structural economic factors, there is little evidence of status group integration across these key dimensions of economic power.

1. INTRODUCTION

Economic power flows in part from an individual's position within the ownership and authority structure of the workplace (Robinson & Kelley 1979; Smith 2002; Wolf & Fligstein 1979; Wright 1997). At a simple level, there are four distinct positions within the workplace ownership and authority structure: workers, who do not own the means of production and do not control the activities of others; proprietors, who own the means of production and control the activities of workers; managers, who do not own the means of production but do control the activities of workers; and independent producers, who own and operate small firms by themselves (Kalleberg & Griffin 1980; Robinson & Kelley 1979; Wright & Perrone 1977). These positions are often referred to as class positions because unequal ownership and authority are thought to engender intergroup antagonism and conflict. Because the term “class” is deployed with reference to a great variety of different collectivities, it is necessary to impose some limitations of scope. For expositional clarity,

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this study uses the term exclusively to refer to positions within the workplace ownership and authority structure.

Analyses of class structure and class attainment are central to sociological theory and research. Class structure is defined as the aggregate distribution of individuals across class positions, and class attainment refers to the process by which different individuals come to occupy different class positions. Research on class structure and class attainment is important because ownership and authority within production shape the distribution of other valued resources, such as income, social status, and political influence, and because class inequality is thought to be a particularly contentious type of intergroup division with the potential to provoke social conflicts capable of restructuring societal institutions (Smith 2002; Wright 1997).

The direction and magnitude of changes in class structure since the early 1970s is a contested topic. For example, post-class and post-industrial theories contend that technological development has attenuated the demand for labor power, enhanced the demand for managerial decision-making, and facilitated the growth of new economic sectors in which small firms flourish, leading to a decline in the proportion of workers and an increase in the proportion of managers, proprietors, and independent producers (Bell 1973; Pakulski & Waters 1996). Class-analytic theory, by contrast, contends that the dynamics of market competition and technological development promote economic concentration, leading to a decline in the proportion of independent producers, proprietors, and managers, and an increase in the proportion of workers (Marx 1971; Wright 1997).

Theory and prior research also suggest competing hypotheses about changes in the class attainment process, and in particular, about racial and gender disparities in access to ownership and authority in production. One perspective on changes in class attainment predicts sharply declining racial and gender disparities since the early 1970s as a result of newly implemented anti-discrimination policies, egalitarian shifts in racial and gender attitudes, and extensive investments in human capital among racial minorities and women. By contrast, an alternative perspective anticipates enduring racial and gender disparities in class attainment as a result of persistent discrimination against subordinate status groups.

Despite the variety of competing hypotheses about recent changes in class structure and class attainment, few prior studies employ a time-series research design capable of rigorously evaluating these conflicting predictions. Most previous research on workplace ownership and authority is based on cross-sections of the population at a single point in time (e.g., Jaffee 1989; McGuire & Reskin 1993; Wolf & Fligstein 1979; Wright 1997), which preclude an analysis of trends, and the handful of prior studies that do examine trends suffer from critical limitations. In particular, they rely on potentially inaccurate measures of workplace ownership and authority.

For example, several foundational studies of trends in class structure (Wright & Martin 1987; Wright 1997) do not directly measure differences in workplace ownership and authority over time but rather approximate these differences using an occupation-by-industry imputation procedure. However, class positions based on workplace social relations and

occupational positions based on the technical division of labor are conceptually and empirically distinct (Kalleberg & Griffin 1980). Moreover, occupational classification data may have become an increasingly unreliable proxy measure for workplace authority over time as a result of job title inflation. Previous studies suggest that many firms responded to nondiscrimination policies in the 1970s by expanding managerial job titles, but not tangible control or influence within the workplace, to include a greater number of female and minority employees (Jacobs 1992; Reskin & Ross 1992). Analyses of workplace ownership and authority structures based on occupational data, therefore, may lead to faulty inferences about the direction or magnitude of changes.

Similarly, previous research on racial and gender disparities in class attainment often equates self-employment with the ability to control capital and direct a firm (e.g., Aronson 1991; Fairlie 2004; Fairlie & Meyer 2000; Hughes 2003). The self-employed, however, are a highly heterogeneous group composed of both proprietors, who do indeed control capital, direct the production process, and manage the activities of others, as well as independent producers, who are often indistinguishable from workers that lack property and authority in the workplace (Dale 1986; Kalleberg 2011). Because women and racial minorities may be disproportionately represented among the nominally self-employed class of independent producers, failure to accurately distinguish between this group and the comparatively advantaged class of proprietors could lead to faulty inferences about racial and gender disparities in class attainment over time.

This study investigates changes in the American class structure—defined in terms of workplace ownership and authority—and trends in racial and gender disparities in class attainment. It extends previous research by using time-series data that cover nearly four decades and by using more direct measures of workplace ownership and authority. Specifically, it combines information on self-employment and job responsibilities from the 1972 to 2010 waves of the General Social Survey (GSS) and from the 1980 and 1991 surveys of the Comparative Project in Class Analysis (CPCA) in order to precisely identify an individual's position within the workplace ownership and authority structure. Despite some nontrivial fluctuations, results from these data indicate that the relative sizes of different classes have remained fairly stable and that racial and gender differences in class attainment have persisted largely intact.

2. CLASS STRUCTURE AND ITS TRANSFORMATION

This study adopts a conception of class based on the social relations of production. The social relations of production refer to patterns of control over different factors involved in the production process. Ownership relations refer to control over the means of production, including raw materials, land, machines, and so on. Authority relations refer to control over individuals involved in the production process. Social classes, then, are defined as different positions within the ownership and authority structure of the workplace. At a simple level, class positions consist of proprietors, managers, workers, and independent producers. Proprietors own the means of production and control the activities of workers. Managers do not own the means of production, but they direct the production process and control the activities of workers. Workers lack control over the means of production and over the

production process, and they labor under the direction of proprietors and managers. Finally, independent producers own the means of production and direct the production process within a self-operated enterprise, but they do not control other workers. This typology is closely informed by several interrelated approaches to class analysis within the conflict theoretical framework (Dahrendorf 1959; Kalleberg & Griffin 1980; Marx 1971; Proudhon 2011; Robinson & Kelley 1979; Wright & Perrone 1977).

Several competing perspectives suggest starkly different trends in social class structure. Post-class and post-industrial theories contend that recent technological changes revolutionized the production process in ways that expanded the relative number of proprietors, managers, and independent producers, and reduced the relative number of workers (Bell 1973; Pakulski & Waters 1996; Pakulski 2005).[1] By contrast, the class-analytic perspective contends that the dynamics of market competition and technological development have expanded the relative number of workers, and reduced the relative number of proprietors, managers, and independent producers (Marx 1971; Proudhon 2011; Wright 1997). Still another perspective highlights the potential effects of large scale demographic shifts since the 1970s, such as high-volume immigration, on changes in class structure.

2.1. The Post-class and Post-industrial Perspectives

Post-class and post-industrial theories contend that technological development transformed the economy from a system based primarily on monopolistic goods-producing enterprises into a system based on service provision in which small firms flourish and scale economies are less important (Bell 1973; Pakulski & Waters 1996). The development of advanced telecommunications and computers is thought to have catalyzed the growth of economic sectors involving the provision of services and information, which may be more conducive to small-scale entrepreneurship and less vulnerable to domination by large enterprises than the goods-producing sectors. Consistent with this view, the proportion of the population involved with the goods-producing sector has declined while the proportion engaged in the service sector has increased since the 1970s (Lee & Mather 2008). Moreover, compared with the goods-producing sector, the service sector is composed of fewer workers and a larger number of independent producers and small proprietors (Wright 1997), which suggests that, net of other factors, deindustrialization should shrink the relative number of workers and expand the relative size of the self-employed classes at the population level. In addition, technological development is also thought to have reduced demand for workers engaged in primary production and enhanced demand for managerial decision-making as a result of the growing technical complexity of modern production operations (Bell 1973; Pakulski & Waters 1996). Together, these changes imply a decline in the proportion of workers and an increase in the proportion of proprietors, managers, and independent producers since the early 1970s.

[1]This section focuses narrowly on the specific elements of post-class and post-industrial theories with clear implications for trends in aggregate class structure, defined in terms of ownership and authority relations in production. In addition to addressing changes in ownership and authority relations, post-class and post-industrial theories also address changes in the technical division of labor, the skill content of work, the organizational culture of firms, and so on, which are beyond the scope of this analysis.

2.2. The Class-analytic Perspective

According to class-analytic theory, market competition between firms has a paradoxical tendency to reduce the number of competitors and to promote concentration of the means of production among an increasingly selective group of proprietors (Marx 1971; Proudhon 2011; Wright 1997). Specifically, this perspective contends that a natural consequence of market competition is for larger and better-endowed enterprises to use their advantages to eliminate or absorb inferior firms. As a result, the means of production become more concentrated among a shrinking group of proprietors over time. In addition, technological development is also thought to promote economic concentration because it conveys a competitive advantage to large firms capable of financing and implementing new technologies. Consistent with this perspective, most indicators suggest that industrial concentration has increased since the late 1970s, especially within the service, financial, and retail industries (Foster, McChesney, & Jonna 2011; Lynn 2011; Attaran & Saghafi 1988; Pryor 2001; White 2002). These processes imply a decline in the proportion of independent producers and proprietors, and an increase in the proportion of workers over the past four decades.

The impact of these changes on managers is more difficult to discern. On the one hand, economic concentration may increase demand for managerial labor, which is needed to staff growing administrative bureaucracies in large enterprises. On the other hand, economic concentration and technological development may improve the efficiency with which managerial labor is utilized, such that fewer individuals can effectively direct the production process when it is organized within a single large enterprise rather than within multiple smaller enterprises operating independently. In addition, as firms become more insulated from competition and begin to saturate the markets for their products, it may become increasingly difficult to generate new revenue through sales or price increases. In this situation, proprietors and high-level managers may reduce costs by eliminating mid- and low-level managers, who are responsible for a disproportionately large share of a firm's wage bill. These forces are expected to exert downward pressure on the proportion of managers over time.

2.3. The Demographic Perspective

Another potential determinant of changes in the U.S. class structure since the 1970s is high-volume immigration from Latin America and Asia (Martin & Midgely 2006). Because mass immigration since the 1970s has involved a large number of entrants with low levels of human and economic capital (Borjas 1994; Martin & Midgely 2006), this demographic change might be expected to disproportionately inflate the number of workers relative to other class positions that are more closely associated with the possession of skills, credentials, or financial capital. At the same time, however, self-employment and business ownership are frequently pursued as an alternative route to economic advancement by new immigrants in response to labor market discrimination or other blocked opportunities (Fairlie & Meyer 1996), which suggests that recent waves of immigration might actually lead to an increase in the number of proprietors and independent producers relative to the number of workers. In sum, the net impact of recent immigration on class structure is

somewhat unclear, but it should nevertheless be accounted for in an analysis of population-level trends.

3. RACE, GENDER, AND CLASS ATTAINMENT

Previous research based on cross-sectional data indicates that women and racial minorities, compared with men and whites, are less likely to occupy positions of ownership and authority in the workplace (Smith 2002; Wright 1997). Theories of status group disparities in class attainment can be roughly categorized into micro-level explanations that emphasize individual differences in human capital and preferences for certain types of work; macro-level explanations that focus on how racial minorities and women are disproportionately located in marginalized sectors of the economy; and meso-level explanations that highlight the role of discrimination (Smith 2002). In reality, these explanations are not neatly separable, but this heuristic categorization still provides a useful guide for analyses of class attainment.

3.1. Micro-level Explanations

Micro-level explanations point to individual differences in job preferences and human capital as the primary determinants of differential class attainment by race and gender. According to this set of explanations, women and racial minorities are underrepresented in positions of ownership and authority because they have less training, education, and experience. Investment in human capital increases the likelihood of being promoted into managerial roles (Kluegel 1978; Ross & Reskin 1992) and is also positively associated with self-employment (Hout & Rosen 2000). Racial and gender disparities in education and training therefore explain, at least in part, status group disparities in workplace ownership and authority (Carr 1996; Smith 2002).

With regard to gender disparities in particular, micro-level theories also contend that aspirations, preferences, and strategic decisions based on early socialization and rational evaluations of available economic opportunities explain female underrepresentation in ownership and management (Boden 1999; Carr 1996). According to this perspective, women place less value on workplace ownership and authority, are less competitive and more risk-averse, and are more likely than men to assume family responsibilities that conflict with the time demands associated with owning or managing a firm. For these reasons, women are thought to choose career paths that do not lead to business ownership and may select themselves out of contention for managerial positions at work. Although family responsibilities and personal preferences are important predictors of class attainment, the weight of the evidence indicates that these factors can explain only a small part of the gender gap in workplace ownership and authority (Fairlie 2007; Smith 2002).

3.2. Macro-level Explanations

Macro-level explanations for status group disparities in class attainment posit that women and racial minorities are underrepresented in positions of ownership and authority because they are disproportionately located in marginalized sectors of the economy that offer limited opportunities for business development and managerial promotion. For example, research

within this framework indicates that women and racial minorities are more likely than their counterparts to work in certain sectoral economies, such as the personal services industry, which provide fewer promotional opportunities. However, pronounced racial and gender disparities in class attainment persist even after accounting for a variety of structural economic factors (Loscocco & Robinson 1991; Reskin & Padavic 1994).

3.3. Meso-level Explanations

Meso-level explanations are based on the premise that dominant status groups, like whites and men, have an interest in maintaining their disproportionate control over the means and processes of production (Kanter 1977; Smith 2002; Wright 1997). To this end, dominant group members with influence over business development and promotion decisions, such as financiers and high-level managers, may exclude women and racial minorities from access to capital and from authority hierarchies in an effort to preserve greater economic power for themselves and similar others. In addition to overt acts of discrimination, members of dominant status groups may also engage in statistical discrimination by using race and gender as proxies for productivity when making promotion and investment decisions. Previous empirical research using a variety of study designs suggests that these different forms of discrimination significantly constrain the class attainment prospects of women and racial minorities (Blanchflower, Levine, & Zimmerman 2003; Elliott & Smith 2004; Reskin & Padavic 1994). Finally, along with contemporary acts of discrimination, historical patterns of discrimination may continue to impact modern disparities in class attainment through legacy gaps in household wealth (Conley 1999).

3.4. Status Group Disparities in Class Attainment: Temporal Dimensions

Based on the foregoing discussion, two competing perspectives on recent trends in racial and gender disparities can be derived. The declining disparities perspective posits that women and racial minorities have made substantial inroads to business ownership and management since the early 1970s, leading to a steady reduction of status group disparities in class attainment. The enduring disparities perspective, by contrast, anticipates persistent status group disparities in class attainment as a result of ongoing discrimination.

The declining disparities perspective emphasizes a number of sweeping social changes since the early 1970s that may have attenuated the historically severe underrepresentation of women and racial minorities in positions of ownership and authority. First, the U.S. federal government enacted and expanded a variety of nondiscrimination policies designed to facilitate access to managerial hierarchies and promote business ownership among women and racial minorities (Smith 1999). Second, racial differences in human capital declined throughout the period under consideration (Kao & Thompson 2003), and similarly, gender differences in human capital declined and then reversed, such that women now outperform men on most educational metrics (DiPrete & Buchmann 2013). To the extent that racial and gender disparities in class attainment are driven by human capital differences, these trends suggest a pattern of growing parity in access to workplace ownership and authority. Finally, research on intergroup attitudes documents a substantial decline in overt racism and sexism, a smaller but nontrivial decline in negative stereotypical views about women and racial minorities, a growing level of support for less restrictive gender roles, and an increase in

support for principles of intergroup equality (Brewster & Padavic 2000; Brooks & Bolzendahl 2004; Schuman et al. 1997). These attitudinal changes may signal a decline in discriminatory practices among existing networks of business owners and managers.

The enduring disparities perspective recognizes these social changes but maintains that members of dominant status groups continue to have an interest in protecting their disproportionate access to positions of economic power. To maintain these advantages during a period when they are being challenged by subordinate status groups, dominant group members may continue to engage in more subtle forms of discrimination while avoiding the appearance of overt prejudice and tolerating relatively weak opportunity-enhancing policies (Jackman 1994). According to this view, nondiscrimination policies are thought to be largely symbolic concessions, and their limited scope and lax enforcement ensure that they do not fundamentally transform status group disparities in class attainment. In sum, the enduing disparities perspective implies that women and racial minorities remain significantly underrepresented in positions of ownership and authority.

4. METHODS

4.1. Data

To investigate trends in class structure and class attainment, this study uses data from the 1972 to 2010 waves of the GSS. The GSS contains demographic and employment data from repeated nationally representative samples of non-institutionalized adults in the U.S. (Smith et al. 2011). It was conducted annually from 1972 to 1994, except in 1979, 1981, and 1992, and biannually thereafter. In earlier waves of the survey, about 1,500 adults were interviewed each year. More recently, between 3,000 and 4,500 adults have been interviewed in each wave. The analytic sample for this study consists of the 24,266 respondents who were 25 to 65 years old and worked full-time. Parallel analyses that included full- and part-time respondents, that focused only on respondents in nonagricultural industries, that included unemployed respondents as a residual class category, and that included 18 to 24 year old respondents produced similar results (not shown, available upon request).

4.2. Variables

4.2.1. Social Class—Respondents to the GSS report whether they are self-employed or whether they work for someone else. Respondents also report whether their job involves supervising others.[2] Together, these items are used to classify respondents as proprietors (self-employed and supervise others), independent producers (self-employed and do not supervise others), managers (work for someone else and supervise others), or workers (work for someone else and do not supervise others).[3] Similar approaches to measuring social class —defined in terms of workplace ownership and authority—are used by Wright and Perrone

[2]The GSS uses a split-ballot survey design, where questions about supervisory responsibilities are asked of a random 50 to 75 percent subset of respondents.

[3]Nurses and teachers report unusually high levels of authority at work, which suggests that respondents in these occupations answered questions about supervisory responsibilities with their students and patients in mind rather than subordinate workers. These responses are treated as erroneous, and all teachers and nurses are coded as either workers or independent producers, depending on their self-employment status.

(1977), Robinson and Kelley (1979), Kalleberg and Griffin (1980), and Halaby and Weakliem (1993).

4.2.2. Covariates—To investigate whether the hypothesized persistence of racial and gender disparities in class attainment is related to discrimination, this study adopts the "residual approach" to isolating this mechanism. It involves estimating the residual racial and gender gaps in class attainment that remain after controlling for an extensive set of other covariates thought to explain these disparities, including human capital, family, and structural economic characteristics. Under the assumption that there are no unobserved covariates that affect class attainment and differ across status groups, nonzero estimates of residual racial and gender differences can be interpreted as evidence of discrimination (Rodgers 2006).

The demographic and human capital factors included in this analysis are respondent race, gender, nativity, education, verbal ability, and age. In addition, I also measure and control for dimensions of a respondent's family background, including father's education, occupational prestige, and self-employment status. Gender is coded 1 for female and 0 for male, and race is coded 1 for black and 0 for nonblack. The nonblack category is composed predominantly of white respondents, but a small number of Hispanic and Asian respondents are pooled with whites because their limited sample size precludes an analysis fully stratified by race. Parallel analyses that excluded Hispanic and Asian respondents entirely yield results similar to those based on the black/nonblack coding scheme used here. Nativity is coded 1 if the respondent was born in the U.S. and 0 otherwise. Respondent education is measured as years of completed schooling; verbal ability is measured with scores on an abbreviated version of the Gallup-Thorndike verbal intelligence test; and age is measured in years. Father's education is also measured as years of completed schooling; father's occupational prestige scores come from the Hodge-Siegel-Rossi rating system, which assigns scores based on respondent estimates of the relative social standing of different occupations; and father's self-employment status is coded 1 for self-employed and 0 otherwise.

This analysis also controls for marital status and the presence of young children in the household. Marital status is coded 1 for married and 0 for unmarried. The presence of young children is expressed as a dummy variable coded 1 if there are children younger than 12 years old in the household, and 0 otherwise. Multivariate analyses include interactions between these measures and gender to account for the differential impact of household composition on men's and women's career choices. Controlling for measures of marital status and household composition is intended to adjust for the possibility that women are more likely than men to assume family responsibilities that may interfere with class attainment.

The structural economic controls included in this analysis are geographic region, rural residence, and industrial sector. Geographic region is expressed as a series of dummy variables for residence in the "East," "South," "Midwest," and "West." Rural residence is coded 1 if a respondent lives in a county without any towns of 10,000 residents or more, and 0 otherwise. Industrial sector is measured with a series of dummy variables for "agriculture," "manufacturing and transportation," "wholesale and retail trade," "business

and personal services," and "professional and other services." Missing values for all variables are simulated using multiple imputation with 20 replications, and combined estimates are reported throughout (Rubin 1987). Descriptive statistics are summarized in Table 1 by gender, race, and decade.

4.3. Analyses

To investigate trends in the relative sizes of social classes, semiparametric multinomial logit models are used to compute smooth estimates of class proportions at each survey wave, denoted by $P(C_t = j)$. In this notation, C_t is a polytomous variable with $j = 1, \ldots, 4$ categories representing each of the class positions defined previously, and $t = 1972, \ldots, 2010$ denotes the survey wave. The multinomial logit model has form

$$P\left(C_t=j\right)=exp\left(g\left(t,\beta_{C=j}\right)\right)/\sum_{k=1}^{4}exp\left(g\left(t,\beta_{C=k}\right)\right),\quad k=1,\ldots,4, \quad (1)$$

where $g(t,\beta_{C=1})$ is constrained to equal zero and $g(t,\beta_{C=j})$ for $j = 2, \ldots, 4$ are functions of time and the parameters, β_j. Exploratory analyses that evaluated a variety of specifications for $g(t,\beta_{C=j})$, including different polynomial, step, and spline functions of time, indicated that a quadratic *B*-spline with knots at the years 1972, 1992, and 2010 provided the best balance between goodness of fit and model parsimony.

In general terms, *B*-splines are a flexible method for fitting smooth curves through a set of observed data that can accommodate nonlinear and nonmonotonic relationships. More specifically, in a quadratic *B*-spline, d knots are introduced on the time axis located at t_1, $t_2, \ldots, t_d$, and the model consists of piecewise quadratic polynomials between adjacent knots that are constrained to be continuous and smooth at each knot (Kvam & Vidakovic 2007). Because parameter estimates from *B*-splines are difficult to interpret, results are presented graphically as interval estimates of $P(C_t = j)$ plotted across time, with confidence intervals computed using the delta method.

To investigate racial and gender disparities in class attainment over time, the multinomial logit model in Equation 1 is elaborated to permit separate *B*-spline functions for blacks and nonblacks and for men and women. Based on these models, unadjusted trends in class attainment are estimated, plotted graphically, and compared for each status group. Then, to investigate whether unadjusted racial and gender differences in class attainment are due in part to discrimination, another set of models are estimated that include controls for human capital characteristics, socioeconomic background, family responsibilities, and structural economic factors. Results from these more complex models are also presented graphically to simplify interpretation. Specifically, interval estimates for the probabilities of class attainment are plotted across time—separately for blacks and nonblacks and for men and women—with control variables set to their pooled sample means.

4.4. Robustness Checks with Alternative Data

Workplace authority is a multidimensional concept. It involves not only direct control over subordinates via supervision but also indirect control that operates through influence over workplace policies. Supervisory responsibility and policy influence are correlated, but

access to these distinct dimensions of workplace authority may have evolved differently over time. Because the GSS only contains a measure of supervisory responsibility and lacks information on policy influence, it may obscure potentially divergent trends in these distinct dimensions of authority. To overcome this measurement limitation in the GSS, I also analyze data from the CPCA, which fielded nationally representative surveys of American adults in 1980 and 1991 (Hout, Wright, & Sanchez-Jankowski 1996; Wright 1986). Although the CPCA is based on just two waves of data, it contains information on both supervisory responsibility and policy influence at work and thus permits at least a crude assessment of directional changes in class structure using measures that incorporate multiple different indicators of workplace authority.

The 1980 and 1991 waves of the CPCA respectively contain data from 1,315 and 1,493 full-time respondents between the ages of 18 and 65. The CPCA asks whether respondents are self-employed, and self-employed respondents additionally report the number of employees in their firm. The CPCA also asks employed respondents an extensive battery of questions about their supervisory responsibilities and policy influence at work.

With these data, I construct four different measures of social class to compare with the GSS. For all four measures, the classification of proprietors and independent producers is the same: self-employed respondents who have at least one employee are classified as proprietors, while self-employed respondents without any employees are classified as independent producers. The measures differ only in their treatment of managers and workers. Measure A classifies employed respondents as managers if they report being responsible for at least one of the following supervisory tasks: making work assignments for subordinates, deciding which tools and materials will be used by subordinates, deciding the work pace of subordinates, and determining disciplinary actions. Measure B, by contrast, classifies employed respondents as managers if they report directly participating in at least one of the following policy decisions: decisions about the size of the workforce, decisions about product lines, decisions about production methods, and decisions about the firm's budget. Measure C is an inclusive operationalization that defines employed respondents as managers if they report involvement in e*ither* supervisory tasks *or* policy decisions. Measure D is an exclusive operationalization that defines employed respondents as managers if they report involvement in *both* supervisory tasks *and* policy decisions. With each of these measures, I estimate class proportions at both waves of the CPCA and compare them with estimates from the GSS.[4]

[4]There are several changes in question wording in the CPCA that complicate analyses across time. In particular, questions about policy authority in the 1980 survey ask respondents whether they make the decision “themselves,” “as a voting member of a group,” “subject to approval,” or merely “provide advice,” while similar items in the 1991 survey ask whether respondents “participate directly” or “provide advice.” To reconcile these differences, respondents in the 1980 survey who report making the decision themselves or as a voting member of a group are coded as participating directly, while those who report making decisions subject to approval are coded as providing advice. An alternative coding scheme that treats respondents who “make the decision subject to approval” as direct participants in workplace policy-making suggests a decline in the proportion of managers from 1980 to 1991 rather than the stagnant trend reported from these data in the main text.

5. RESULTS

5.1. Trends in Class Structure

Figure 1 presents interval estimates of class proportions from 1972 to 2010. The upper panel of the figure displays trends for all classes on the same scale, while the lower panel displays trends for the two smallest classes—proprietors and independent producers—using a magnified scale on the right vertical axis.

Results based on the total sample indicate that the American class structure followed two distinct trajectories during the period under consideration. From 1972 to 1985, the proportion of workers decreased, while the proportion of managers, proprietors, and independent producers increased. Specifically, between 1972 and 1985, the proportion of workers declined from about 57 percent to 52 percent; the proportion of managers increased from about 32 percent to 36 percent; the proportion of proprietors increased from about 6 percent to 8 percent; and the proportion of independent producers increased from about 4 percent to 5 percent.

From the mid-1980s onward, however, these trends reversed. Between 1985 and 2010, the proportion of workers increased, while the proportions of managers and proprietors decreased. Specifically, the proportion of workers increased from about 52 percent to 57 percent; the proportion of managers declined from about 36 percent to 32 percent; and the proportion of proprietors declined from about 8 percent to 6 percent during this time period. Only the proportion of independent producers continued on its modest but steady upward trend, increasing from about 5 percent to 6 percent between 1985 and 2010.

To investigate whether these population-level trends were influenced by high-volume immigration, Figure 1 also presents interval estimates of class proportions based on the subsample of U.S. born respondents. These estimates are reported from 1977 to 2010—the period for which the GSS collected information about respondent nativity status. Results based on the U.S. born sample that excludes immigrants are nearly identical to those based on the total sample that includes immigrants, which suggests that high-volume immigration did not have an appreciable direct impact on population-level changes in class structure during this period.

To investigate whether population-level trends in class structure were driven by changes in particular industrial sectors, Table 2 presents estimates separately by industry. Point estimates suggest that inter-industry variation in these trends is fairly modest. For example, Table 2 indicates that in all industries except agriculture, the proportion of workers declined during the 1970s and 1980s, and then increased during the 1990s and 2000s, while the proportion of managers increased during the 1970s and 1980s, and then declined during the 1990s and 2000s. Similarly, in nonagricultural industries, the proportion of independent producers generally increased monotonically between the 1970s and 2000s, while the proportion of proprietors generally increased from the 1970s to 1980s, and then declined thereafter. This trend in the relative number of proprietors is especially pronounced in the wholesale and retail trade industries and in the business and personal service industries. The agricultural sector, which accounts for about 8 to 10 percent of overall employment, exhibits

different trends. Specifically, the proportion of workers and independent producers in agriculture decreased steadily, while the proportion of managers increased fairly steadily. The proportion of proprietors in agriculture increased until the 1990s before sharply declining in the 2000s. These results suggest that population-level changes in class structure were not simply due to shifts in the industrial composition of the economy (e.g., from goods-producing to service-producing sectors), although it is difficult to draw strong inferences because the industry-specific estimates are imprecise.

Table 3 presents estimates from the CPCA, separately by year and the different class measures. Several patterns are evident in these data. First, estimates of the overall size of the managerial class are highly sensitive to the particular operational definition adopted. The most inclusive operational definition (Measure C), which identifies managers as those with any supervisory or policy authority, indicates that this group represents 41 percent of the population in 1980. By contrast, the most exclusive operational definition (Measure D), which identifies managers as those with both supervisory and policy authority, puts this figure at just 11 percent. Second, despite these overall differences, all of the class measures suggest a pattern of relative stability in class structure between the early 1980s and 1990s, consistent with trends from the GSS over the same time period. Point estimates indicate that the proportion of independent producers increased; that the proportion of proprietors remained stable; and that the proportions of both workers and managers remained stable or perhaps declined slightly. Except for growth in the proportion of independent producers, none of these changes approach conventional thresholds for statistical significance. Thus, there is little evidence that class measures based on supervisory responsibility and policy influence are moving in different directions over time, which suggests that trend estimates from the GSS are not simply an artifact of its more limited operational definition of workplace authority.

In sum, trends in the American class structure are difficult to reconcile with post-class and post-industrial theories, with the class-analytic perspective, and with perspectives suggesting an important role for mass immigration. From the early 1970s to the mid-1980s, results are consistent with the post-class and post-industrial perspectives, but from the mid-1980s onward, observed trends are more consistent with the class-analytic perspective. The one finding that consistently deviates from class-analytic hypotheses is the modest but steady growth in the proportion of independent producers. This trend, however, may confound growth in the number of nominally self-employed contingent workers with growth in the number of independently operated small businesses because it is difficult to distinguish between these two groups based on self-employment and supervisory data alone. Growth in the number of nominally self-employed contingent workers, who sell only their own labor power, lack capital, and have no control over the production process, is a well-documented trend over the past several decades (e.g., Kalleberg 2011). Nominally self-employed contingent workers include freelancers, homeworkers, and temporary contractors who differ from conventionally employed workers only in that they sell their labor power to an employer through a different type of contractual arrangement (Dale 1986). If observed growth in the proportion of independent producers is due to increases in the number of nominally self-employed contingent workers, then this trend would in fact be highly consistent with class-analytic theory.

Table 4 compares the socioeconomic characteristics of different classes in an effort to clarify the underlying changes driving observed trends in the proportion of independent producers. Results indicate that workers and independent producers are no different in terms of their educational attainment, occupational prestige, or earned income, while managers and proprietors far exceed both of these groups on all metrics. These patterns are consistent with the argument that observed trends in the proportion of independent producers reflect growth in the number of nominally self-employed contingent workers rather than growth in the number of independently operated small businesses.

5.2. Gender Differences in Class Attainment

Figure 2 summarizes unadjusted gender disparities in class attainment from 1972 to 2010. Interval estimates reveal large and persistent gender disparities in class attainment, where men are substantially more likely than women to attain positions of ownership and authority in production. These results provide little evidence of an appreciable change in gender disparities across time apart from a transitory period in the late 1990s when men and women had similar chances of becoming independent producers. In the 1970s and 1980s, men were 9 to 11 percentage points, or about 1.4 times, more likely than women to be managers and 5 to 7 percentage points, or about 3 times, more likely to be proprietors. In the 1990s and 2000s, men remained about 8 to 9 percentage points, or about 1.3 times, more likely than women to be managers and 5 to 7 percentage points, or about 3 times, more likely to be proprietors. Women were consistently about 15 to 20 percentage points, or about 1.3 to 1.4 times, more likely than men to be workers throughout the period from 1972 to 2010.

Figure 3 describes covariate-adjusted gender disparities in class attainment over time, which are generally smaller than unadjusted disparities overall. This suggests that gender differences in human capital, family responsibilities, and sectoral concentration explain part of the overall gender gap in class attainment. But even after controlling for an extensive set of individual, family, household, and structural covariates, gender disparities in class attainment remain substantial and persist largely intact from 1972 to 2010. Throughout this period, men are consistently 8 to 10 percentage points, or about 1.3 times, more likely than comparable women to be managers, and 3 to 4 percentage points, or about 2.5 times, more likely to be proprietors. By extension, women are consistently 12 to 15 percentage points, or about 1.3 times, more likely than comparable men to be workers.

Table 5 presents estimates of gender disparities in class attainment from the CPCA. Across all four class measures, women are significantly less likely than men to be proprietors and managers, and there is little evidence of significant gender integration in access to positions of ownership and authority over time. These results are consistent with those from the GSS, indicating that the temporally stable pattern of gender disparities is not merely an artifact of its comparatively limited measure of workplace authority.

5.3. Racial Differences in Class Attainment

Figure 4 summarizes unadjusted racial differences in class attainment from 1972 to 2010. Although interval estimates are somewhat imprecise for blacks (a consequence of their small sample size in the GSS), results indicate that they are generally less likely than nonblacks to

be proprietors, managers, and independent producers, and more likely to be workers. Furthermore, despite some transitory fluctuations, estimates indicate that racial disparities in class attainment have been fairly stable over time. Between 1972 and the mid-1980s, when the proprietor and managerial classes were expanding at the population level, nonblacks were 6 to 8 percentage points, or about 1.3 times, more likely than blacks to be managers, and 5 to 7 percentage points, or more than 4 times, more likely to be proprietors. In the 1990s, the proportion of nonblacks in ownership and management declined, while the proportion of blacks in these class positions remained stable. These trends led to a temporary attenuation of racial disparities in class attainment. During the 2000s, the proportion of blacks in management and ownership declined in turn, and racial disparities in class attainment widened. At the end of the decade, racial disparities in class attainment reached their highest point since the early 1980s: in 2010, nonblacks were 11 percentage points, or about 1.5 times, more likely than blacks to be managers, and about 5 percentage points, or nearly 4 times, more likely to be proprietors.

Figure 5 summarizes covariate-adjusted racial disparities in class attainment. These estimates indicate that racial differences in human capital, family background, and industrial concentration explain most, but not all, of the racial disparity in class attainment. Overall, covariate-adjusted racial differences in class attainment are considerably smaller than unadjusted differences, and at several points between 1972 and 2010, these differences are not statistically significant at conventional thresholds. Nevertheless, Figure 5 provides little evidence of a consistent decline in racial disparities over time. Like the unadjusted disparities in Figure 4, the covariate-adjusted disparities presented here increase during the 1980s, decline during the 1990s, and then increase again during the 2000s. Specifically, blacks were less likely than comparable nonblacks to be proprietors and managers during the 1980s. During the 1990s, the class attainment prospects of blacks and nonblacks equalized owing to a decline in the proportion of nonblacks represented in ownership and management. Then, during the 2000s, the trend toward declining racial disparities in class attainment eroded as the proportion of blacks in ownership and management declined in turn, and at the close of the decade, significant racial disparities remerged. Unfortunately, these trend estimates cannot be validated against data from the CPCA because it lacks a sufficiently large sample of black respondents.

6. DISCUSSION

This study investigates several hypothesized changes in class structure and class attainment, with a focus on trends in workplace ownership and authority. It finds that the proportion of workers declined and that the proportion of managers and proprietors increased during the 1970s. But from the mid-1980s onward, these trends reversed, and the proportion of workers increased, while the proportion of managers and proprietors declined. Results also indicate that racial and gender disparities in class attainment remained fairly stable from 1972 to 2010, despite the narrowing of human capital differences, the introduction of policies designed explicitly to promote minority access to positions of economic power, and broad attitudinal changes suggesting a decline in the extent of overt discrimination. Although estimates suggest some modest fluctuations over time, there is no discernable trend toward either greater equality or inequality in the class attainment prospects of different status

groups. At present, blacks and especially women remain significantly less likely to occupy positions of workplace ownership and authority.

These results extend previous theory and research in several important ways. First, using an occupation-by-industry imputation procedure, Wright's (1987; 1997) seminal studies on changes in class structure documented a steady decline in the proportion of workers and a pronounced increase in the proportion of managers between 1960 and 1990. Results from the present study, which are based on a more direct measure of class and a longer time-series, corroborate these findings through the early 1980s, but they also reveal that trends in class structure reversed course in the mid-1980s and followed the general pattern hypothesized by class-analytic theory thereafter. These findings suggest a reconsideration of Wright's (1987; 1997) conclusion that the empirical record provides overwhelming support for post-class and post-industrial theories of change in modern class structures.

Second, the results presented in this study suggest a reconsideration of conventional methods used to identify managers and track their relative number over time. Previous studies based on occupational classification data show steady growth in the proportion of managers since the 1970s (e.g., Goldstein 2012; Wright 1997), but results based on respondent reports of supervisory responsibilities and policy influence at work provide no evidence of a monotonic expansion in the proportion of the labor force with managerial powers. These disparate findings are consistent with other evidence suggesting a nontrivial amount of job title inflation—that is, an increase in the prevalence of managerial job titles without a corresponding increase in the number of individuals that actually exercise managerial authority in the workplace—during the period under consideration (Jacobs 1992; Reskin & Ross 1992). Altogether, this suggests that occupational classification data may have become increasingly unreliable as an indicator of managerial power over the past several decades.

Third, this study suggests a reassessment of prior estimates based on self-employment and occupational classification data that provide evidence of significant gender integration across social classes since the early 1970s (e.g., Cohen et al. 2009; Hughes 2003; Loscocco & Robinson 1991; Stainback & Tomaskovic-Devey 2009). Results from the GSS and CPCA based on measures that distinguish between proprietors and independent producers among the self-employed and that incorporate information on supervisory and policy authority at work indicate that gender disparities in class attainment were fairly stable from 1972 to 2010, with women consistently underrepresented in positions of ownership and authority.

The trends in class structure documented in this study are difficult to reconcile with post-class and post-industrial theories and with the class-analytic perspective. Moreover, the invariance of these trends among the U.S. born and total population is also inconsistent with arguments that changes in class structure are influenced by recent waves of high-volume immigration. From the early 1970s to the mid-1980s, these trends followed the pattern hypothesized by post-class and post-industrial theories, but from the mid-1980s onward, they were more consistent with class-analytic theory. This pattern may reflect potentially contradictory effects of technological development and market competition on trends in class structure across industries and over time. The introduction of new technology may simultaneously lower demand for labor power by reducing the need for menial or repetitive

tasks, open new opportunities for business development in emerging industrial sectors, and lead to economic concentration. Market competition may also have contradictory impacts because it can simultaneously promote innovation and new business development on the one hand, and economic concentration on the other. As a result, class structures may follow a cyclical trend as economic concentration intensifies and subsides owing to the contradictory impacts of technological development and market competition across industries and over time.

For example, technological changes catalyzed the expansion of service industries and the decline of goods-producing industries in the 1970s and 1980s, the former of which were initially less concentrated and more conducive to small-scale entrepreneurship. Over time, however, as competition in service industries intensified and further technological developments provided competitive advantages to the largest firms, smaller enterprises may have been slowly eliminated, leading to growing economic concentration among the expanding service sectors. These changes would be associated with an increase in the proportion of proprietors and a decline in the proportion of workers during the early period of deindustrialization, and then a decline in the proportion of proprietors and an increase in the proportion of workers during the later period of deindustrialization as service industries began to mature and conglomerate. The results of this study follow a pattern similar that described here, but without more detailed data and a longer time series, this explanation remains speculative.

Although observed changes in class structure are difficult to reconcile with any of the theories that have motivated previous research on these trends, changes in class attainment by race and gender are less ambiguous. The stable pattern of racial and gender differences in class attainment are generally consistent with the enduring disparities perspective and cast considerable doubt upon the declining disparities perspective. Despite well-documented declines in status group disparities on other dimensions of social stratification, such as educational attainment and wages, this study reveals that racial and gender inequalities in workplace ownership and authority have remained stubbornly intact. These results resonate with an emerging body of evidence suggesting that workplace ownership and authority constitute dimensions of social class that may be especially resistant to status group integration (e.g., Jacobs 1992; Mintz & Krymkowski 2010; Reskin & Ross 1992; Smith 1999).

An alternative explanation for these persistent disparities, however, may be that status group integration across class boundaries occurs primarily through a process of cohort replacement that would only be reflected in time-series data many decades after egalitarian changes in human capital acquisition, labor market policies, and prejudicial attitudes. For example, if promotion into positions of authority typically occurs mid-career, at which point downward mobility out of authority hierarchies is rare, then gender disparities in promotional practices from decades past may continue to exert a strong influence on cross-sectional gender differences in class attainment observed during more recent periods. Thus, an analysis that does not account for these life-course dimensions of class attainment may overstate the persistence of racial and gender disparities.

To investigate this alternative explanation, I conducted a parallel analysis of status group disparities in class attainment using an analytic sample that excludes older birth cohorts (i.e., respondents age 41-65 at each wave). Results from this ancillary analysis are very similar to those discussed in Sections 5.2 and 5.3. They indicate that status group disparities in class attainment have not appreciably declined over time, even among younger birth cohorts. Additional analyses using synthetic cohort methods also indicate that younger cohorts of blacks and women face barriers to becoming proprietors and managers that are just as steep as those encountered by older cohorts when they were at a similar stage in their careers. These ancillary findings (not shown, available upon request) cast doubt on the argument that persistent status group disparities are overstated in time-series data because they partly obscure significant class integration among more recent birth cohorts.

Although studies of population-level changes in more conventional measures of social stratification, such as income, wealth, and occupational skill, document profound increases in inequality since the early 1980s (e.g., Autor, Levy, & Murnane 2003; Piketty 2014), this study documents comparatively small changes in class structure defined in terms of workplace ownership and authority. It is not difficult, however, to reconcile these seemingly disparate trends. For example, the modest decline in the proportion of proprietors since the 1980s is consistent with findings that the distribution of non-household wealth has become more concentrated and that much of the recent growth in wealth inequality is due to changes in asset prices rather than asset concentration (Piketty 2014). Furthermore, growing asset concentration and a slowly declining number of proprietors and managers suggests a shift toward an economy dominated by larger and more competitively insulated businesses, potentially leading to opportunities for economic rent extraction and amplifying growth in income inequality. Future research should further explore the links between changes in workplace ownership and authority relations on the one hand, and trends in income, wealth, and occupational inequality on the other (e.g., Wodtke forthcoming).

Although this study makes several important contributions to research on class structure and class attainment, it is not without limitations. First, this study does not link observed trends in class structure to the underlying mechanisms hypothesized to govern these trends, such as technological development and shifts in the competitive environment. While it is critically important to first evaluate different theories of changes in class structure against broad population-level trends, future research should attempt to directly link these trends to patterns of technological development and market competition.

Second, this study relies on the “residual approach” to measuring discrimination, which requires the strong assumption that there are no unobserved characteristics that affect class attainment and differ across status groups. If, for example, there are unobserved differences in career preferences between men and women (or blacks and nonblacks), then it would be inappropriate to attribute residual disparities in class attainment to discrimination. Although it is impossible to completely rule out unobserved heterogeneity as an explanation for observed status group disparities in class attainment, I controlled for an extensive set of covariates to minimize this threat to internal validity. As an additional robustness check, I also investigated whether racial and gender differences in preferences for self-employment can account for observed disparities in class attainment. The 1989, 1998, and 2006 waves of

the GSS asked a random subsample of respondents if they would prefer to be self-employed or employed by someone else. Results (not shown, available upon request) from ancillary analyses of these data indicate that racial and gender differences in preferences for self-employment cannot explain persistent disparities in class attainment.

Finally, this study uses a measure of class that may not accurately categorize wealthy rentiers who live on passive income and are not directly engaged in some form of occupation. However, pure rentiers (i.e., those not engaged in any economic activity beyond collecting interest, dividends, or rents) are a very small subset of proprietors, and their mismeasurement is unlikely to have a notable impact on trend estimates. Moreover, wealth data collected in the 2006 wave of the GSS suggests that the operational definition of proprietors used in this study does in fact capture a nontrivial number of high-net-worth individuals: about 20 percent of proprietors in these data report a net worth in excess of 750,000 dollars.

Its limitations notwithstanding, this study provides considerable evidence that both the aggregate class structure and status group disparities in class attainment were remarkably stable from 1972 to 2010. This stability suggests that the ownership and authority structure of the American economy, as well as ascriptive inequalities in attainment of positions therein, are highly resilient to industrial shifts, demographic changes, policy interventions, and expanding access to human capital.

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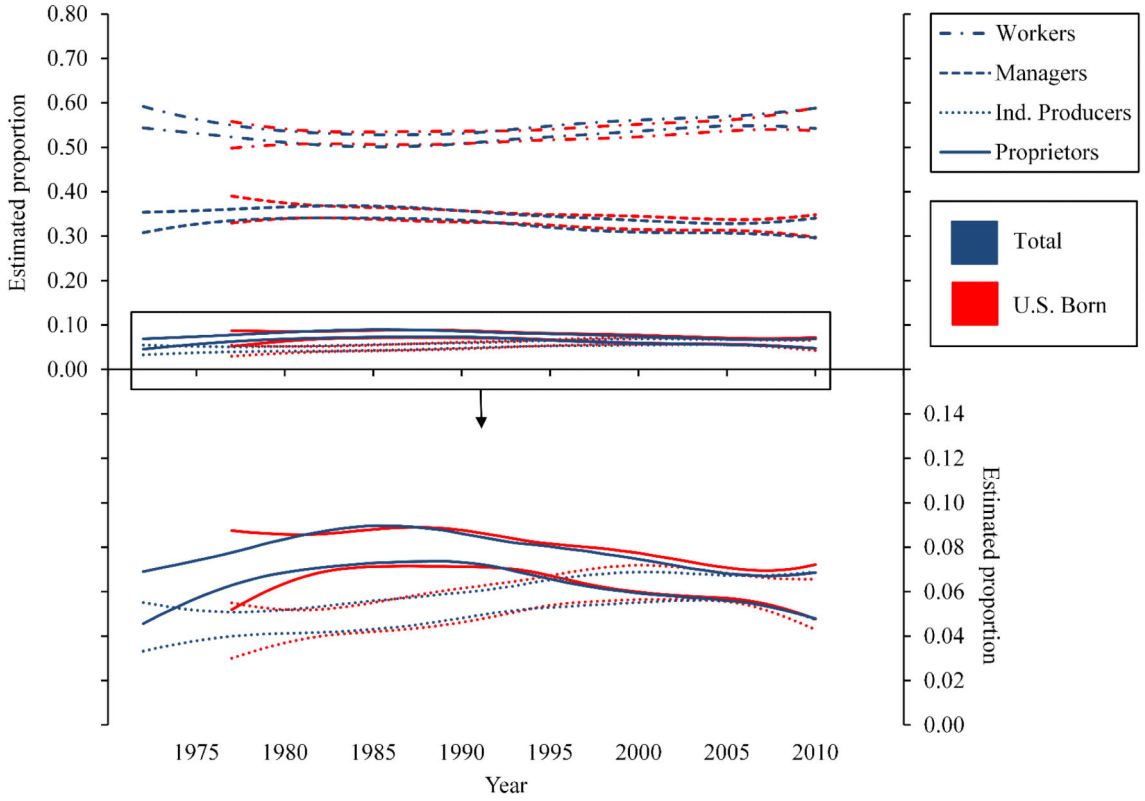
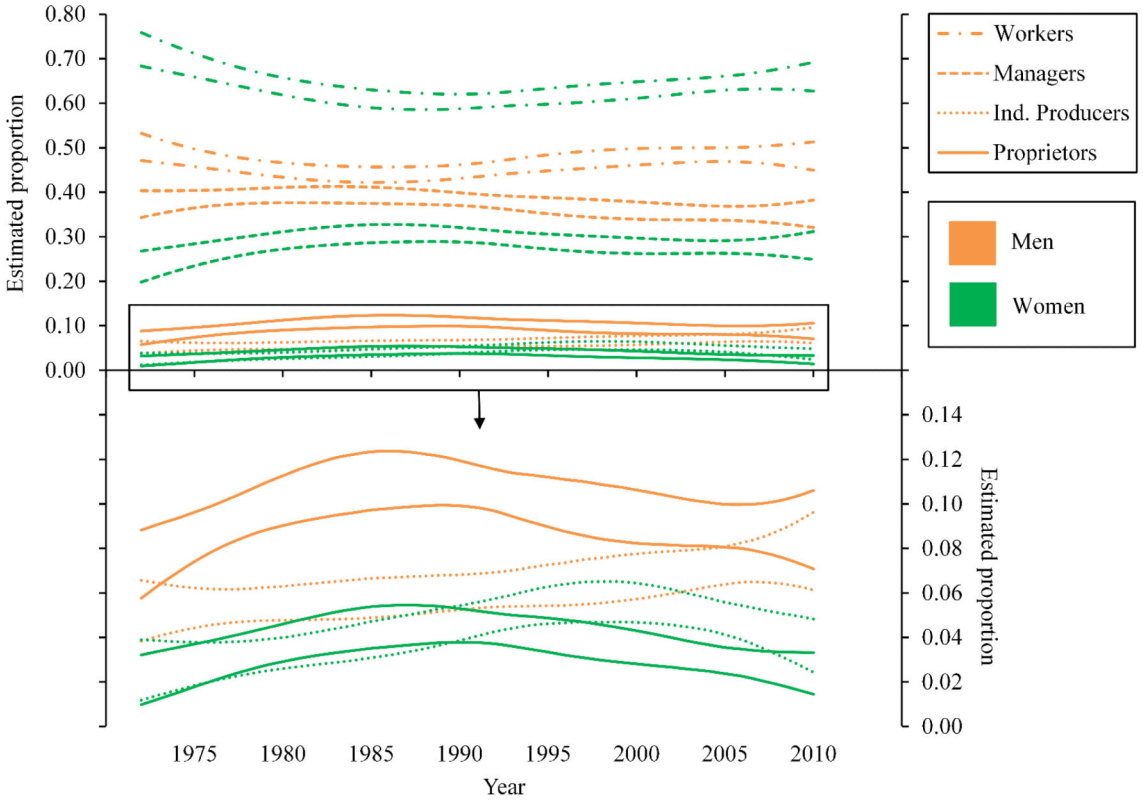


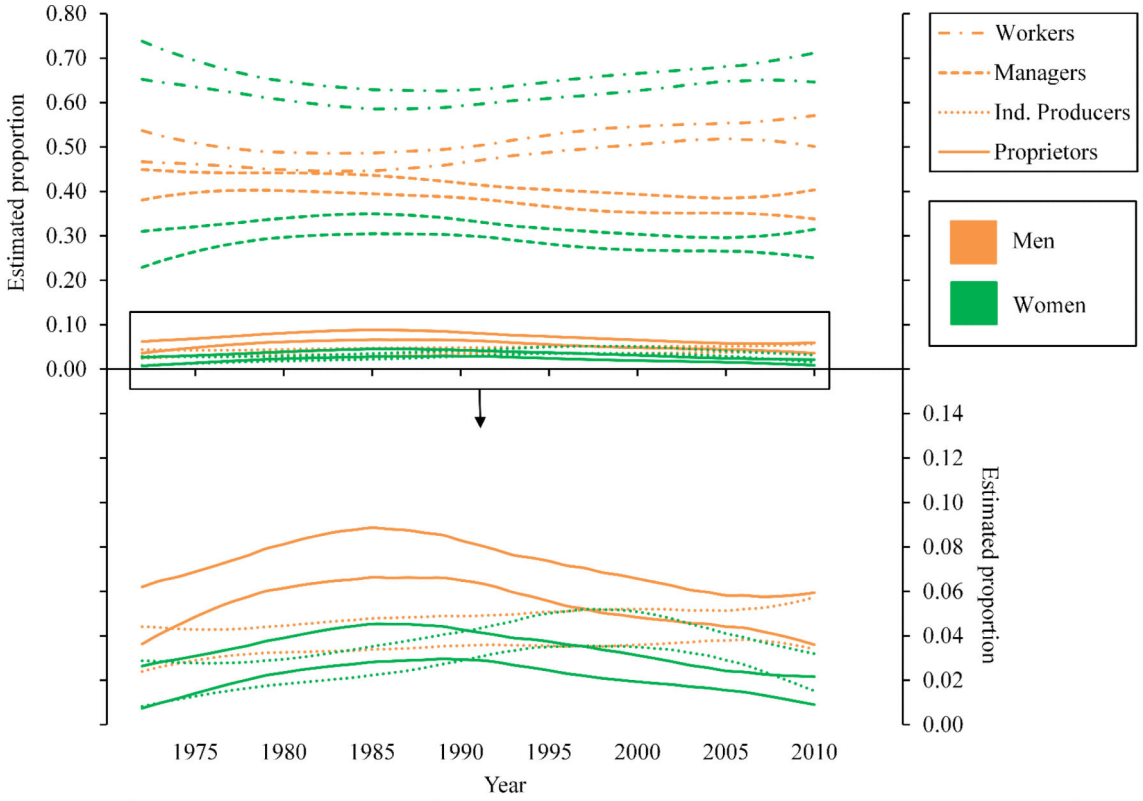
Notes: Plot displays 95 percent confidence intervals. Sample includes respondents who are 25 to 65 years old and work full-time in the 1972 to 2010 GSS waves. Results are combined estimates from 20 multiple imputation datasets.

Figure 1.
Trends in Class Structure, 1972-2010 GSS



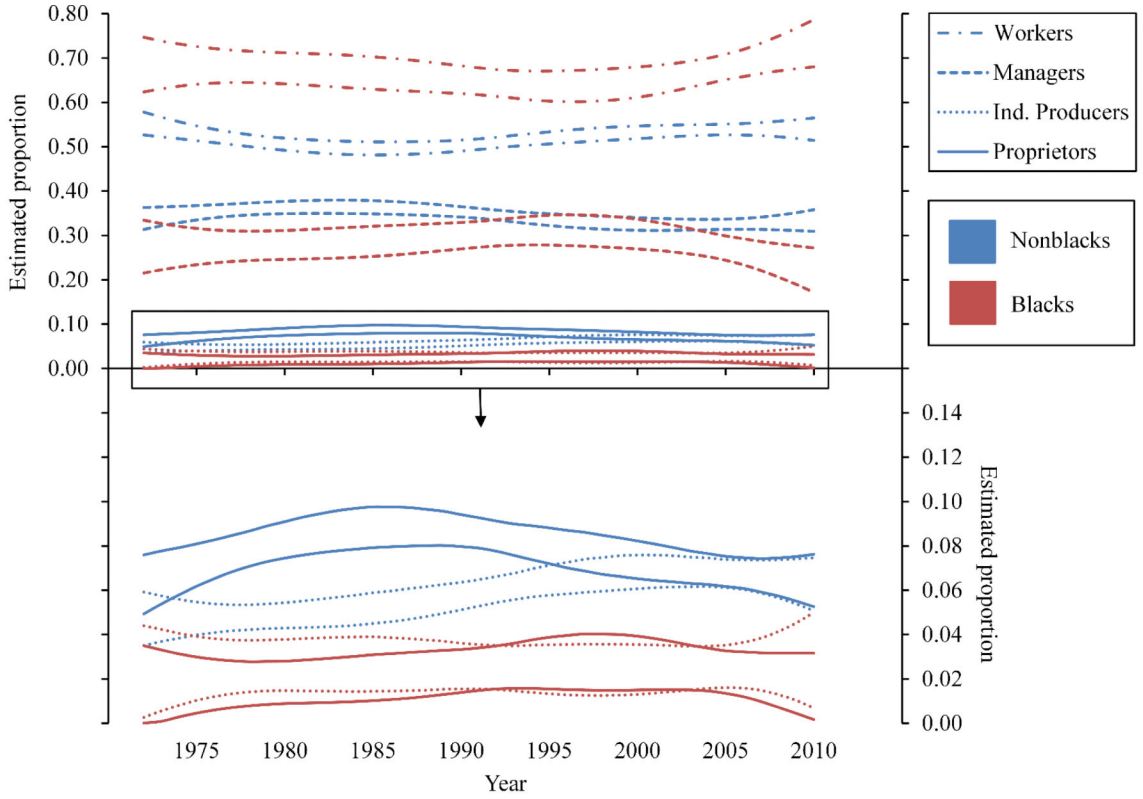
Notes: Plot displays 95 percent confidence intervals. Sample includes respondents who are 25 to 65 years old and work full-time in the 1972 to 2010 GSS waves. Results are combined estimates from 20 multiple imputation datasets.

Figure 2.
Unadjusted Gender Disparities in Class Attainment, 1972-2010 GSS



Notes: Plot displays 95 percent confidence intervals. Sample includes respondents who are 25 to 65 years old and work full-time in the 1972 to 2010 GSS waves. Results are combined estimates from 20 multiple imputation datasets. Proportions are estimated with control variables set to their sample means.

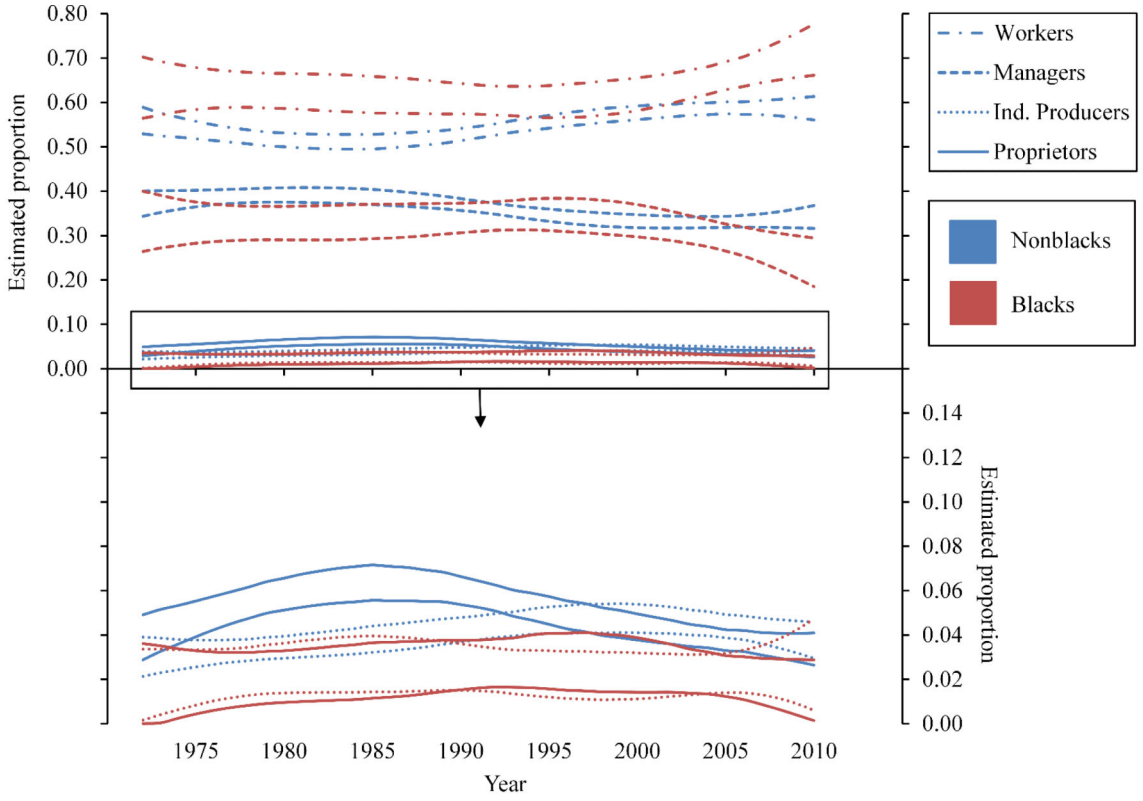
Figure 3.
Covariate-adjusted Gender Disparities in Class Attainment, 1972-2010 GSS



Notes: Plot displays 95 percent confidence intervals. Sample includes respondents who are 25 to 65 years old and work full-time in the 1972 to 2010 GSS waves. Results are combined estimates from 20 multiple imputation datasets.

Figure 4.

Unadjusted Racial Disparities in Class Attainment, 1972-2010 GSS



Notes: Plot displays 95 percent confidence intervals. Sample includes respondents who are 25 to 65 years old and work full-time in the 1972 to 2010 GSS waves. Results are combined estimates from 20 multiple imputation datasets. Proportions are estimated with control variables set to their sample means.

Figure 5.
Covariate-adjusted Racial Disparities in Class Attainment, 1972-2010 GSS

Table 1

Sample Characteristics by Gender, Race, and Decade, 1972-2010 GSS

	Men		Women		Nonblacks		Blacks	
Variables	**1970s**	**2000s**	**1970s**	**2000s**	**1970s**	**2000s**	**1970s**	**2000s**
Demographics/human capital								
Age, mean	42.0	42.4	41.9	42.6	42.1	42.8	40.9	40.8
Education, mean	12.6	13.9	12.5	14.1	12.7	14.1	11.2	13.6
Verbal ability, mean	6.2	6.2	6.5	6.2	6.5	6.3	5.0	5.5
Parental education, mean	8.8	11.7	9.1	11.7	9.1	11.9	7.3	10.7
Parental occ. prestige, mean	39.0	44.4	39.3	43.6	39.8	44.8	33.7	39.1
Parentral self-employment, %	33.0	24.6	34.9	21.9	34.2	24.5	29.7	16.3
U.S. born, %	94.4	86.4	93.9	87.6	94.0	86.6	97.0	88.8
Family constraints								
Married, %	83.9	57.7	61.7	47.7	77.6	56.1	66.3	34.6
Young children present, %	47.2	27.9	35.5	29.1	42.7	27.8	47.2	32.3
Structural characteristics								
Rural residence, %	17.6	11.2	13.2	11.6	17.3	11.9	6.3	8.7
Region, %								
East	24.5	17.2	20.8	18.1	23.5	17.7	21.0	17.7
Midwest	29.7	22.7	27.0	23.5	29.5	24.2	23.3	16.1
South	30.2	38.0	35.4	38.7	29.9	34.8	48.5	59.4
West	15.6	22.1	16.8	19.7	17.1	23.3	7.2	6.8
Industry, %								
Agriculture	15.1	15.1	1.6	2.3	11.0	10.1	7.4	3.6
Manufacturing/transportation	39.3	30.3	27.8	15.8	35.6	23.4	33.2	24.4
Wholesale/retail trade	11.7	14.2	14.6	14.7	12.8	14.8	11.5	12.3
Business/personal service	9.6	15.8	14.9	18.3	11.2	17.1	13.2	16.0
Professional/other services	24.3	24.6	41.1	48.9	29.4	34.6	34.7	43.7

Notes: Sample includes respondents who are 25 to 65 years old and work full-time in the GSS. Results are combined estimates from 20 multiple imputation datasets.

Table 2

Trends in Class Structure by Industry, 1972-2010 GSS

	Workers		Managers		Ind. Producers		Proprietors	
Industry/decade	**Est.**	**95% CI**	**Est.**	**95% CI**	**Est.**	**95% CI**	**Est.**	**95% CI**
Agriculture								
1970s	0.37	(0.16, 0.57)	0.30	(0.10, 0.50)	0.17	(0.01, 0.33)	0.17	(0.01, 0.33)
1980s	0.33	(0.15, 0.51)	0.33	(0.15, 0.51)	0.12	(0.00, 0.25)	0.22	(0.06, 0.37)
1990s	0.33	(0.14, 0.51)	0.30	(0.12, 0.48)	0.13	(0.00, 0.27)	0.24	(0.07, 0.42)
2000s	0.32	(0.17, 0.47)	0.36	(0.20, 0.52)	0.14	(0.03, 0.26)	0.17	(0.05, 0.30)
Mfg/transport								
1970s	0.60	(0.48, 0.71)	0.36	(0.25, 0.48)	0.01	(0.00, 0.04)	0.03	(0.00, 0.07)
1980s	0.59	(0.48, 0.69)	0.36	(0.26, 0.46)	0.02	(0.00, 0.05)	0.03	(0.00, 0.07)
1990s	0.60	(0.49, 0.70)	0.34	(0.24, 0.44)	0.03	(0.00, 0.07)	0.03	(0.00, 0.07)
2000s	0.63	(0.54, 0.73)	0.29	(0.20, 0.39)	0.03	(0.00, 0.06)	0.04	(0.00, 0.08)
Wholesale/retail trade								
1970s	0.52	(0.32, 0.72)	0.31	(0.13, 0.49)	0.05	(0.00, 0.14)	0.12	(0.00, 0.25)
1980s	0.42	(0.28, 0.57)	0.38	(0.23, 0.52)	0.06	(0.00, 0.14)	0.14	(0.03, 0.24)
1990s	0.42	(0.28, 0.57)	0.42	(0.27, 0.57)	0.06	(0.00, 0.13)	0.10	(0.01, 0.18)
2000s	0.52	(0.39, 0.65)	0.37	(0.25, 0.50)	0.04	(0.00, 0.08)	0.07	(0.00, 0.14)
Bus./personal services								
1970s	0.50	(0.30, 0.71)	0.28	(0.10, 0.47)	0.11	(0.00, 0.24)	0.10	(0.00, 0.23)
1980s	0.41	(0.26, 0.56)	0.35	(0.21, 0.49)	0.11	(0.02, 0.20)	0.13	(0.03, 0.23)
1990s	0.49	(0.35, 0.63)	0.27	(0.15, 0.40)	0.14	(0.04, 0.24)	0.09	(0.01, 0.17)
2000s	0.47	(0.35, 0.59)	0.30	(0.19, 0.41)	0.15	(0.06, 0.24)	0.08	(0.01, 0.15)
Prof./other services								
1970s	0.60	(0.47, 0.72)	0.36	(0.24, 0.48)	0.01	(0.00, 0.04)	0.03	(0.00, 0.08)
1980s	0.58	(0.48, 0.68)	0.36	(0.27, 0.46)	0.01	(0.00, 0.04)	0.04	(0.00, 0.08)
1990s	0.61	(0.51, 0.70)	0.32	(0.23, 0.41)	0.03	(0.00, 0.06)	0.05	(0.01, 0.09)
2000s	0.62	(0.54, 0.70)	0.31	(0.23, 0.39)	0.03	(0.00, 0.05)	0.04	(0.01, 0.07)

Notes: Sample includes respondents who are 25 to 65 years old and work full-time in the GSS. Results are combined estimates from 20 multiple imputation datasets.

Table 3

Trends in Class Structure, 1980 and 1991 CPCA

	1980		1991	
Class	**Est.**	**95% CI**	**Est.**	**95% CI**
Measure A *(supervisory authority)*				
Workers	0.48	(0.45, 0.51)	0.48	(0.46, 0.51)
Managers	0.39	(0.36, 0.42)	0.34	(0.31, 0.37)
Proprietors	0.10	(0.08, 0.12)	0.10	(0.09, 0.12)
Ind. Producers	0.03	(0.02, 0.04)	0.07	(0.06, 0.09)
Measure B *(policy authority)*				
Workers	0.74	(0.71, 0.76)	0.68	(0.66, 0.71)
Managers	0.13	(0.11, 0.15)	0.14	(0.12, 0.16)
Proprietors	0.10	(0.09, 0.12)	0.10	(0.09, 0.12)
Ind. Producers	0.03	(0.02, 0.04)	0.07	(0.06, 0.08)
Measure C *(supervisory OR policy authority)*				
Workers	0.46	(0.43, 0.49)	0.45	(0.43, 0.48)
Managers	0.41	(0.38, 0.44)	0.37	(0.35, 0.40)
Proprietors	0.10	(0.09, 0.12)	0.10	(0.09, 0.12)
Ind. Producers	0.03	(0.02, 0.04)	0.07	(0.06, 0.09)
Measure D *(supervisory AND policy authority)*				
Workers	0.76	(0.73, 0.79)	0.72	(0.69, 0.74)
Managers	0.11	(0.09, 0.13)	0.11	(0.09, 0.13)
Proprietors	0.10	(0.08, 0.12)	0.10	(0.09, 0.12)
Ind. Producers	0.03	(0.02, 0.04)	0.07	(0.06, 0.08)

Notes: Sample includes respondents who are 25 to 65 years old and work full-time in the 1980 and 1991 waves of the CPCA. Results are combined estimates from 20 multiple imputation datasets.

Table 4

Socioeconomic Characteristics by Class, 1972-2010 GSS

	Education		Occupational Prestige		Income (log)	
Class	**mean**	**95% CI**	**mean**	**95% CI**	**mean**	**95% CI**
Workers	13.3	(13.2, 13.3)	43.0	(42.7, 43.2)	10.53	(10.51, 10.54)
Ind. Producers	13.3	(13.2, 13.5)	43.4	(42.6, 44.3)	10.52	(10.47, 10.57)
Managers	13.9	(13.8, 14.0)	46.6	(46.2, 46.9)	10.82	(10.80, 10.84)
Proprietors	14.2	(14.1, 14.4)	48.5	(47.8, 49.2)	11.10	(11.06, 11.15)

Notes: Sample includes respondents who are 25 to 65 years old and work full-time in the GSS. Results are combined estimates from 20 multiple imputation datasets.

Table 5

Trends in Class Structure by Gender, 1980 and 1991 CPCA

	Men				Women				LRT
	1980		1991		1980		1991		
Class/measure	**Est.**	**95% CI**	**Est.**	**95% CI**	**Est.**	**95% CI**	**Est.**	**95% CI**	**p-value**
Measure A (*sup. authority*)									
Workers	0.39	(0.35, 0.43)	0.40	(0.36, 0.43)	0.62	(0.58, 0.67)	0.59	(0.55, 0.63)	0.54
Managers	0.45	(0.41, 0.49)	0.38	(0.35, 0.42)	0.29	(0.25, 0.33)	0.29	(0.25, 0.32)	
Proprietors	0.13	(0.10, 0.15)	0.14	(0.11, 0.16)	0.07	(0.04, 0.09)	0.06	(0.04, 0.08)	
Ind. Producers	0.03	(0.02, 0.05)	0.08	(0.06, 0.10)	0.02	(0.01, 0.04)	0.06	(0.04, 0.08)	
Measure B (*pol. authority*)									
Workers	0.67	(0.63, 0.71)	0.62	(0.59, 0.66)	0.83	(0.80, 0.87)	0.76	(0.73, 0.80)	0.23
Managers	0.17	(0.14, 0.20)	0.16	(0.13, 0.19)	0.08	(0.05, 0.10)	0.12	(0.09, 0.14)	
Proprietors	0.13	(0.10, 0.15)	0.14	(0.11, 0.16)	0.07	(0.04, 0.09)	0.06	(0.04, 0.08)	
Ind. Producers	0.03	(0.02, 0.05)	0.08	(0.06, 0.10)	0.02	(0.01, 0.04)	0.06	(0.04, 0.08)	
Measure C *(sup. OR pol. authority)*									
Workers	0.36	(0.32, 0.40)	0.37	(0.33, 0.40)	0.60	(0.56, 0.65)	0.56	(0.52, 0.60)	0.34
Managers	0.48	(0.44, 0.52)	0.41	(0.38, 0.45)	0.31	(0.26, 0.35)	0.32	(0.28, 0.36)	
Proprietors	0.13	(0.10, 0.15)	0.14	(0.11, 0.16)	0.07	(0.04, 0.09)	0.06	(0.04, 0.08)	
Ind. Producers	0.03	(0.02, 0.05)	0.08	(0.06, 0.10)	0.02	(0.01, 0.04)	0.06	(0.04, 0.08)	
Measure D *(sup. AND pol. authority)*									
Workers	0.70	(0.66, 0.74)	0.65	(0.62, 0.69)	0.85	(0.81, 0.88)	0.80	(0.76, 0.83)	0.48
Managers	0.14	(0.11, 0.17)	0.13	(0.10, 0.15)	0.06	(0.04, 0.09)	0.08	(0.06, 0.11)	
Proprietors	0.13	(0.10, 0.15)	0.14	(0.11, 0.16)	0.07	(0.04, 0.09)	0.06	(0.04, 0.08)	
Ind. Producers	0.03	(0.02, 0.05)	0.08	(0.06, 0.10)	0.02	(0.01, 0.04)	0.06	(0.04, 0.08)	

Notes: Sample includes respondents who are 25 to 65 years old and work full-time in the 1980 and 1991 waves of the U.S. CPCA. Results are combined estimates from 20 multiple imputation datasets. The likelihood ratio tests (LRT) evaluate the hypothesis of no change in gender differences over time.