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The authors examine whether growth in earnings inequality has played out in ways that are class strengthening or class weakening. Using the Current Population Survey, they show that the absolute amount of inequality is increasing (a) between big classes, (b) between the occupations constituting big classes, and (c) within occupations. In relative terms, the share of total inequality occurring within occupations has declined, whereas the share of total inequality occurring between classes and between the occupations constituting big classes has tended to increase, most clearly for men. Although the majority of earnings inequality is still generated within occupations, especially rapid growth of the between-class and between-occupation components implies that the well-known takeoff in inequality has generated a "lumpier" earnings distribution with relatively stronger class and occupational distinctions.

Keywords: *social class; earnings inequality; wage inequality*

The takeoff in earnings inequality is one of the most spectacular social developments in the recent history of the United States. Although an appropriately massive literature on the takeoff has developed among social scientists, this literature is dominated by economists and largely ignored by sociologists. This state of affairs is surprising because sociologists, more so than economists, have represented themselves as uniquely concerned with the unequal distribution of valued goods.

Why have sociologists, with several notable exceptions (see Bernhardt, Morris, Handcock, & Scott, 2001; DiPrete, Goux, & Maurin, 2002; Fernandez, 2001; Firebaugh, 2003; Kalleberg, 2003; Morgan & Tang, 2005; Morris & Western, 1999), studiously

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ignored what is arguably one of the most consequential social developments of our time? The main explanation resides, we think, in the discipline's commitment to understanding and measuring inequality with either socioeconomic scales or social class categories, neither of which reference the earnings distribution in any direct or simple way (see Myles, 2003, for a related argument). The unanticipated effect of this measurement decision was to lock sociologists out of one of the key social science literatures in the past quarter century and marginalize the discipline yet further.

Is it possible for sociologists to contribute at this late date to the study of earnings inequality? There are two approaches that might prove to be fruitful here. First, sociologists might develop uniquely sociological interpretations of the growth in earnings inequality, perhaps by focusing on its political, institutional, or organizational sources (e.g., Morris & Western, 1999; also, Stone, 2004). These types of sociological accounts are certainly worth pursuing, especially given that some of the long-dominant economic accounts of the trend (e.g., skill-biased technological change) are now receiving more criticism, presumably opening up new space for a distinctively sociological account (e.g., Card & DiNardo, 2002; also, Bernstein & Mishel, 1999; Levy & Murnane, 1992). Even with this opening, it will still be difficult for sociologists to have much impact, not just because "first movers" tend to control the development of a literature but also because the field is so well studied that any newcomers, sociologists included, will perforce be hard pressed to come up with truly novel stories.

The second approach, and one that we take up here, is to sidestep altogether the narrowly causal questions with which economists have been understandably fascinated. Rather than offering yet another "smoking gun" article that pits skill-biased technological change against some other preferred source of the growth in earnings inequality, we instead explore the implications of rising earnings inequality for the class structure. We accordingly focus on the effects rather than causes of earnings inequality. Given that sociologists have been so fascinated with social class, it might be supposed that they would have by now carefully examined how the class structure has been affected by the dramatic takeoff in earnings inequality, if for no other reason than to reassure that conventional class schemes still suffice. It is surprising that rather little in the way of relevant work on this question has been completed, an omission we seek to rectify here.

We wish to ask whether the takeoff in earnings inequality has altered in some fundamental way the contours of the class structure. There is much research on changes in the univariate earnings distribution but virtually no research on possible changes in the bivariate class-earnings distribution. This relationship is of interest because class categories are typically conceived as homogeneous "social containers" filled with individuals with similar life conditions and, presumably, quite similar earnings as well. The association between class and earnings has in fact been used to justify the usefulness of class models (e.g., Beck, 1992; Hout, Brooks, & Manza, 1993). To be sure, class analysts stress that class categories are useful precisely because they

signal a wide range of life conditions (e.g., prestige, authority, cultural capital), not just earnings or income. Although earnings is, then, but one of the life conditions indexed by class schemes, it is no doubt regarded as one of the more crucial ones. By this logic, we should presumably want to know whether classes are signaling earnings with more or less reliability now than in the past, a question on which there is little evidence.

The structure of the class-earnings relationship speaks in this sense to whether class categories are information rich and can profitably be used by sociologists as a synthetic measure of social position. This relationship is of interest, however, not merely out of a methodological concern for the viability of class schemes but also because social scientists want to know whether identifiable groups are emerging in the labor market and render inequality a lumpy, group-determined phenomenon rather than a more continuous and individualistic one. As Giddens (1973) famously (if awkwardly) put it, "class structuration" is well developed insofar as class position is determinative of a host of life conditions, including most obviously earnings.

We carry out our analyses in the context of a model that examines labor market structure at both the big-class and micro-class levels (see Grusky, 2005; Grusky & Galescu, 2005; Weeden & Grusky, 2005a, 2005b, 2006). In operationalizing big classes, we take the usual approach of aggregating "similar" detailed occupations, with our aggregations yielding categories such as professional, manager, clerical worker, craft worker, or farmer. As we noted above, these aggregations are typically justified on the argument that class members share broadly similar life conditions (e.g., prestige, earnings, cultural capital), although reference is sometimes additionally or alternatively made to the similarity of their on-the-job working conditions and employment contracts (e.g., Goldthorpe, 2001; Lockwood, 1989). In this regard, the categories of big-class schemes are largely statistical constructions of academics or Census Bureau officials, whereas the detailed occupations or "micro classes" (e.g., lawyer, secretary, carpenter) that comprise big-class categories are more deeply institutionalized, meaning that they are quite widely diffused "constructions" of employers, employees, and many others. This institutionalization takes the form of (a) workers representing their career aspirations in occupational terms, (b) professional and vocational schools training workers for occupationally defined skills, (c) professional associations and labor unions forming on occupational designations, and (d) employers constructing, advertising, and remunerating jobs in terms of occupational labels (e.g., Treiman, 1977; Wilensky, 1966).

We simply do not know whether the takeoff in earnings inequality has strengthened big-class distinctions, occupational distinctions, or both. This is not to suggest that big classes and detailed occupations have been ignored altogether. To the contrary, many analyses of earnings inequality feature big classes of one sort or another (often referred to as "occupations"), whereas a handful of analyses bring in detailed occupations in some way (Groshen 1991; Howell & Wolff, 1991; Levy, 1998; Murphy & Welch, 1993). These efforts fall short for our purposes either because

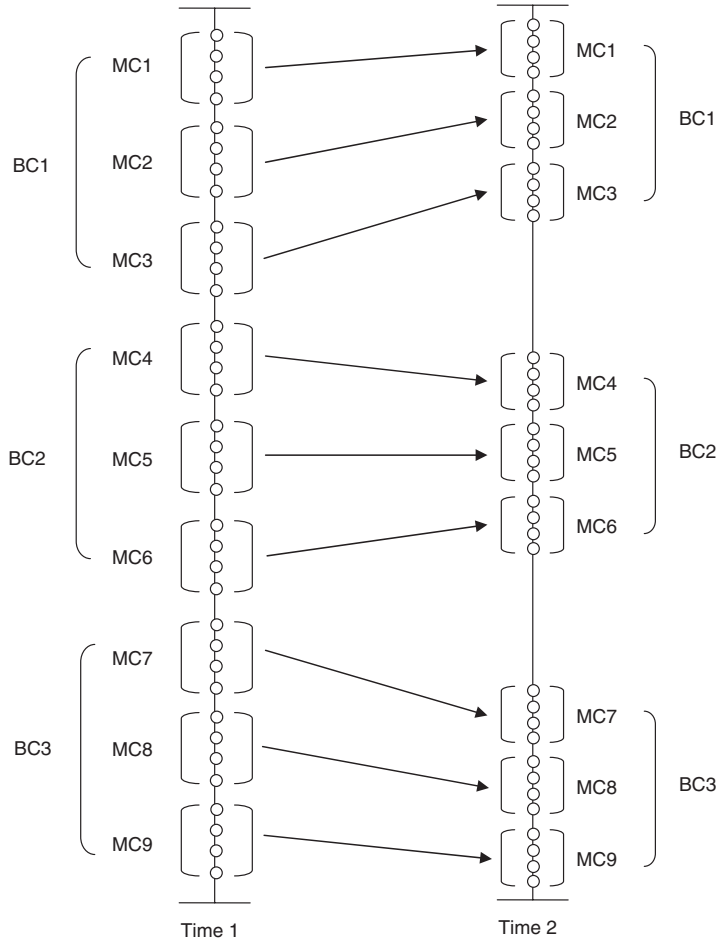
(a) only a single time period is analyzed or (b) the decomposition is carried out in terms of big classes alone or detailed occupations alone, not both at once.

The structure of the takeoff is best understood, we argue, by recognizing that detailed occupations are nested in big classes and then apportioning the earnings inequality into three components: (a) the between-class (BC) component (i.e., inequality between big classes), (b) the between-occupation/within-class (BO/WC) component (i.e., inequality between the detailed occupations that comprise each big class), and (c) the within-occupation (WO) component (i.e., inequality within detailed occupations). The BO/WC and WO components are conflated as "within-class inequality" in analyses that use big classes alone, and the BC and BO/WC components are conflated as "between-occupation inequality" in analyses that use detailed occupations alone. We argue below that these components are driven by very different mechanisms and are usefully distinguished in understanding trends.

The further virtue of distinguishing these three components is that it allows us to identify whether trends in inequality are playing out in ways that strengthen either big classes or occupations, strengthen neither, or strengthen both. As an example of one possible outcome, Figure 1 graphs a constellation of changes that, taken together, are distinctly "pro-class" in their implications. In this stylized figure, the labor market has just three big classes (i.e., BC1, BC2, and BC3), with three micro classes (i.e., MC1 to MC3, MC4 to MC6, and MC7 to MC9) then nested in each of these big classes. Within each micro class, the log(wages) of incumbents are uniformly distributed, an implausible but presentationally convenient functional form. The two vertical axes reveal a pattern of change in which the WO component is shrinking, the BO/WC component is shrinking, and the BC component is growing. The second axis (pertaining to Time 2) accordingly suggests a three-class society marked by substantial between-class differences in log(wages) and trivial within-class differences. By contrast, the transition to a micro-class regime, as represented in Figure 2, has the WO component again decreasing, whereas the BO/WC and BC components now move in directions opposite to those shown in Figure 1. This change effectively yields a labor market with nine small classes rather than three big ones.

It is quite plausible that we will instead observe roughly commensurate increases in the WO, BO/WC, and BC components. This type of change simply "stretches out" the overall distribution and leaves the relative sizes of the WO, BO/WC, and BC components unchanged (see Allison, 1978; also, Sen, 1973). If an absolutist tack is taken, all that matters is that such change increases the earnings heterogeneity within classes and occupations, thereby undermining the class principle (e.g., Kim & Sakamoto, 2006).[1] The relativist counterargument is that (a) the social meaning of inequality is gradually recalibrated to adjust to an increased dispersion in earnings and (b) a commensurate change in all components is therefore a class-neutral change (see Blau & Kahn, 2002). This counterargument suggests that one should care principally about the relative sizes of the WO, BO/WC, and BC components. We do not privilege either argument but instead cater to both by presenting evidence on relative as well as absolute change in the inequality components.

Figure 1
The Transition to a Big-Class Regime

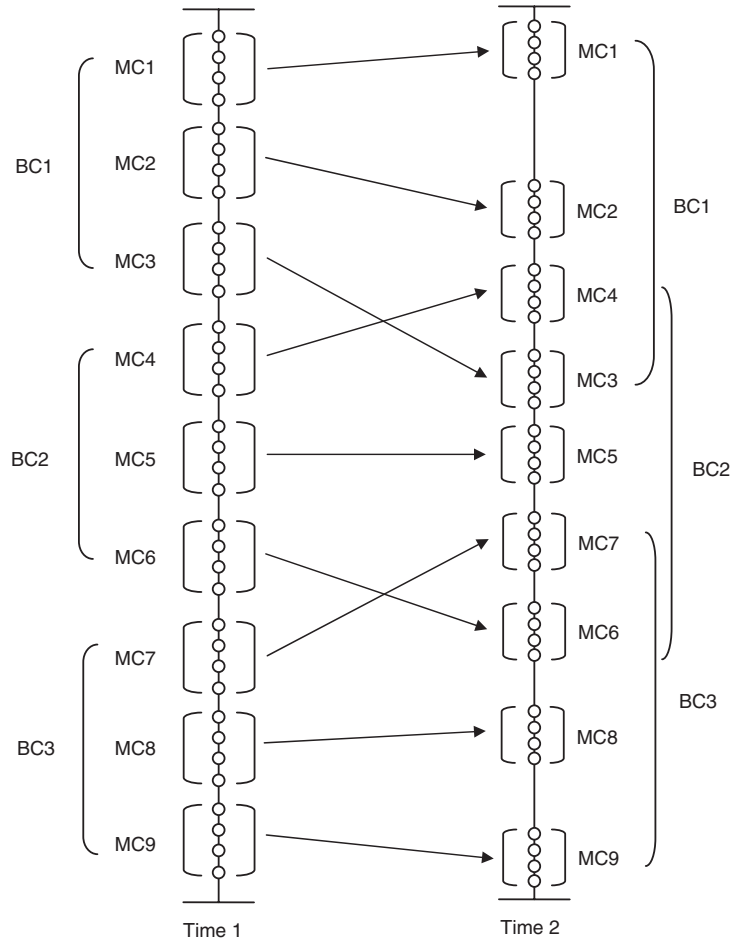


Note: BC = big class; MC = micro class.

Sources of Trends

It is instructive to identify the mechanisms that underlie change in the three components of inequality and thereby strengthen or weaken the class principle. As shown in the following sections, these mechanisms differ across the three components, implying that rates of change may also differ across the components.

Figure 2
The Transition to a Micro-Class Regime



Note: BC = big class; MC = micro class.

The BC Trend

The BC component is well studied within the literature and can be dispensed with quickly. In understanding the BC component, it is relevant that entry into different big classes is linked to different levels of schooling, with the professional and managerial classes usually requiring a college or more advanced degree, the sales and

clerical classes typically requiring at least some college education, and the manual classes (i.e., craft, operative, laborer) serving as the default location for those with high school degrees or less. This link between big-class categories and educational levels is hardly perfect, not just because conventional big-class schemes typically make distinctions between categories that have roughly similar educational requirements (e.g., sales, clerical) but also because entry requirements for most big classes are not explicitly tied to specific educational degrees (e.g., Grusky & Sørensen, 1998; Weeden & Grusky, 2005b). Most obvious, entry into the craft class is not limited to those with high school degrees; nor is entry into the operative or laboring classes reserved exclusively for those who lack such degrees. Even so, there is clearly a strong association between class and educational qualifications, and the BC component, therefore, should fluctuate with changes in the returns to different levels of schooling.[2] If big classes are effectively just education groups in disguise, the BC trend line should be quite flat in the 1970s by virtue of the relatively large supply of college-educated workers but then increase rapidly in the 1980s as the demand for college-educated workers begins to outstrip the supply (see Katz & Murphy, 1992; Levy & Murnane, 1992).

In the foregoing story, classes are mere statistical entities that stand in as markers of educational qualifications, and the trend in the BC component simply shadows the well-known trend in returns to education. Could one imagine a story about the BC component in which classes are more than such indirect "stand-ins"? This type of story becomes available in societies where big classes are deeply institutionalized and their representatives participate formally in collective bargaining. For example, big classes in Sweden are conventionally represented as meaningful wage-setting actors, not just statistical categories that indirectly signal changes in market-driven returns to schooling. The BC component will increase in Sweden whenever the union that represents the upper class does unusually well in its collective bargaining or the union that represents the lower class does unusually poorly in its collective bargaining. To some extent, big unions in the United States engage in similar collective bargaining and wage-setting efforts, but they do not map onto entire big classes nearly as neatly as in the Swedish case, nor do they command anything approaching the wage-setting power of their Swedish counterparts. It follows that the BC component will fluctuate in the United States largely in response to changes in the returns to education or changes in the educational composition of classes.

The BO/WC Trend

The direction of the BO/WC trend does not fall out quite so directly from an existing empirical literature (cf. Weeden, 2002). We can, however, lay out two simple hypotheses about this trend, the first directly related to demand shifts that favor high-skill labor and the second directly related to the spread of occupationalization and occupational closure.

The first of these two stories, a within-class variant of the standard demand-side account, begins with the presumption that each big class is a mixture of high-skill and low-skill occupations. It is clear that the skill differential within classes will be much smaller than the skill differential for the full labor market, but one would nonetheless anticipate a nontrivial differential within even the most homogeneous classes. If the demand for labor within the high-skill occupations of each big class outstrips the supply of labor for those occupations, their earnings will be driven up and the BO/WC component will accordingly grow. For example, the relative demand for high-skill computer programmers and related technical occupations within the professional class clearly took off during the 1980s, whereas the demand for other less skilled occupations within the professional class (e.g., photographers) appears to have increased more slowly. The increasing demand for computer programmers and related technical occupations can itself be understood as part of the shift toward an "information economy" driven by technological change and outsourcing of low-skill work.

Should we anticipate a quick increase in the supply of high-skill labor in response to these higher wages? Although one might expect relatively quick responses to demand-induced wage premia that emerge either within occupations or between classes, there is good reason to believe that interoccupational wage premia will be preserved during the longer run. This is because occupations have often established control of entry in ways that make slow-growth policies viable. That is, many high-skill occupations control entry via licenses, credentials, training requirements, and certification, allowing them to protect the wages of current incumbents by restricting supply (see Weeden, 2002). In this sense, a demand-shift story becomes especially plausible when applied to the BO/WC component, as here one finds institutionalized mechanisms of closure that give real staying power to demand-induced wage premia.

The second main source of BO/WC trend also references these institutionalized mechanisms of closure but turns attention to the gradual diffusion of such mechanisms during the past quarter century. The process of occupationalization, one of the main rent-generating forces of our time, can raise the wages of occupational incumbents by (a) increasing the occupation's control of the supply of labor and (b) reducing competition from other potential providers of the product or service and, therefore, increasing demand (see Abbott, 1988; Weeden, 2002). For example, the American Bar Association not only establishes certification requirements and controls the supply of labor but also ensures that lawyers, rather than representatives of other occupations (e.g., paralegals, accountants), maintain as much control as possible of the dispute-adjudicating niche in the labor market.

If closure movements were a random process to which all occupations, both high skill and low skill alike, were equally subjected, then they would not have any implications for within-class inequality. However, high-skill occupations appear to have been especially successful during the past quarter century in securing closure of this

sort, thereby raising their already high wages yet higher. This process has been especially prominent within the professions (i.e., "professionalization") and other nonmanual big classes. Although some high-skill occupations in the manual sector have attempted to follow suit with professionalization projects of their own (e.g., truck drivers, electricians), these projects are neither as common nor as successful as those within the nonmanual sector (see Weeden, 2002, Table 6).

If professionalization has been the method of choice for securing the rewards of social closure within the nonmanual sector, craft unionization is the corresponding method of choice within the manual sector. The latter method has fared less well of late than has professionalization. As craft unions weaken, it has become difficult for them to maintain control of the supply of labor and to capture the rent that such control makes possible, and the wage gap between the privileged and less privileged craft occupations has accordingly begun to close. The BO/WC trend may be suppressed by such countervailing "deoccupationalizing" effects in the manual big classes.

The forces making for the BO/WC trend are in these ways deeply dependent on the institutional mechanisms by which occupationalization is either weakened or strengthened. Indeed, even when one understands the BO/WC trend line in terms of a standard demand-side account, the forces of occupationalization are still relevant because they affect the long-term staying power of demand-induced wage premia. The importance of occupationalization for the BO/WC component leads us to hypothesize that this component will particularly take off in those sectors of the labor market, such as the nonmanual sector, in which occupationalization has been unusually successful.

The WO Trend

The final component of interest is the within-occupation variance. In the economics literature, the closest analogue to the within-occupation variance is what has conventionally been termed the "within-group" variance, where this refers to the residual variance in earnings that falls out of standard Mincer-type human capital regressions (using such variables as age, schooling, and interactions between age and schooling). Although the groups that are referenced by such methods are statistical cross-classifications rather than institutionalized occupations (cf. Groshen, 1991), it is still worth examining the ways in which the within-group variance is presumed to be generated.

The stylized fact with which this literature begins is that most of the growth in overall wage inequality is attributable to growth in such residual inequality (e.g., Acemoglu, 2002; DiNardo, Fortin, & Lemieux, 1996; Juhn, Murphy, & Pierce, 1993; Katz & Autor, 1999; cf. Card & DiNardo, 2002; Lemieux, 2003). This growth is frequently, although not exclusively, attributed to the rising demand for skill, where the skills of interest are not indexed by observable schooling but by unobservable social, cognitive, or personality traits (see Levy & Murnane, 1992, pp. 1365-1367). The demand for skilled labor started expanding in the 1970s, yet the effect of this

expansion on the wage premium for observable schooling was suppressed until the 1980s, when finally the supply of college-schooled labor no longer kept pace with the growing demand for such labor. By contrast, the relative supply of unobservable skills may be presumed to be constant with time, meaning that the wage premium for such skills should steadily expand and generate a long-term upward trend in residual inequality during the 1970s and beyond (see especially Acemoglu, 2002).

The rising demand for unobservable skills, which is typically treated as exogenous, can itself be attributed to any number of causes, including skill-biased technological change and shifts in the structure of final demand (also see Frank & Cook, 1995; Stone, 2004). Whatever its source, a rising payoff to unobservable skills will generate a growth in within-group inequality, just as a rising payoff to observable skills generates a growth in between-group inequality. This type of account has not been subjected to anything approaching a definitive test, yet it remains attractive because of its consistency with competitive wage theory (see Levy & Murnane, 1992).

We are not averse to porting over this economic account and using it to explain trends in within-occupation inequality. It is possible, however, that much of what appears to be growing demand for high-skill labor within the residual statistical groups of Mincer-type regression models is just growing demand for particular high-skill occupations (e.g., doctors, systems analysts), not growing demand for high-skill tasks within all occupations. If so, we need only invoke a story about increasing demand for high-skill occupations, a story already outlined in the preceding section on the BO/WC trend. Once the BO/WC component is stripped out of the residual, it may well be that the remaining WO component suggests much less in the way of growing demand for high-skill labor.

The WO component is not, however, likely to be entirely stable once the BO/WC component is parsed out. To the contrary, it is plausible that complementary increases in the WO component will be generated by rising demand for unobservable skill, just as the standard economic account would have it. This type of account is best suited to explaining a within-occupation takeoff in inequality in those sectors of the labor market, such as the nonmanual sector, in which the demand for skill has substantially increased. The introduction of computers and related technical innovations has presumably transformed the nonmanual workplace in especially revolutionary (and skill-demanding) ways. At the same time, the demand for interactive or "soft" skills may also have grown among service and manual laborers (Fernandez, 2001; Howell & Wolff, 1991), but we doubt that this soft-skill demand shift in the manual sector is as pronounced as the computer-based demand shift in the nonmanual sector. We assess this argument by charting the evolution of the WO component in the manual and nonmanual sectors separately.

Caveats

The preceding discussion is not intended as an exhaustive review of all possible mechanisms that might produce a change in inequality. Rather, it serves merely to

suggest that these mechanisms play out in component-specific ways, meaning that the BC, BO/WC, and WO trend lines may diverge in ways that affect the occupation and class principles differentially. In the analysis that follows, we begin by exploring overall trends for each of these three components, after which we turn to examining trends within each of the big classes. The latter analysis allows us to assess whether upward trends in the BO/WC and WO components are indeed more pronounced in the nonmanual than manual classes.

Data and Method

We analyze earnings data collected in the May supplement of the Current Population Survey (CPS) from 1973 to 1978 and in the "outgoing rotation group" (ORG) supplements of the monthly CPS from 1979 to 2005 (Bureau of Labor Statistics, 1973-2006).[3] These surveys are nationally representative samples of households that contain information on the usual pay of the main job that all household members held in the week prior to the survey.

Data Processing

To prepare the May/ORG files for the analysis, we were required to make a host of technical and conceptual decisions that affect the measurement of inequality and potentially observed trends in inequality. We follow best practice in the earnings literature whenever a consensus on best practice has been reached and otherwise proceed by carrying out analyses with two or more operational alternatives. Because our main conclusions were usually unaffected by such operational decisions, we report but one set of results in this article.[4]

Throughout the analyses presented here, earnings are measured as hourly wages.[5] In the May/ORG CPS, workers who indicate that they are paid on an hourly basis are asked to report their usual hourly wages, and workers who indicate some other pay periodicity report their usual weekly wages. We follow here conventional practice of calculating hourly wages for nonhourly workers by dividing weekly wages by the number of hours usually worked at the main job. We then convert hourly wages into constant 2000 U.S. dollars using the personal consumption expenditures index from National Income and Products Accounts (Bureau of Economic Analysis, 2005). When wages have been truncated by the Bureau of Labor Statistics to maintain confidentiality (i.e., "topcoding"), we have applied the conventional multiplier of 1.4 (Card & DiNardo, 2002; Lemieux, 2003).[6] We rely on unedited measures of earnings because, unlike edited earnings, these are available in the May 1973 to 1978 surveys and are unaffected by changes in the mid-1990s to the Bureau of Labor Statistics procedures for allocating earnings (see Hirsch & Schumacher, 2004; Lemieux, 2003). We exclude the 1994 to 1995 ORG files, because in these files,

workers with edited earnings cannot be identified reliably (see Lemieux, 2003, pp. 6-7).[7]

We include all wage and salary workers between the ages of 16 and 65 who report positive hours worked at their main jobs and for whom a valid occupation code is available. Following conventional practice, we exclude workers whose hourly wages fall below $1 or above $100 in 1979 U.S. dollars or who are self-employed, the latter because they are not asked the earnings questions in the ORG supplements (Angrist & Krueger, 1999; Card & Dinardo, 2002; Mishel, Bernstein, & Schmitt, 2001; cf. Bollinger & Chandra, 2005). We do not, however, exclude part-time workers, as analysts of wage inequality often do. Instead, we weight workers by the number of hours they usually work, thereby obtaining a wage distribution representative of all hours worked in the economy (see, e.g., Card & DiNardo, 2002; DiNardo et al., 1996; Lemieux, 2003). This practice may be understood as a compromise between excluding part-time workers and simply ignoring the distinction between part-time and full-time work.[8] After imposing all restrictions, our May surveys contain on average 21,323 men and 15,776 women per year, and our ORG surveys contain on average 65,821 men and 61,825 women per year, yielding a total of 1,773,452 men and 1,640,270 women.

Occupation and Class Schemes

We use several occupation and big-class schemes to ensure that our results are not specific to any one. For most of our reported analyses, we rely on Standard Occupation Classification (SOC) codes, thereby allowing the scheme to change with the introduction of new versions of the SOC in the 1983, 1992, and 2003 surveys. We also examine trends with a uniform scheme created by back coding all CPS data between 1983 and 2005 into the 1970 SOC codes (see Weeden, 2005a, 2005b; also Weeden & Grusky, 2005a, 2005b, 2006). This back-coding procedure uses a set of sex-specific weights, calculated from double-coded data sets, to assign earlier SOC codes to data originally arrayed in a later SOC scheme.

Which of these two occupation schemes is to be preferred? With the back-coded scheme, the occupational structure is treated as frozen in time as of 1970, and the rise of new occupations and related changes in occupational boundaries are ignored. The indigenous occupation scheme, by contrast, provides the best available characterization of the occupational structure in a given year and presumably delivers the most accurate estimate of absolute levels of within-occupation inequality. However, where the goal is to obtain estimates of trend in the various components of inequality, one should not necessarily default to this form of accuracy. If each new occupational classification scheme comes on the heels of real change in institutionalized boundaries of the occupational structure, analysis of the data arrayed in the indigenous scheme will indeed offer a better assessment of trends in micro-class inequality. The 1970-basis scheme will overestimate the increase in within-occupation inequality and, conversely,

underestimate the increase in between-occupation inequality, at least if the earnings profiles of newly formed occupations diverge from those of their "parent" occupations. If, on the other hand, each new occupation scheme merely improves the measurement of an underlying occupational structure that has remained largely constant, the indigenous occupation scheme will overestimate the increase in between-occupation inequality. It is likely that both accounts are partly true. That is, some of the changes in a new occupation scheme may capture newly institutionalized occupational boundaries (e.g., systems analysts), whereas others may capture occupational distinctions that existed in the past but had simply been ignored by the classifiers (e.g., distinctions among managers). Because there is no solution to this dilemma, we have estimated trends in the various components of inequality with both indigenous and 1970-basis schemes, allowing us to gauge the sensitivity of our results to our measurement decisions.[9] In the interest of brevity, we report only the indigenous-scheme decompositions but cite any cross-scheme differences in the notes.[10]

We evaluate these two occupation schemes against two conventional big-class schemes: the Erikson-Goldthorpe (EG) scheme (Erikson & Goldthorpe, 1992), and the Featherman-Hauser (FH) scheme (Featherman & Hauser, 1978). The EG scheme has become the de facto standard in European analyses of inequality, but it also has its share of users, if not advocates, in North American analyses (e.g., Manza & Brooks 1999; Morgan & Tang, 2005). We use the 7-class variant of EG that is implemented with occupation codes alone (Erikson & Goldthorpe, 1992, pp. 35-47). After excluding the 2 self-employed classes (i.e., petty bourgeoisie, farmers), we are left with 5 EG categories: "service" workers (i.e., professionals and managers), routine nonmanual workers, skilled craft workers, unskilled manual workers, and agricultural workers.

The FH scheme, which is based on aggregate Census Bureau categories, is more detailed than the EG scheme and devised specifically for the U.S. occupational structure. In its commonly applied version, the FH scheme consists of 12 classes, from which we excise 2 (self-employed professionals, self-employed managers). The remaining 10 FH categories are employed professionals, employed managers, sales workers, clerical workers, craft workers, operatives, service workers, laborers, farmers, and farm laborers. In the following graphs and tables, we feature the FH scheme because our prior research suggests that it better captures the heterogeneity in many variables, including income (Weeden & Grusky, 2005a, 2005b, 2006). We have, however, replicated all of our analyses with the EG scheme and secured very similar results.

The starting point for our implementation of EG was Morgan and Tang's (2005) translation of 1980 and 1990 SOC codes into EG classes.[11] Using their algorithm and the double-coded 2000 to 2002 CPS Basic files (see above), we created our own algorithm for translating 2000 SOC codes into EG categories by calculating the modal EG class for each SOC 2000 code based on the relative size of each 1990 contributor to a 2000 code and its EG class assignments. We used an analogous procedure to devise an algorithm for translating 1970 SOC codes into the EG scheme.[12]

We then created one set of EG codes for the 1973 to 1982 CPS files using the 1970-basis algorithm and two sets of EG codes for the 1983 to 2005 CPS files, one using the SOC-specific algorithm applied to indigenous occupation codes and one using the 1970-basis algorithm applied to 1970-basis occupation codes. We followed the same strategy to devise algorithms for translating the 1970 and 2000 SOC codes into FH using a 1980-basis FH algorithm as our baseline.

Method

We carried out all analyses with two measures of inequality, the variance of log(wages) and Theil's index, both of which can readily be decomposed into BC, BO/WC, and WO components. However, we present only decompositions based on the variance of log(wages), given that the analogous decompositions using the Theil index yielded similar conclusions. We present separate decompositions of inequality for men and women throughout.

The total variance in log(wages) can be decomposed by fitting two models. The first model regresses log(wages) on the categories of a big-class scheme, and the second model regresses log(wages) on the categories of an occupation scheme, where occupations are nested in big classes. These two models allow us to implement our desired three-way decomposition: The BC component is the total variance in log(wages) minus the variance of the residuals of the big-class model; the BO/WC component is the difference between the variance of the residuals of the big-class and occupation models; and the WO component is the variance of the residuals from the occupation model. We can formalize as follows:

$$Var_{BC} = \frac{\sum_{i=1}^{N}(y_i - \bar{y})^2}{N-1} - \frac{\sum_{i=1}^{N}\left((\hat{y}_i|c_i - y_i) - \overline{(\hat{y}_i|c_i - y_i)}\right)^2}{N-1},$$

$$Var_{WC/BO} = \frac{\sum_{i=1}^{N}\left((\hat{y}_i|c_i - y_i) - \overline{(\hat{y}_i|c_i - y_i)}\right)^2}{N-1} - \frac{\sum_{i=1}^{N}\left((\hat{y}_i|o_i - y_i) - \overline{(\hat{y}_i|o_i - y_i)}\right)^2}{N-1}, \text{ and}$$

$$Var_{WO} = \frac{\sum_{i=1}^{N}\left((\hat{y}_i|o_i - y_i) - \overline{(\hat{y}_i|o_i - y_i)}\right)^2}{N-1},$$

where $\boldsymbol{c}_i$ is a vector of dummy variables indexing the big class of individual i, $\boldsymbol{o}_i$ is a vector of dummy variables indexing the occupation of individual i, and N is sample size. The three-part decomposition of Theil, although not frequently used, is a straightforward extension of the usual two-part decomposition (see, e.g., Akita, 2001).

We also examine the BO/WC and WO components within each big class separately. In implementing these decompositions, we again rely on the variance of log(wages) and Theil's index, but here our task is simplified because there are but two components of inequality, BO/WC and WO. The variance within each big class can be decomposed by regressing log(wages) on the occupations (measured with 0-to-1 dummy variables) that constitute each big class. The variance of the residuals from this model indicates the amount of within-occupation inequality in that class, whereas the difference between the total variance and the residual variance represents the amount of between-occupation inequality. The decomposition of the Theil index merely requires stratifying the data by class and calculating the two components in the usual way.

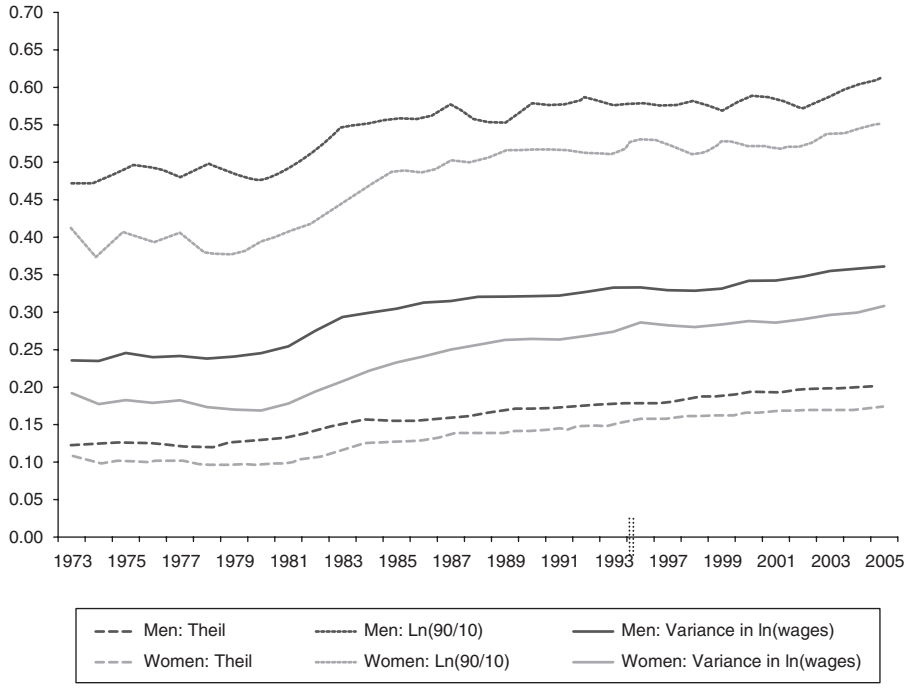
Results

We set the stage for our decomposition by presenting trends in overall wage inequality from 1973 to 2005 (see Figure 3). These results are calculated with the variance of log(wages), the Theil index, and the log of the 90/10 ratio, the latter normalized by dividing by 2.56 (see Card & DiNardo, 2002, p. 746).[13] We observe for all measures the now-famous pattern of stability in the 1970s, takeoff in the 1980s, and somewhat slower accretion throughout the 1990s and beyond.

The first set of three-way decompositions is presented in Figure 4 (for men) and Figure 5 (for women). Because the relative rate of change can be difficult to gauge via inspection alone, we report in Table 1 the estimates secured by imposing, for men and women separately, a linear trend on the variance in log(wages). The first model in Table 1 fits a single slope and intercept to the trend lines, whereas the second model fits a single slope but allows the intercept to shift with each change in the occupational classification scheme (in 1983, 1992, and 2003). The simpler model (i.e., Model 1) corresponds to the assumption that new classification schemes are introduced in response to real changes in institutionalized occupational boundaries (i.e., "changing occupational structure"). If such changes are indeed real, then any increase in the explanatory power of these more refined classifications bespeaks a meaningful change in how inequality is apportioned within and between occupations. By contrast, the second model corresponds to the assumption that new classification schemes capture occupational distinctions that were always present but were ignored in the more primitive classifications of prior years (i.e., "constant occupational structure"). It is appropriate under this assumption to parse out the classification effects and then fit a pooled slope coefficient.

The results of Table 1 pertain to absolute changes alone. As we noted, the relative size of the BC, BO/WC, and WO components is also of interest, implying that one should condition on the overall growth in inequality and ask how it was distributed across the three components. We present in Table 2 measures of relative change under

Figure 3
Trends in Men and Women's Wage Inequality in the United States, 1973 to 2005

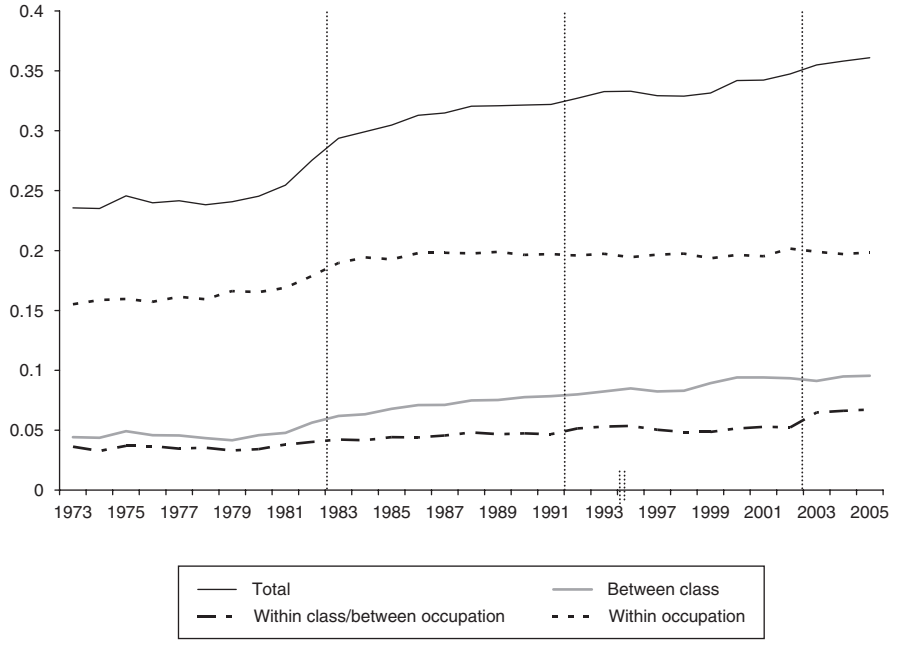


Note: Hash marks indicate a break in the time series. Ln = natural logarithm.

the models of Table 1. These measures, calculated for 1973 and 2005, are simply the percentage of the total variance in log(wages) that each component represents.[14]

We can turn now to addressing the main questions at hand. The BC trend line, which we consider first, is distinguished by a steep takeoff in the 1980s and steady increase thereafter. The BC component accounts for 45.0% to 51.7% of the total change in male inequality (see Table 1), and the BC share of the total male variance increased from 17.2% in 1973 to 22.9% to 26.3% in 2005, depending on the model (see Table 2). For women, the pooled BC trend line is less steep, and the BC component accordingly accounts for less of the total change in inequality (see Table 1). This apparent gender difference should not be overinterpreted. Because the BC series for women declines steeply in the 1970s, the pooled coefficient reported in

Figure 4
Variance-Based Decomposition of Men's Wage Inequality Into Between-Class, Within-Class/Between-Occupation, and Within-Occupation Components, 1973 to 2005

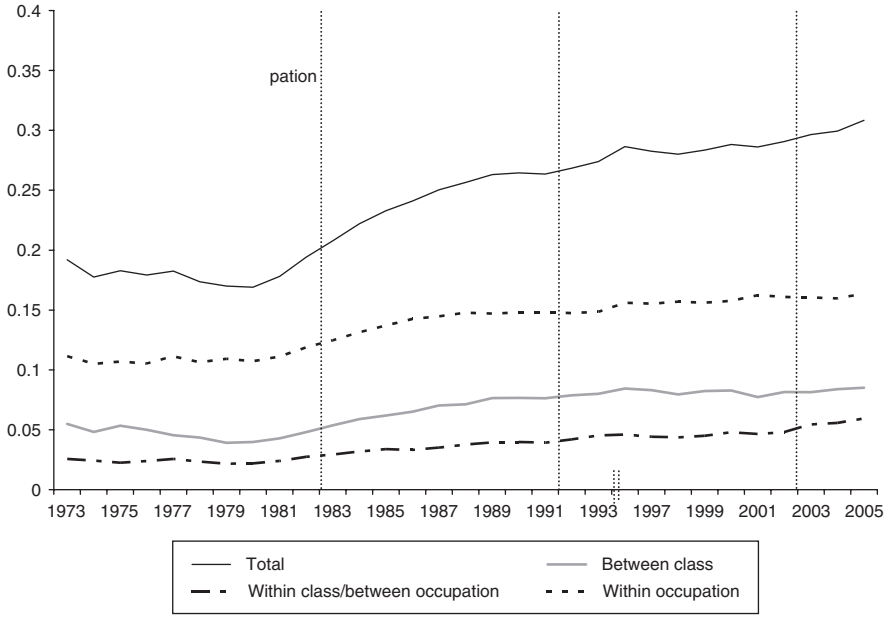


Note: Vertical lines indicate new Standard Occupation Classification scheme; hash marks indicate a break in the time series.

Table 2 averages across the decline and the post-1982 takeoff, yielding an attenuated estimate of the latter. If one instead fits a linear trend to the post-1982 data, the male and female series uniformly show a rapid increase in the BC component.[15] This growth in between-class inequality is hardly surprising. Insofar as big classes are merely education groups in disguise, the well-known increase in the payoff to schooling should be expressed as a takeoff in the BC trend line during the past two decades, just as we find here.

We consider next the trend in between-occupation/within-class inequality. In this case, our results cannot be straightforwardly read off from prior research, because big classes and detailed occupations have not before been analyzed in tandem. For both women and men, we find that the BO/WC trend line does not show the characteristic steep takeoff in the early 1980s, nor does it move sharply upward at any point

Figure 5
Variance-Based Decomposition of Women's Wage Inequality Into Between-Class, Within-Class/Between-Occupation, and Within-Occupation Components, 1973 to 2005



Note: Vertical lines indicate new Standard Occupation Classification scheme; hash marks indicate a break in the time series.

thereafter. Except for a classification-induced shift in 2003, the increase in between-occupation/within-class inequality is slow and gradual, and it translates into a slightly higher share of the total variance by 2005, at least under Model 1 (see Table 2). The BO/WC component accounts for 10.3% to 21.4% of the total growth in male inequality and for 21.7% to 23.5% of the total growth in female inequality (see Table 1). It follows that the BO/WC component, like the BC component, is increasing both in absolute and relative terms, although the rate of increase for the BO/WC component is less dramatic than the corresponding rate for the BC component. The BO/WC rate is of course just an average and may conceal the emergence of more substantial inter-occupational differences in classes with especially successful closure movements or especially pronounced demand for high-skill information economy occupations. We take on this hypothesis subsequently.

Table 1
Estimated Linear Effect of Time on the Components of Wage Inequality, by Sex

	Intercept	Slope Coefficient	Average Percentage Change per Year	Percentage of Total Change
Model 1: Changing occupational structure				
Men				
Total	0.2374	0.0041	1.7	
	(0.005)	(0.000)		
Between class	0.0411	0.0019	4.5	45.0
	(0.002)	(0.000)		
Between occupation/ within class	0.0323	0.0009	2.7	21.4
	(0.002)	(0.000)		
Within occupation	0.1640	0.0014	0.8	33.6
	(0.003)	(0.000)		
Women				
Total	0.1684	0.0046	2.7	
	(0.005)	(0.000)		
Between class	0.0436	0.0015	3.3	31.6
	(0.002)	(0.000)		
Between occupation/ within class	0.0198	0.0011	5.4	23.5
	(0.001)	(0.000)		
Within occupation	0.1050	0.0021	2.0	44.7
	(0.002)	(0.000)		
Model 2: Constant occupational structure				
Men				
Total	0.2335	0.0026	1.1	
	(0.003)	(0.000)		
Between class	0.0402	0.0014	3.4	51.7
	(0.001)	(0.000)		
Between occupation/ within class	0.0346	0.0003	0.8	10.3
	(0.001)	(0.000)		
Within occupation	0.1586	0.0010	0.6	37.5
	(0.002)	(0.000)		
Women				
Total	0.1691	0.0024	1.4	
	(0.005)	(0.001)		
Between class	0.0449	0.0004	0.8	15.0
	(0.002)	(0.000)		
Between occupation/ within class	0.0217	0.0005	2.4	21.7
	(0.001)	(0.000)		
Within occupation	0.1025	0.0015	1.5	62.9
	(0.002)	(0.000)		

Note: Numbers in parentheses are standard errors. Model 1 fits a simple linear trend on the variance in logged wages. Model 2 fits a uniform linear trend with intercept adjustments at each change in the occupational classification scheme.

Table 2
Predicted Change in Proportion of Total Variance Attributable to the Components of Inequality, 1973 and 2005

	Model 1		Model 2	
	1973	2005	1973	2005
Men				
Total variance	0.237	0.369	0.233	0.317
Percentage of total				
Between class	17.3	27.2	17.2	26.3
Between occupation/within class	13.6	16.4	14.8	13.6
Within occupation	69.1	56.4	67.9	60.0
Women				
Total variance	0.168	0.315	0.169	0.246
Percentage of total				
Between class	25.9	28.6	26.5	22.9
Between occupation/within class	11.8	17.2	12.8	15.6
Within occupation	62.3	54.2	60.6	61.5

Note: Model 1 fits a simple linear trend on the variance in logged wages. Model 2 fits a uniform linear trend with intercept adjustments at each change in the occupational classification scheme.

The third series in our analysis, the WO series, is distinguished by important gender differences in the absolute trend. Among male workers, the WO component is increasing, but fails to match the fast-paced growth of the BC component or even the BO/WC component. Indeed, the WO series suggests a one-time takeoff in the early 1980s, followed by near stasis thereafter. The relatively slow pace of change means that only a minority share of the total change in male inequality is attributable to a growth in WO (see Table 1). This result is inconsistent with the long-standing claim that rising within-group inequality is the driving force behind the overall growth of inequality (cf. Lemieux, 2003). It does, however, lend support to our suggestion that much of what conventional Mincer-type formulations represent as growth in within-group inequality is in fact growth in the BO/WC component.

The relatively slow pace of change in the WO component for males translates, furthermore, into a decline in the percentage of the total variance that is generated within occupations. It may be recalled in this context that the BC and BO/WC components both increased in absolute as well as relative terms. It is clear that these two components had to be taking relative share from the WO component, and Table 2 reveals precisely this relationship. The WO share declines from 69.1% to 56.4% when Model 1 estimates are used.

The female WO series, by contrast, shows clear evidence of ongoing increase after the early 1980s, with a steeper overall slope coefficient as a result. In fact,

the WO component accounts for more of the total change in variance than the BC component, especially under the assumption of a constant occupational structure (see Model 2, Table 1). There are a host of potential explanations for the gender disparity in the WO series. The task of adjudicating among them is well beyond the scope of this article, but it is worth noting that the disparity is potentially consistent with a simple skill-biased technological change account. That is, many female-typed occupations (e.g., secretary) have developed an especially strong reliance on computer, interactive, and other unobservable skills, whereas male-typed clerical occupations (e.g., mail sorter) have not been as frequently affected by skill-demanding technological change (Weinberg, 2000; Welch, 2000). The rapid rise in within-occupation inequality among women may arise from such new unobserved skills opening up new inequalities.[16]

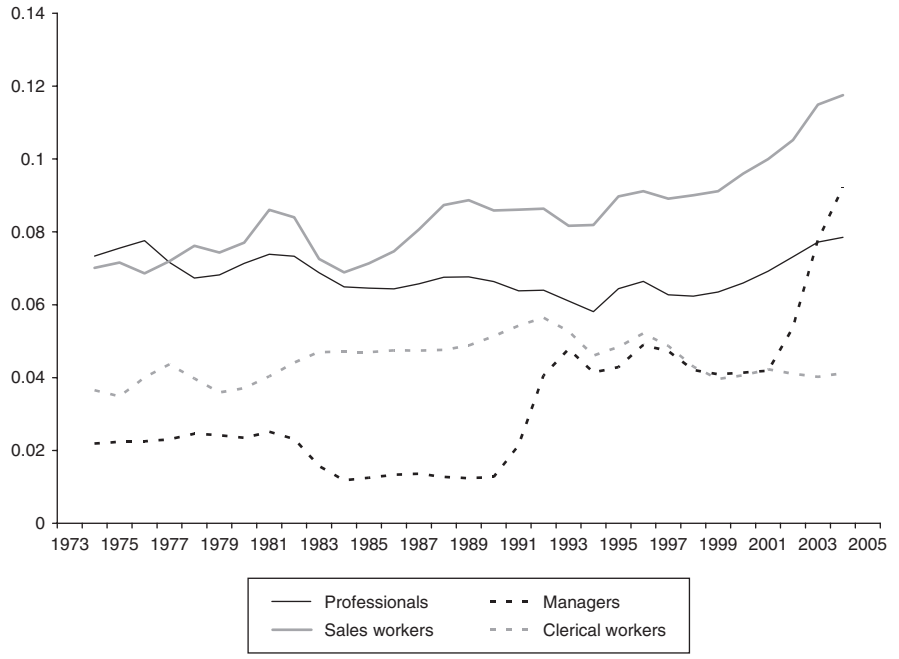
Although the upward trend in the WO component is steeper for women than for men, it is not so much steeper as to require a gender-specific account of trends in the WO share of inequality. Under Model 1, the WO share of the total variance declines from 62.3% to 54.2% for women, a decline that is only slightly less dramatic than that for men (see Table 2). By contrast, the WO share of inequality increases under Model 2, but this result is an artifact of gender differences in the pre-1982 trend. If only post-1982 data are analyzed, the Model 2 estimates show that the WO share of total inequality is declining for women as well as for men.

The next set of analyses reveals whether the between-occupation trends are playing out differently in different big classes. In Figures 6a through 6d, we graph the BO variance in each of eight FH classes, presenting the manual and nonmanual trends separately. We had predicted that the upward trend in the BO component would be especially pronounced in the nonmanual classes. This is because the nonmanual classes contain precisely those high-skill occupations (e.g., computer programmer) that might profit from demand explosions. Furthermore, the nonmanual classes are the home ground of closure movements that allow high-skill occupations to control supply and demand, thus generating rent and opening up an earnings gap relative to occupations that have not successfully occupationalized.

The results in Figures 6a through 6d are partly consistent with such claims. For women and men alike, the nonmanual trend lines tend to move upward at a faster pace than the manual trend lines, the latter being mired for the most part at very low levels during the past 30 years.[17] The most dramatic takeoff in BO variance occurs in the nonmanual class of sales workers. When we examine the particular occupations that within this class are rising or falling in earnings, we find much evidence of high-skill winners (e.g., sales engineers, stock and bond salespeople, advertising agents) and low-skill losers (e.g., retail sales clerks, cashiers, sales representatives), just as a demand-shift hypothesis would have it.

The main exception to our hypothesis is the between-occupation increase in inequality among male service workers. If we again examine particular occupations within this class, we find that such low-skill occupations as maids, waiters, food service

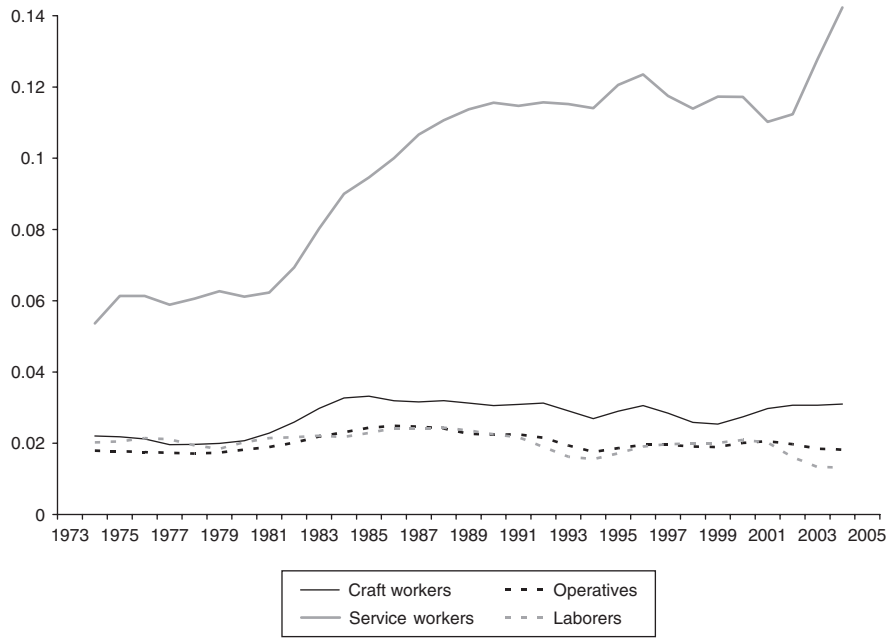
Figure 6a
Between-Occupation Variance in Men's Logged Wages in the Nonmanual Classes (3-Year Moving Average)



workers, and food counter workers are declining in wages, whereas such high-skill occupations as firefighters, marshals, and sheriffs are increasing in wages. This result seems consistent with a demand-shift hypothesis.[18] For the most part, nonmanual occupations reveal precisely the skill differentiation that a demand-shift hypothesis requires, yet the FH service class happens also to be an amalgam of occupations that is quite heterogeneous in skill requirements. It again bears noting that some of these high-skill occupations have gained (partial) control of the certification process and can resist any massive wage-correcting influx of new workers.

The corresponding trends for the WO components of inequality are presented in Figures 7a through 7d. We argued above that rising demand for unobservable skills should play out principally in the nonmanual sector, where the workplace has been

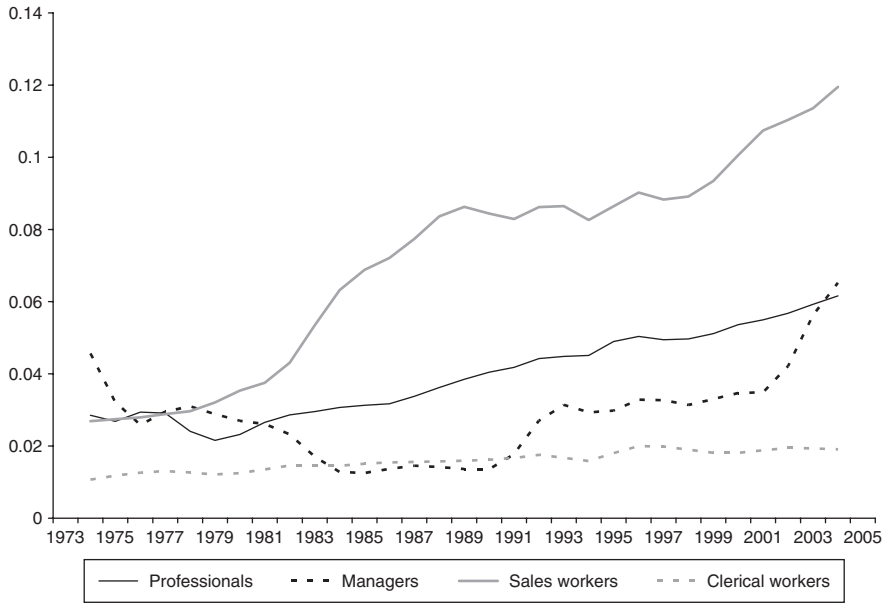
Figure 6b
Between-Occupation Variance in Men's Logged Wages in the Manual Classes (3-Year Moving Average)



transformed dramatically by the introduction of computers and related technical innovations. The results for both men and women are strikingly consistent with this type of account. We find, for example, high and increasing WO trend lines in Figures 7a and 7c (nonmanual classes) and low and stable WO trend lines in Figures 7b and 7d (manual classes).

Although our results are consistent with the assumption of rising demand for unobservable skills, we have to confess that our close inspection of the data reveals a great many occupations with exploding variances that cannot, it would seem, be explained exclusively in these terms. As one example, wage inequality among religious workers took off during this period, yet it seems unlikely that this takeoff can be entirely explained as a function of technological changes (e.g., innovations in mass marketing) that allowed mega-churches to diffuse and "mega-pastors" to triumph

Figure 6c
Between-Occupation Variance in Women's Logged Wages in the Nonmanual Classes (3-Year Moving Average)

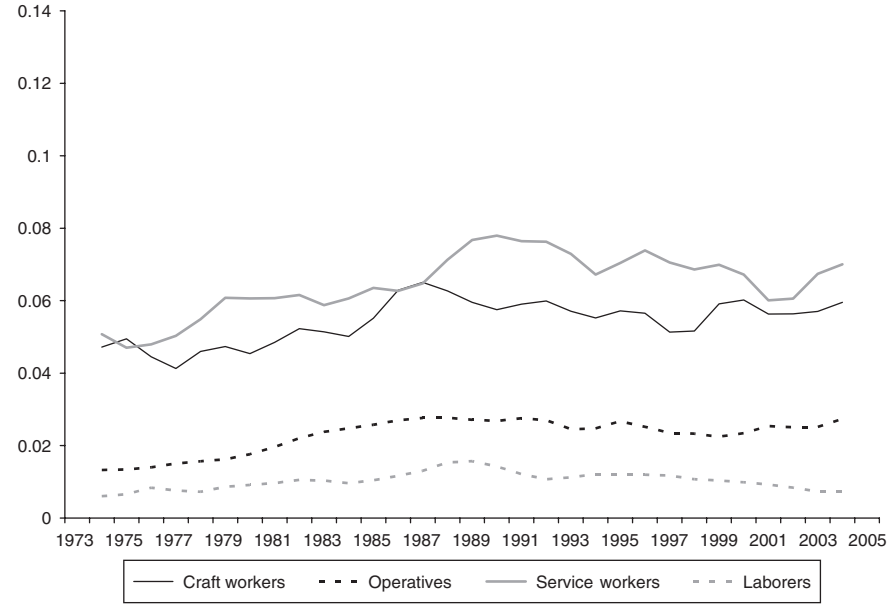


in some classic winner-take-all fashion (Frank & Cook, 1995). We are merely suggesting, therefore, that any serious test of the hypothesis would require a far more formal analysis.

Discussion

We conclude by asking how our results speak to the relationship between class and earnings. Has the ongoing increase in earnings inequality played out in ways that support the rise of big classes? Does the takeoff in inequality instead support the rise of micro classes? Are both types of class principles simultaneously supported? Or is earnings inequality becoming an increasingly individualistic affair that occurs mainly within groups rather than between them? By posing questions of this sort, we

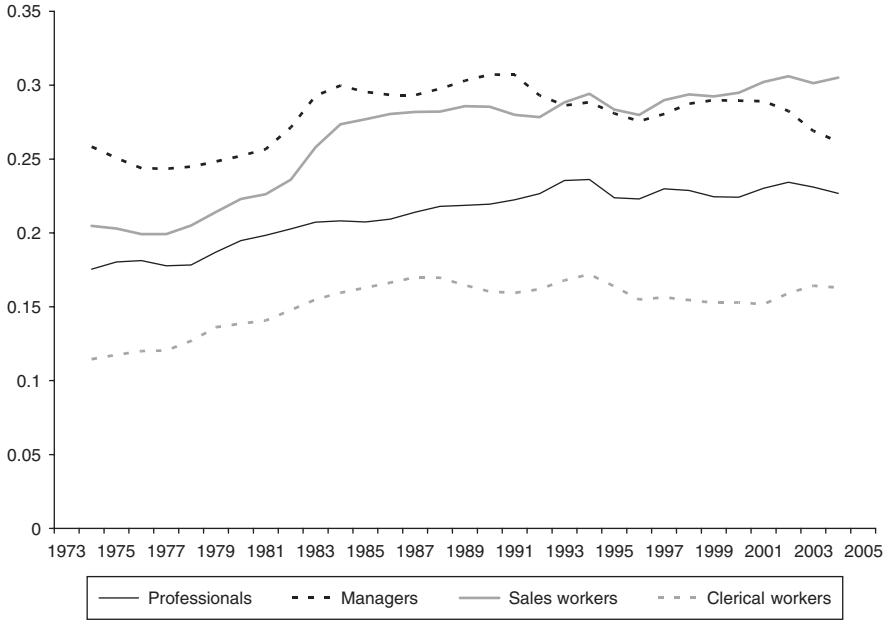
Figure 6d
Between-Occupation Variance in Women's Logged Wages in the Manual Classes (3-Year Moving Average)



have sought to move away from the field's long-standing focus on the causes of earnings inequality, turning instead to questions about its effects on the structure of social classes. It might be supposed that sociologists, long accused of having class too much "on the brain" (Saunders, 1989, pp. 4-5), would have by now explored the effects of the historic takeoff in earnings inequality on the class structure. It is surprising that they have not yet done so, save in the most tentative ways (e.g., Kim & Sakamoto, 2006).

We begin by assessing whether the foregoing results are consistent with big-class formulations (see Figure 1). Although there is much in these results that big-class enthusiasts can embrace, our data are not working exclusively or unambiguously in support of the big-class principle. The core results to which big-class adherents will inevitably point are the growing absolute size of the BC component and the growing

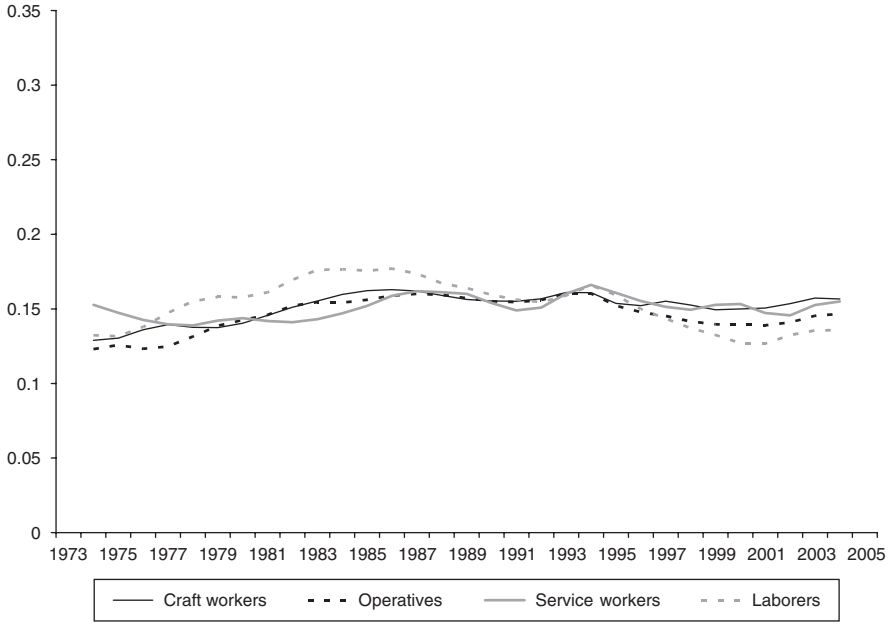
Figure 7a
Within-Occupation Variance in Men's Logged Wages in the Nonmanual Classes (3-Year Moving Average)



BC share of the total variance. Important though these results are, it must also be noted that interoccupational cleavages within some big classes are growing as well, a result that is inconsistent with simple big-class stories. The double-edged sword of rising earnings inequality appears to be simultaneous growth in distinctions between classes and within them. These within-class cleavages have become so prominent in some classes, such as the FH service class, that it has to be asked whether this is still a single class, if ever it was.

How, then, does the micro-class story fare? Here again, one can find results that are consistent with a micro-class account, especially the steady growth in within-class occupational distinctions. Moreover, the WO component to inequality is declining in relative size for both men and women, at least after 1982. We can conclude that the class principle, as expressed via big classes and micro classes together, accounts for a growing share of the total variance in earnings, whereas the residual of "individualized

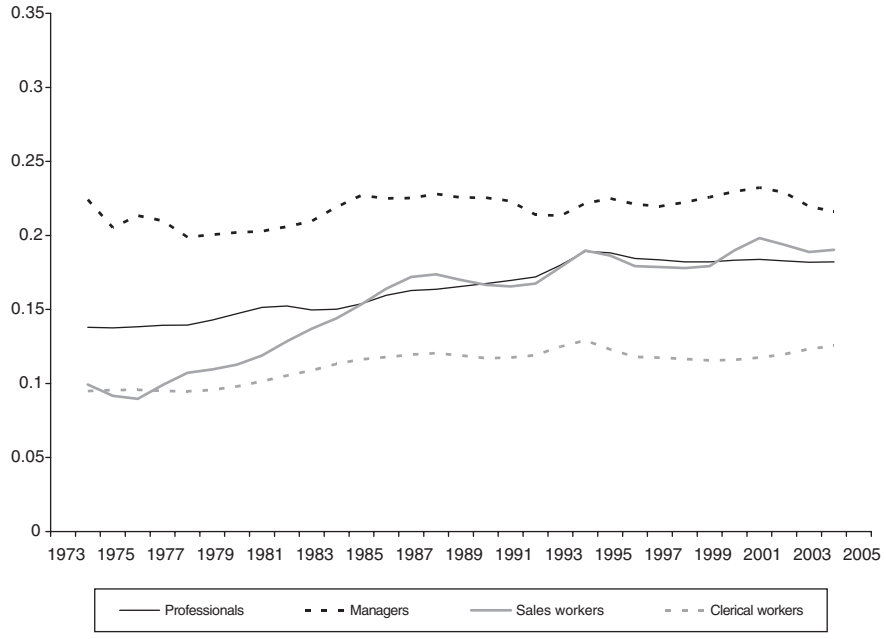
Figure 7b
Within-Occupation Variance in Men's Logged Wages in the Manual Classes (3-Year Moving Average)



inequality" is declining in relative size. The earnings distribution suggests a new type of dual closure in which two types of nested social groupings, the big-class and the detailed occupation, are increasingly prominent.

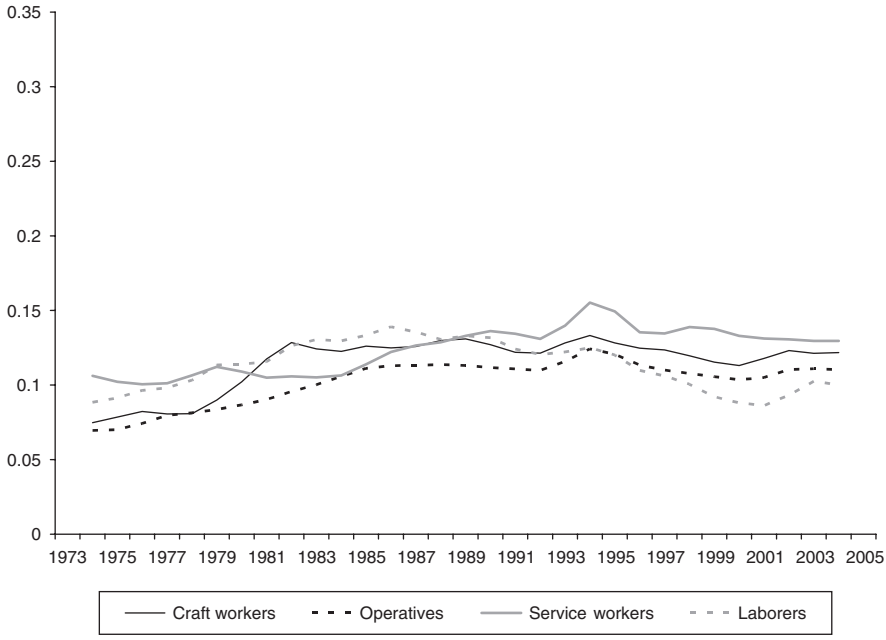
Although the dual-closure story is a descriptively accurate account of recent trends, it does not follow that inequality in the future will necessarily take on an increasingly simple dual-closure form. This is because, without understanding the mechanisms behind recent trends, a simpleminded extrapolation is obviously too bold. There are two questions about mechanisms that are especially important in this regard. The first pertains to the mechanisms underlying the trend in big-class formation, and the second pertains to the mechanisms underlying the trend in micro-class formation. We review each of these two questions below.

Figure 7c
Within-Occupation Variance in Women's Logged Wages in the Nonmanual Classes (3-Year Moving Average)



On the big-class side of the equation, one has to ask whether the rising payoff to schooling is indeed the main mechanism increasing between-class inequality. If it is, big classes are reduced to indirect beneficiaries of trends that ultimately support the development of "education classes" (e.g., Meyer, 2001). The key question in this regard, and one that remains unanswered by our analyses, is whether the BC component is increasing even in the presence of controls for education. For purposes of illustration, suppose that there are just two big classes (manual and nonmanual) and two education groups (educated and uneducated), as indicated in Figures 8a and 8b. We can then distinguish between (a) pro-education change in which the net education cleavage is widening and the net class cleavage is not (i.e., Figure 8a) and (b) pro-class change in which the net class cleavage is widening and the net education cleavage is not (i.e., Figure 8b). If the growth in between-class inequality is driven

Figure 7d
Within-Occupation Variance in Women's Logged Wages in the Manual Classes (3-Year Moving Average)

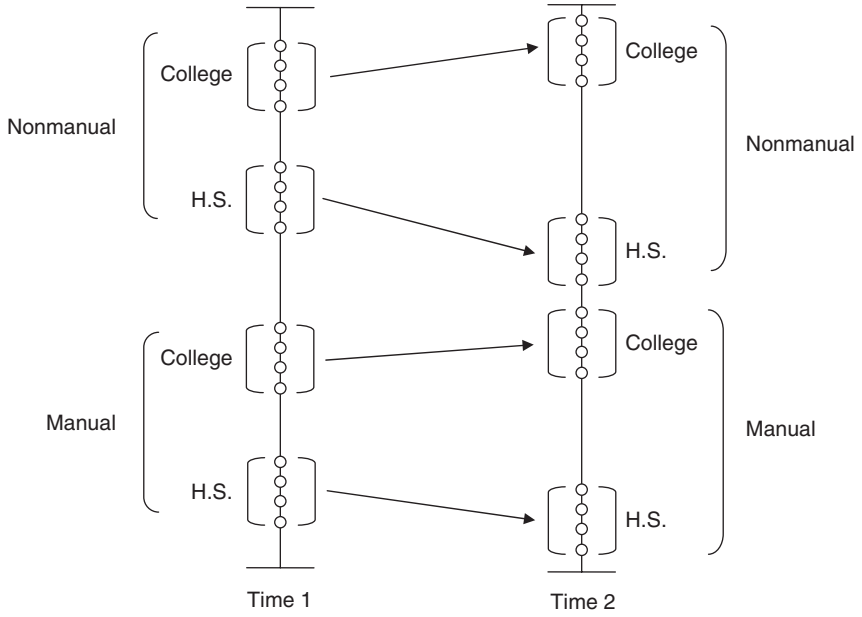


exclusively by the rising payoff to education, then education groups rather than big classes are arguably emerging as the principal form of extraindividual structure in the contemporary labor market.

The dual-closure account is also potentially vulnerable on the micro-class front. Here, the skeptic might point out that the relative decline in within-occupation variance is playing out almost exclusively in the manual sector, not within the ever-growing ranks of the nonmanual sector. It follows that as the manual sector continues to shrink, the forces that expand within-occupation inequality (e.g., increasing returns to unobservable skills) may come to dominate those that contract such inequality. By this account, within-occupation inequality in nonmanual occupations will eventually control trends, and the overall decline in within-occupation inequality reported here will soon stall.

The foregoing skeptic's account treats the steep rise of within-occupation inequality within the nonmanual sector at face value. Might we instead interpret this steep

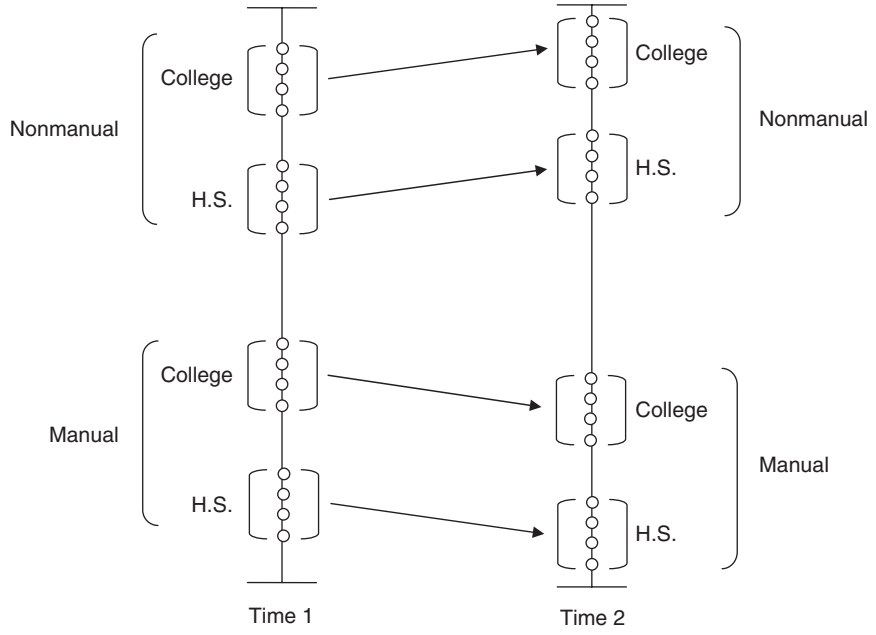
Figure 8a
The Transition to an Education Regime



Note: H.S. = high school.

rise as an artifact of increasingly error-ridden occupational classifications? The occupational structure within the nonmanual sector is so dynamic that there is inevitable ambiguity in distinguishing true increases in within-occupation inequality from those generated by the emergence of new suboccupational distinctions. When, for example, the earnings of cosmetic dentists grow spectacularly whereas those of other dentists do not, does this bespeak a true increase in within-occupation inequality? Or does it instead reveal incipient suboccupational distinctions that might be formalized in separate occupational associations with differentiated training and credentialing? In practice, we have resolved this question by conditioning on formal occupational classifications, allowing for new occupations only when the SOC recognizes them. We suspect, however, that the SOC does not always keep pace with the dynamism of the nonmanual sector, meaning that some of the apparent takeoff in within-occupation inequality within this sector is just classification error. If this interpretation is on the mark, the rise of group-based inequality is even more extreme than our results imply.

Figure 8b
The Transition to a Big-Class Regime



Note: H.S. = high school.

It bears reiterating that these ambiguities are especially consequential when one attempts to predict whether inequality in the future will take on increasingly individualized or class forms. If one instead settles for a purely descriptive account of recent trends, the ambiguity fades somewhat and the merit of a class account of inequality is less contestable. Although the majority of earnings inequality is still generated within occupations, the relatively rapid growth of the BC and BO components implies that the labor market is not only becoming more unequal but lumpier as well.

Notes

1. The increase in the between-class (BC) component under this scenario is a compensating form of pro-class change.

2. There is also a very weak association between experience and big-class position. For example, some workers are promoted during the course of their careers from sales to managerial positions, thus generating higher average experience levels in the managerial sector than in the sales sector. The BC component

should trend upward because (a) returns to experience have increased (see Levy & Murnane, 1992) and (b) class categories indirectly capture experience differentials.

3. We prefer the May outgoing rotation group (ORG) files to the March Current Population Survey (CPS) because the former provide larger sample sizes, allow analysts to identify earnings from the main job, include "point-in-time" measures of wages, and rest on more consistent topcoding procedures over time (e.g., see Card & DiNardo, 2002; Lemieux, 2003).

4. Results from alternative specifications are available from the first author.

5. We privilege hourly earnings over weekly earnings for two reasons. First, we prefer a measure of wage inequality that is unaffected by inequality in hours worked, which we regard as a conceptually distinct, albeit partially endogenous, form of inequality. Second, hourly earnings may contain less measurement error, given that a (slight) majority of workers in the United States prefer to report their wages in hourly terms (see Lemieux, 2003).

6. We assessed alternative procedures in which topcoded earnings are adjusted by year-specific multipliers calculated under the assumption that wages follow (a) a Pareto distribution or (b) a log-normal distribution (see, e.g., Kim & Sakamoto, 2006; Misel, Bernstein, & Schmitt, 2001; Morgan and Tang, 2005; Schmitt, 2003). The trends estimated with these methods are very similar to those estimated under the constant-multiplier method.

7. The exclusion of the 1994 and 1995 May/ORG surveys generates a break in the time series in the period immediately following a redesign of the CPS survey (see Polivka, 2000). Although the redesign could, in theory, produce an artificial shift in the overall level of wage inequality, in practice the pre-1994 and post-1995 levels of inequality are not notably disparate, and there is little evidence that the relative sizes of the BC, between-occupation within-class (BO/WC), or within-occupation (WO) components of inequality were affected by the redesign.

8. We have also completed analyses in which all workers were given equal weight. It is not surprising that trends for men were unaffected, whereas trends for women were affected only trivially.

9. Because our sample is very large, we do not aggregate detailed occupations into the 126-category scheme used in much of our prior research (e.g., Weeden & Grusky, 2005a, 2005b, 2006).

10. Decompositions using the 1970-basis codes are available from the first author.

11. Morgan and Tang (2005, pp. S2-S5), acting on a suggestion by John Goldthorpe, used earnings profiles to assign "borderline" occupations to EG (Erikson-Goldthorpe) codes. The resulting EG categories obviously will capture variation in earnings better than categories devised without the benefit of earnings information, but observed trends in between-class and within-class inequality should be relatively unaffected.

12. We also applied an alternative coding approach in which the 1970-basis EG scheme is built with preexisting algorithms devised for the 1960 Standard Occupation Classification (SOC) codes (see, e.g., Weeden & Grusky, 2005b). Where the two algorithms disagreed, we privileged the Morgan-Tang (2005) version except for a few cases in which small 1970 SOC occupations were folded into large 1980 SOC occupations, yielding implausible class assignments.

13. We also calculated Gini coefficients, but we have excluded them from Figure 3 because they parallel trends in the Theil index.

14. We have calculated the analogous percentages based on observed values of the BC, BO/WC, and WOs in 1973 and 2005. The results are (unsurprisingly) similar to those secured under Model 1.

15. These supplementary results are available from the first author on request.

16. Other potential sources of the rapid rise in within-occupation inequality among female workers include rising returns to experience (Blau & Kahn, 2002), the expansion of contingent work and other nontraditional employment contracts, and the falling real value of the minimum wage. These processes can have gender-specific effects because (a) the variance in experience is greater within the female labor force than the male labor force and (b) women are disproportionately represented in the ranks of contingent and low-wage workers.

17. The managerial class also shows a dramatic increase in between-occupation variance, but the timing of the increase suggests it is induced by changes in the SOC (in 1992 and again in 2003).

18. The declining wages in food service occupations are no doubt partly attributable to the declining minimum wage in real dollars (see Lee, 1999).

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