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Class Structure and Household Economic Well-Being*

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1. Introduction

Distribution of national income among major social classes was a central concern of classical economists and Marx. Surprisingly, however, mainly sociologists and not economists have conducted most of the empirical investigations into the class structure of contemporary advanced capitalist nations. Class conflict over the functional distribution of national income figures prominently in theoretical models of effective demand and growth inspired by the classical (including Marxian) tradition. It is also a key factor in modern accounts of profitability, accumulation and crises. However, the relationships between class structure and economic inequality among households have not received the attention that it deserves. The substantial body of work on questions of earnings inequality and compensation of top management, while valuable in itself and for understanding economic inequality, cannot serve as a substitute for systematic empirical studies.

The aim of this paper is to contribute toward an empirical examination of class structure and economic inequality. We develop a typology for identifying the class location of individuals and households (Section 2). The typology is employed to describe the class structure of the United States and some demographic characteristics of the households in various class locations. Disparities among population subgroups (e.g. racial/ethnic groups) in economic well-being have been discussed extensively. We add to this literature by focusing here on the class-dimension of these disparities (Section 3). We will present evidence on (a) disparities among subgroups within each class (e.g. the white-nonwhite gap within each class); and, (b) disparities among classes within each subgroup (e.g. class disparities within the white and nonwhite groups). Much has been written on the growing inequality in the United States during the 1980s and 1990s. We add to this literature in Section 4 by discussing (b) the contribution of intra-class and inter-class inequality to overall inequality; and, (c) the extent to which the distribution of economic well-being within each class overlap with the distributions among other classes; and, (c) the contribution of different sources of income to overall inequality.

2. Operationalizing class

The primary distinction in Marxist theory regarding class location is between those who own the means of production and those who do not. While direct ownership of means of production dominated at an earlier stage of capitalism, major assets in private hands is held under corporate ownership in modern capitalism. As Marx and Engels noted in Volume 3 of *Capital*, the separation of ownership and control in production activities had become a powerful tendency in the second half of the nineteenth century (Marx 1991, pp.567-569, Chapter 27). They also noted that the separation leads to the formation of a managerial class, entrusted with the charge of "other people's capital," and a financial capitalist or rentier class.[1]

In spite of this fundamental transformation in capitalism, empirical studies in the Marxist tradition tend to identify the capitalist class as a subset of the self-employed. Essentially, a capitalist is defined as a self-employed person who employs some minimum number of employees. The minimum is specified differently across studies. Thus, Wright and Perrone (1977, p.34, Table 1; p.36, note 7) and Western and Wright (1994, p.610, Table 1) defined the required minimum as one employee. Wright (1997, p.46) defined the capitalists as self-employed persons who employ ten or more workers. Hogan (2005, p.656) used three employees as the required minimum while Schooler and Schoenbach (1994, p.438) defined "employers" as self-employed persons who employ at least four nonfamily employees.

The principal rationale behind this criterion is that the hallmark of those who belong to the capitalist class is their employment of others for the purpose of making profits. There are a few problems with this rationale. First of all, it can be hard to separate the net

[1] In his Supplement to Volume 3 of Capital, Engels pointed out that the rapid pace of capitalist accumulation in the 1870s and 1880s had led to "a growth in the number of rentiers, people who have tired of routine exertion in business and who simply want to amuse themselves or pursue only a light occupation as directors of companies." (Marx 1991, p.1046).

income of a self-employed individual into wages and profits.[2] Second, if the self-employed serve in effect as subcontractors for large corporations then the social relation between them and their employees will resemble the manager/supervisor-worker relation rather than the capitalist-worker relation. Most importantly, this approach neglects three important facts about the modern U.S. economy: (i) the overwhelming majority of private-sector employees work for corporations; (ii) corporations own the vast majority of private-sector nonresidential fixed assets; and, (iii) corporations account for the bulk of business receipts. Thus, corporations rather than individual business owners dominate production for private profit. Using the criterion can at best identify small business owners.[3]

An alternative approach, therefore, would be to identify those who control the corporations as the capitalist class. This was the approach taken by Michael Zweig, which has its roots in the sociological tradition of studying the elites (Domhoff 1998). Zweig argued that the capitalist class is made up of the owners and top management of big business (defined as enterprises with more than 20 employees). He estimated that they constituted 2 percent of the labor force in 1995. This estimate was apparently constructed on the basis of the average number of directors on the board of big business enterprise and the total number of big businesses (Zweig 2000, p.17-19). Thus, while Zweig's concept of the capitalist class includes the owners and the top management, his estimate of it appears to consist only of the board of directors.

Either criterion—the number of employees under a self-employed person or membership in a corporation's board of directors—is insufficient to include the financial aristocracy among the ranks of the capitalist class. Wright did recognize this limitation of his

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[2] This problem is also encountered in estimating the overall share of labor in national income. Typically, an arbitrary assumption is made to split the net income of the self-employed into wages and profits (e.g. estimating an imputed wage by assigning the average wage of employees to the self-employed and then subtracting the resulting total wages from net income to obtain imputed profits).

[3] Wright and Perrone did recognize this limitation, but attributes it to the limitation of their particular sample, rather than to a structural feature of modern capitalism (Wright and Perrone 1977, p.36, note 7).

criterion but argued that including them will have only a negligible impact on the estimated size of the capitalist class (Wright 1997, p.48). Given the relatively small number of households that make up the financial aristocracy, Wright is indeed correct. Yet, admittedly, estimating the distribution of households or individuals across class locations is only a step in most research; the interesting and often more difficult issues pertain to the relationship between class structure and other characteristics of individuals, such as race, income or educational attainment.

In this study, we identify the capitalist class on the basis of wealth. A household is considered to be a capitalist household if it has a net worth of at least $5 million or business equity worth at least $2 million (dollar amounts are in 2000 dollars). While the thresholds are arbitrary, they would be, under normal circumstances, sufficient to yield a property income that can provide a household with a standard of living that is beyond the reach of the majority of households.[4] In effect, members of capitalist households may be considered as being free from the economic compulsion to engage in wage labor by virtue of their exceptionally large amounts of wealth.[5] Moreover, our definition includes the so-called "rentier" class – those who can live off the mere ownership of their wealth.[6]

For individuals in non-capitalist households, their position in the social labor process is the determinant of class location. Previous research has delineated positions in the labor process using the authority dimension and the skills/credentials dimension (Goldthorpe 2000; Wright 1997, pp.24-25). The complex approach to operationalizing these dimensions is to classify individuals on the basis of responses to a battery of questions

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[4] Assuming a modest 4 percent rate of return, the thresholds imply that the expected property income will be $200,000 (for net worth) or $80,000 (for business equity). In contrast, median household income in 2000 was $42,000.

[5] Only assets that can be readily converted to cash are included in our definition of wealth: owner-occupied housing; real estate and businesses; liquid assets; financial assets (stocks, bonds etc.); and, retirement assets (excluding the value of future benefits from public or private pensions). Net worth is calculated by subtracting liabilities, mortgage debt and other debt, from assets.

[6] In more dated terminology, these individuals would have been referred to as "coupon clippers."

regarding the actual content of their jobs, the number of subordinates and superiors they have, etc. The simpler approach classifies individuals based on their occupational titles. Comparison of results based on the two approaches suggests that the simpler method performs quite well in capturing the main features of the class structure.[7] We used the Census Bureau's detailed occupational codes (499 in 1989 and 494 for 2000) to group employees into five class locations: managers, supervisors, white-collar skilled workers, blue-collar skilled workers, and unskilled workers. The relationship between the standard major occupational groups and our class schema for employees is shown in Table 1. In this typology, we distinguish workers both by their supervisory relationship and by the skill content of their work.

Individuals in non-capitalist households who are self-employed are treated as a distinct group that is separate from employees. We could call this group the "petty bourgeoisie", but because it can include individuals enmeshed in qualitatively different sets of social relations, we designate them simply as "self-employed." This group consists of owners of small enterprises as well as professionals (doctors, lawyers, consultants, etc.) and skilled craftspeople (plumbers, electricians, etc.).

Our basic data is drawn from the public-use files of the Census Bureau's Annual Demographic Supplement (ADS). However, the ADS does not have any information on the amount of household wealth, the crucial variable required for identifying capitalist households. We therefore statistically matched the ADS with the principal survey on household wealth, Survey of Consumer Finances (SCF), conducted by the Federal Reserve in 1989 and 2001. The idea behind the matching algorithm is to find, for each household record in the ADS a household record in the SCF that matches it closely in terms of key characteristics, such as race and age of the householder, household income

[7] The comparison found that the biggest problem was with the category of "managers" where occupational title did not always reflect the actual job content: on the basis of the more complex operationalization, a third of those with the occupational title of managers had to be reclassified as supervisors or nonmanagerial employees (Wright 1997, p.90)

etc.[8] The combined total number of capitalist and non-capitalist households in the sample were 47,139 and 64,594, respectively, in 1989 and 2000.

3. Class structure

Our unit of analysis is the household since our main focus is on the relationship between class structure and household economic well-being. This choice of the unit of analysis requires the designation of a particular individual in the household as the "reference person." Following the convention, we have picked the person designated as the "householder" by the Census Bureau as the reference person for capitalist households and households in which the householder is an earner (i.e. either an employee or self-employed). For non-capitalist households in which the householder is not an earner, we designated the person with the highest earnings as the reference person. Our approach to determining the household's class position can be described as a combination of the conventional approach (which uses the position of the household head) and the dominance approach of Erikson (which uses the position of the earner with the dominant occupational position) (Erikson 1984; Sorensen 1994).[9]

Table 2 shows a percentage breakdown of households classified by our typology in 1989 and 2000. In the later year, only 1.9 percent of all households fell into the capitalist class. Managers made up 13.1 percent, supervisors 5.8 percent, and skilled workers 28.6 percent. Unskilled workers constituted the largest group, at 40 percent. The self-employed made up 10.6 percent.

The biggest change between 1989 and 2000 was that the share of capitalists almost doubled, from 1.1 to 1.9 percent. This change reflected the large increase in household wealth over this period. The managerial class also grew, by 1.6 percentage points, while

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[8] Details on the matching algorithm are available from the authors upon request.

[9] It should be noted that the Census Bureau's definition of the householder is different from the traditional definition of the household head. The householder is the person in whose name the housing unit is owned or rented. If the ownership or lease is joint, then the Bureau assigns the householder status randomly.

the supervisory class declined by 0.7 percentage points. The self-employed class also declined, by 2.0 percentage points.

There are notable differences in the demographic composition of the capitalist class compared to all households (Table 3). In 2000, 88 percent of capitalist households were white, compared to 73 percent overall. Moreover, 69 percent of capitalist households were "headed" by a man (using our definition) compared to 59 percent overall. Capitalists are older than average, with 59 percent overage age 50 compared to 31 percent overall. Capitalist households are also more educated than average, with 70 percent headed by a college graduate compared to 39 percent overall.

The demographic composition of the other groups in both 1989 and 2000 is portrayed in Figures 1 to 4. In both 1989 and 2000, a higher share of mangers, supervisors, skilled white-collar workers, and self-employed were white compared to overall (Figure 1). In contrast, non-whites made up a larger share of unskilled workers in both years than overall and about the same percentage of skilled blue-collar workers as overall. The share of whites in all classes declined between 1989 and 2000, though at about the same rate as overall.

The highest share of female heads was found in the unskilled worker group in the two years (Figure 2). Next in line was skilled white-collar work, followed by the managerial class, the supervisory group, and the self-employed. Not surprisingly, only a small share of the skilled blue-collar group was composed of women . Females increased as a share of every group between 1989 and 2000, much in line with their increase overall.

The age composition of the six worker groups in 2000 was pretty much in line with the overall age composition, with the notable exception of self-employed workers (Figure 3). The highest proportion of young workers (under age 35) was in the unskilled worker group (33 percent) and the lowest share in the self-employed class (only 13 percent). The highest share of prime-age workers (age group 35 to 50) was found in the supervisory class and the lowest share in the unskilled worker group. The highest percentage of older

workers (age 51 and over) was in the self-employed class (45 percent), compared to 31 percent overall.

College graduates made up 39 percent of all household heads overall but 76 percent of the skilled white collar group, 61 percent of the managerial group, and 43 percent of the self-employed class in 2000 (Figure 4). Household heads with less than a high school education (the lowest educational group in our categorization) comprised 11 percent of all household heads but 18 percent of skilled blue-collar workers and 19 percent of unskilled workers.

4. Disparities in well-being

4.1. Measures of well-being

Gross money income (MI), the most widely used measure of household economic well-being, has been subjected to a number of criticisms for failing to adequately reflect the household's command over commodities (Canberra Group, 2001; Wolff, Zacharias and Caner 2004). In recognition of the limitation of the standard measure, the Census Bureau has been publishing alternative measures since the 1980s. The Bureau's most comprehensive measure, which we refer to as extended income (EI), is a better approximation of a household's command over commodities than MI. EI is an after-tax measure of income that also takes into account the value of noncash government transfers and employer contributions for health insurance. It expands the definitions of income from wealth by adding to property income, an imputed return on home equity and realized capital gains (Table 4).

However, the expanded definition of income from wealth in EI does not fully capture the "stock" dimension of the advantages from the ownership of nonhome wealth and completely neglects the disadvantage from the burden of nonhome debt. If the ability to approximate potential consumption over a given period of time is a desirable characteristic of a measure of economic well-being, then it seems appropriate to take wealth into account in a more comprehensive manner than is done in EI. We address this

task by including, instead of the definition of income from wealth in EI, an alternative definition of income from wealth in our measures of well-being, comprehensive income (CI) (Table 4). Our definition includes income from home wealth and income from nonhome wealth separately. Income from home wealth is estimated as the difference between the gross imputed rent on owner-occupied housing and the annutized value of mortgage debt. Income from nonhome wealth is calculated as the difference between the imputed lifetime annuity on nonhome assets and the annutized value of nonhome debt.

We treat owner-occupied housing differently from the Census Bureau. The latter, by valuing the benefit as a return on home equity, in effect, treats it like a financial asset. We consider housing to be a universal need and hence value the benefit in the form of a replacement cost, i.e. rental equivalent.

The most common alternative to the lifetime annuity method is the bond-coupon method. We preferred the chosen method because it better reflects the resources available to the wealth holder on a sustainable basis over the expected lifetime. More importantly for our purposes here, it assumes that the amount of wealth remains unchanged over the expected (conditional) lifetime of the wealth holder.[10] We also used asset-specific, historical rates of total return (ranging from 14 to 40 years) in calculating the annuity value in order to account for the differences in portfolio composition across households. In contrast, the bond-coupon method assumes away the differences in individual household overall rates of return caused by differences in household portfolios (Wolff and Zacharias 2006).

There are two other significant differences between CI and EI. First, we broaden the definition of tax burden by including consumption taxes (state and local excise and sales taxes). Second, we use the government-cost method to value noncash transfers.[11] In contrast, the Census Bureau includes the "fungible value" of the medical benefits in EI. The fungible value method is based on the utilitarian theoretical argument that the

[10] We used life tables differentiated by sex and race in our estimates.

[11] In the case of Medicare and Medicaid—by far the biggest items in this list—the relevant cost is the "insurance value" differentiated by risk classes.

income-value for the recipient from a given noncash transfer is, on the average, less than the average cost incurred by the government in providing that benefit (see, for e.g., Canberra Group 2001, pp.24,65). In practice, this involves estimating how much the household could have paid for the medical benefit, after meeting its expenditures on some basic items (such as food, clothing etc.), with the maximum payment for the medical benefit set equal to the average cost incurred by the government. The alternative is not pursued by us primarily because of its important implication that households with incomes below the minimum threshold and participating in the program are presumed to receive no benefit from a product that they actually consume. This is inconsistent with our goal of measuring the household's command over commodities.

4.2. Class disparity in well-being

We begin by looking at median values of income for our seven classes in 1989 and 2000 (Table 5). In 2000, the capitalist class ranked first in terms of median well-being according to all three income measures (CI, MI, and EI). The managerial class ranked second and the skilled white-collar group third according to all three measures. The supervisory group and self-employed were in a virtual tie for fourth place. Skilled blue-collar workers were next to last and unskilled workers ranked last.

The actual level of well-being (relative to unskilled workers) was quite similar according to the three measures for all classes except the capitalist class. Using CI as the measure of well-being, the capitalist class had 12.4 times the CI of unskilled workers in 2000, compared to a ratio of 3.3 on the basis of MI and 2.8 on the basis of EI. The difference in results reflects the much larger value of income from wealth in CI as compared to the other two measures (see Table 6).

According to the CI measure, the median well-being of the capitalist class grew by 23 percent between 1989 and 2000, compared to 7.7 percent for all households. The next largest gain was recorded by self-employed workers (14.4 percent), while median CI of the other five classes grew by 7.1 percent or less. Results based on MI or EI actually show an absolute decline in the median well-being of the capitalist class over this period.

Table 6 provides greater detail on the source of the gains of the capitalist class over the period. In 2000, fully 84.6 percent of the CI received by the capitalist class was income from nonhome wealth, compared to 29.9 percent overall. Only self-employed workers had a share of CI from this source over 20 percent (23.4 percent in 2000). Moreover, only 17.6 percent of total CI for the capitalist class came from base income. For all other groups, the share was over 90 percent (over 100 percent excluding unskilled workers). Transfers made up 7.0 percent of CI overall but 14.7 percent for unskilled workers and only 1.1 percent for capitalists. The average tax rate was 27.8 percent in 2000 but only 7.4 percent for capitalists and over 30 percent for all other groups except unskilled workers.

Between 1989 and 2000 the most notable change in the composition of CI overall was a huge increase in the share of income from nonhome wealth, from 19.2 to 29.9 percent. This change largely reflects the big increase in household wealth over this period, which in turn reflects the stock market boom of the late 1990s. The share of base income correspondingly declined from 95.5 to 86.5 percent overall over the period. For the capitalist class, income from nonhome wealth rose from 82.9 to 84.6 percent of CI over the period whereas base income declined from 20.5 to 17.7 percent of CI. Another notable change is that the average tax burden of the capitalist class actually fell over the period, from 9.5 to 7.4 percent. In contrast, the average tax rate rose for all other groups except the self-employed (for whom it was largely unchanged).

4.3. Class and population subgroups

We next look at racial disparities by class (Figure 5).[12] In the year 2000 the ratio of median CI between nonwhite and white households had a rather low variance, ranging from a low of 0.79 among the managerial class to a high of 0.85 among the skilled white-collar class. The ratio rose among skilled white-collar, unskilled workers, and the self-

[12] Due to the small sample size for the capitalist class, we are unable to provide demographic breakdowns for this group.

employed between 1989 and 2000 but declined in the other groups. The sharpest drop occurred in the managerial class, from 0.83 to 0.79.

A different cut is provided by Figure 6 which shows the ratio of median CI by race and class to that of unskilled workers in the same race. Here, too, there is relatively little variation between whites and nonwhites. The ratio is somewhat higher for whites than nonwhites among the managerial class but somewhat lower for whites than nonwhites among skilled white-collar workers and among supervisors.

Gender disparities in median CI (between women and men) are shown in figure 7. In 2000 the ratio of median CI between women and men were somewhat higher than average among skilled white-collar, unskilled, and self-employed workers and lower in the other groups. Between 1989 and 2001, the ratio rose in every class, with the gretest increase occurring among self-employed workers (by 0.19). There were some notable differences in the ratio of median CI by gender and class among the different employment groups. In 2000, the largest discrepancy was in the managerial class, where the ratio of median CI to that of unskilled workers was 1.70 for men and only 1.43 for women (Figure 8). The ratios were also higher for men than women among the supervisory class and among skilled blue-collar workers.

The ratio of median CI between age group 35-50 and age group 34 and under were highest among mangers, supervisors, and skilled white-collar workers and lowest among skilled blue-collar, unskilled, and self-employed workers in 2000 (Figure 9). Between 1989 and 2000, the ratio fell rather sharply among the managerial class (from 1.41 to 1.33) and among unskilled workers (from 1.32 to 1.27) but remained relatively constant among the other groups. Likewise the ratio of median CI between age group 51-64 and age group 34 and under was highest among the managerial class (1.38) in 2000 and lowest among unskilled workers (1.25) and the self-employed (1.21). The biggest change between 1989 and 2001 again occurred among managers, where the ratio fell from 1.49 to 1.38. Still, in 2000 the largest age differentials in median CI were found among the managerial class, among whom the ratio of median CI to that of the median CI of

unskilled workers advanced from 1.52 for age group less than 35 to 1.67 for age group 51-64. Both supervisory and skilled white-collar workers exhibited rising CI with age, though the gradient was more moderate than that for managers.

Surprisingly, the return to a college education, as measured by the ratio of median CI between college graduates and those with a high school degree or less was highest among the self-employed in 2000 (a ratio of 1.46) and next highest among mangers (a ratio of 1.36). All occupational classes exhibited rising returns to a college degree between 1989 and 2000, with the greatest gains among managers and the self-employed. In terms of the ratio between the median CI of the group to that of unskilled workers, the managerial class ranked highest in 2000, with a ratio of 1.58, followed by the self-employed at 1.41 and skilled white-collar workers at 1.40. However, the self-employed class showed the greatest differentials in the ratio of median CI by educational group.

5. Inequality

We now turn to address the relationship between class divisions and overall inequality in CI. We first examine the contribution of inter-class and intra-class components to overall inequality as well as the extent to which the distribution of CI within each class are different. Then we turn to how different source of income contribute to overall inequality.

The Gini coefficient is our preferred measure of overall inequality. It is the most-widely understood measure. The Gini is especially suited for decomposition by class because unlike other measures of inequality, it can be associated with an index of stratification (Yitzhaki and Lerman 1991). Stratification refers to the extent to which each class, as compared to other classes, occupies a distinct segment of the income distribution.

5.1. Inter-class and intra-class inequality

Shlomo Yitzhaki developed the formal framework that we employed for our analysis. (Yitzhaki 1994). Let G be the Gini coefficient of the CI distribution among all households. The Yitzhaki decomposition separates the total amount of inequality into between-class inequality (I_b) and a remainder (I_r):

$$G = I_b + I_r \tag{1}$$

The amount of between-class inequality is computed as:

$$I_b = \frac{2\,\mathrm{cov}(\mu_i, \overline{F_{oi}}(y))}{\mu}, \tag{2}$$

where y is income (CI), μ is mean income for all households, μ_i is mean income for class i, and $\overline{F_{oi}}(y)$ is the mean rank of class i, i.e., the average position of the members of a class in the overall income distribution.[13] Thus, the amount of between-class inequality is twice the covariance between the mean incomes and mean ranks of classes divided by the mean income for all households.[14]

The remainder term is calculated as:

$$I_r = \sum_{i=1}^{7} s_i G_i O_i, \tag{3}$$

where s_i is the share of class i in aggregate income, G_i is the Gini coefficient of the income distribution within class i, and O_i is the overlapping index for class i. The advantage of the Yitzhaki decomposition over the standard decomposition is that instead of a summary measure of overlapping for all groups, it provides group-specific measures of overlapping. The index of overlapping proposed by Yitzhaki is a measure of the degree to which the range of income in each group overlaps with the range of income for all households. Overlapping can thus be seen as the opposite of stratification: the higher the amount of overlap between a class and the population, less stratified they are as a class in terms of income (Yitzhaki 1994, pp.148-149).

Formally, the amount to which class i overlaps with the overall distribution is defined as:

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[13] For example, if the mean rank is 0.25 for unskilled workers then the average worker's position in the income distribution for all households is at the 25th percentile.

[14] In contrast, in the standard decomposition the between-group component is equal to twice the covariance between the mean income of each group and the rank of each group's mean income divided by overall mean income. The Yitzhaki decomposition takes into account the ranking of each household within each class in the overall distribution.

$$O_i = \frac{\text{cov}_i(y, F_{oi}(y))}{\text{cov}_i(y, F_i(y))}, \tag{4}$$

where $F_{oi}(y)$ is the function that assigns to the members of class i their ranks in the overall distribution, F_i is the function that assigns to the members of class i their ranks in the income distribution within that class, and cov_i indicates that the covariance is according to the distribution within class i.[15] The minimum value of O_i is given by the share of class i in the total number of households and its maximum value is equal to 2. When the index equals the minimum possible value, it suggests that the class in question is a perfect stratum, i.e., it occupies an exclusive segment of the overall income distribution. If a particular class has a range of income that coincides with the range of income of all households then the index will be equal to 1. Finally, if the index is close to 2, the distribution of income within the class is much more polarized than in the overall distribution. This can happen if the members of the class constitute two strata, one that has higher and the other that has lower incomes than μ, the average income of all households in all classes (Yitzhaki and Milanovic 2002, pp.162-163).

The index of overlapping defined in equation (4) is constructed from indexes that indicate the amount by which a class overlaps with each of the other classes:

$$O_i = p_i + \sum_{j \neq i} p_j O_{ji} \tag{5}$$

where p_i is the share of class i in the total number of households and O_{ji} is the index of overlapping of class j by class i. Since the overlapping of a group by itself is equal to 1 by definition, its contribution to O_i is equal to its relative size. The index of overlapping of the overall distribution by a class is shown in equation (5) as the weighted sum of overlapping of each of the other classes by that class, with the relative size of each class serving as the weights.

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[15] In theory, the functions are actually cumulative distribution functions. However, when working with actual samples, the cumulative distribution function is estimated by the rank of the observation and hence our description of the functions as rank-assigning functions (Yitzhaki 1994, p.149, n.1).

In turn, the class-by-class overlapping indexes are calculated as:

$$O_{ji} = \frac{\text{cov}_i(y, F_{ji}(y))}{\text{cov}_i(y, F_i(y))}, \tag{6}$$

where F_{ji} is the function that assigns members of class i their ranks in the income distribution of class j. The index O_{ji} indicates the extent to which the incomes of households in class j falls in the range of incomes of households in class i; the higher the fraction of class j that falls in the range of class i, the higher will be the value of O_{ji}; and, for a given fraction of class j that falls in the range of class i, the closer the incomes of the households in that fraction are to the mean income of class i, the higher will be the value of O_{ji}. The index can take values between 0 (no overlap) and 2. Perfect overlap occurs when the index equals 1, indicating that the rankings of members of class i produced by F_i and F_{ji} are identical (Yitzhaki 1994, pp.150-152).

We now turn to the results of the Yitzhaki decomposition for our data. In 2000, the Gini coefficient of CI for the households in our sample (capitalist and earner households) was a rather high 0.492.[16] Inter-class inequality contributed 41 percent of the total amount of inequality (Table 7, Panel A) or 20.4 Gini points, suggesting that a substantial portion of the overall inequality stemmed from the class divisions among households. Of obvious importance is the huge gap in mean income between the capitalist class and everyone else. As can be calculated from the estimates reported earlier (Table 6), the mean income of the capitalist households was 10.2 times higher than the mean income of all households; in contrast, the ratios of the mean incomes of the other classes to the overall mean income varied between 1.07 (manager) to 0.63 (unskilled worker). Another way to view the class disparities is in terms of the discrepancy between the shares of each class in the total number of households and aggregate CI (Table 7, Panel B, Columns 1 and 2). Capitalist households accounted for a mere 2 percent of total households and a disproportionately large 20 percent of aggregate income. On the other extreme, unskilled

[16] We present only the results for 2000 because the 1989 results are very much similar.

worker households made up 40 percent of all households but commanded only 25 percent of aggregate income. Blue-collar, skilled worker households also had a share in income that was below their share in total number of households (6 versus 9 percent). Share in income roughly equaled the share in the total number of households for all other groups.

While inter-class inequality accounted for a significant portion of total inequality, the larger contribution (59 percent or 28.8 Gini points) was due to the remainder term specified in equation (3). The product of the components of the remainder for each class and the sum of the products across classes are shown in Table 7 (Panel B, Column 5). Looking first at the column of overlapping indexes reveals that, unsurprisingly, the capitalist households showed the lowest amount of overlapping and constituted a near-perfect stratum. In comparison, other classes showed a much higher degree of overlapping, although there are notable difference among them, especially when the values of the index are compared against the population shares, since the latter is the minimum value that the index can take (see equation (5)).

Within-class inequality is the highest (0.459) among the capitalist and self-employed households, yet their indexes of overlapping are drastically different. The high degree of inequality among the capitalist households is the inequality between the very rich and the extremely rich. In contrast, the inequality among the self-employed reflects their more heterogeneous character, consisting as they do of those ranging from the prosperous small business owner to the loss-making one, and highly paid professionals to those in modestly paid unskilled occupations. As a result, the capitalist households are concentrated at the very high end of the overall distribution with very little overlap while the self-employed are more spread out over the distribution with great deal of overlap.

Among the employee groups, blue-collar workers showed the lowest amount of within-class inequality (0.324), while managers showed the highest (0.384), with the other three groups falling in the interval. The relatively lower inequality among blue-collar workers was probably a reflection of their higher degree of unionization and relatively lower degree of occupational heterogeneity, which sets some limits on the range of pay.

Collective bargaining is rare among the occupational groups included under the broad category of "managers." Additionally, the occupational groups included in this category are quite heterogeneous, as they could encompass the CEO of Exxon-Mobil and an assistant manager of a small-town McDonald's. Both these factors probably contributed to the relatively high inequality within the managerial class.

In terms of their respective contributions to the remainder term (I_r), the contribution of the capitalist households was the lowest at 1 percent and the contribution of the unskilled workers was the largest at 31 percent (Table 7, Panel B, Column 6). The low contribution of the former reflected their very low amount of overlapping. A comparison with white-collar, skilled workers who had the same share of aggregate income as the capitalists puts the role of overlapping in sharp relief. The former made the second largest contribution to the remainder term (23 percent) because of their high overlapping, even though within-class inequality (G_i) was lower among them than the capitalists.

Further details on the overlapping between classes is presented in Table 8 that shows the estimate of the overlapping matrix for 2000. The reference group (the class represented by the subscript i in the overlapping index O_{ji}) is shown in the rows of the table; other groups are shown in the columns (the classes represented by the subscript j). As we would expect and indicated by the numbers along the row labeled "Capitalists", the overlapping of other classes by the capitalists are extremely small. In contrast, the overlapping of capitalists by each of the other classes is much larger, as indicated by the numbers down the column labeled "Capitalists." The mechanism at work here can be illustrated by considering the overlapping between capitalists and unskilled workers.

The overlapping of unskilled workers by capitalists is quite negligible at 0.01. This reflects the fact there are only very few worker households in the capitalist income range. As a result, the ranks of capitalist households, when each of them are considered as belonging to the income distribution of worker households, will not differ much from each other and this renders the covariance in the numerator of equation (6) rather small.

On the other hand, the overlapping of capitalists by unskilled workers is somewhat larger at 0.06, reflecting the fact that there are relatively more capitalist households in the worker income range.[17]

If we exclude the row and column labeled “capitalist” from consideration, then the table shows a great deal of overlapping between the classes. The lowest number in this submatrix—0.76—occurs at the intersection of the “manager” row and the “unskilled worker” column. In general, the overlapping of unskilled workers by other employee groups is relatively smaller.

The index of overlapping depends on the ranks and incomes of households in each class and is therefore susceptible to bias from extreme values. It is therefore instructive to also examine the ranking of one class in terms of another. This provides the answer to the following type of question: what will be the position of an average worker household in the income distribution of managers? The average rank of each class in the distribution of other classes is shown in the matrix of ranks (Table 9). Numbers along the row labeled “Capitalist”, for example, indicates the average rank of the households in that class in the distribution of income within each of the other classes. It should be noted that, by definition, the average rank of a class in its own ranking is equal to 0.5, and hence, the numbers on the diagonal are all equal to 0.5. An average rank exceeding 0.5 would indicate that, on the average, households in that class have a rank that is higher than in their own distribution and the converse holds for an average rank falling below 0.5.

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[17] Consider the following hypothetical example. Suppose that there is one worker household that has an income equal to the minimum income of the capitalist class. Further suppose that this minimum turns out to be the income of five capitalist households. Then the proportion of worker households falling in the range of capitalist income will be lower than the proportion of capitalist households falling the range of worker income. Note, however, that the value of the overlapping index is not merely a function of the proportion of households in one class that is included in the income range of the other class (see the discussion following equation 6).

Consider first, the most numerous of the classes, unskilled worker households. Numbers reported along their row indicates that they were, on the average, at the very bottom of the capitalist distribution, and at the third or the fourth decile in the distribution of other classes. The least numerous of the classes, capitalist households, were at the very top or in the top 1 percentile of the distribution of other classes. Managers and white-collar skilled workers had a similar standing, on the average, in each other's distribution as they had in their own; they definitely belonged to the upper portions of the distributions of all other non-capitalist groups. The results for the self-employed group shows the greatest divergence between the pictures conveyed by mean ranks and mean incomes. In terms of mean income in 2000, the self-employed group was above all groups, other than capitalist and manger households (Table 6). However, their average rank is below 0.5 in the distributions of the supervisor and white-collar, skilled workers, indicating that extreme values played some role in pushing their mean income to a level higher than of these groups.

5.2. Inequality and sources of income

We now examine the relationship between overall inequality and the sources of income. In addition to the results based on our preferred measure of income, CI, we also report results using the Census Bureau's most expansive definition, extended income (EI). We provide this comparison in order to highlight that the levels of measured inequality and the contribution of various income sources to inequality depend crucially on how income from wealth is measured.

Before we begin the comparison it is useful to first consider the shares in CI and its components by class (see Table 10). As we saw previously, the capitalist households held about 20 percent of aggregate CI in 2000. This was nearly *twice* as much as the share of CI they had in 1989. The managerial class and the white-collar professionals maintained their shares in CI (roughly 14 and 20 percent, respectively), while the other four groups suffered losses in their income shares. Thus, the increase in the share of the capitalist class between 1989 and 2000 was accompanied by the shrinking shares of supervisors, blue-collar skilled workers, unskilled workers and self-employed.

The latter groups also suffered losses in their shares in base income, which consist primarily of earnings. Capitalists, managers and white-collar professionals were the beneficiaries of the redistribution of base income among classes as their shares in this type of income increased between 1989 and 2000. Over the same period, a remarkable redistribution of income from wealth took place in favor of the capitalist households and against all other classes, the only exception to this general trend being the roughly constant share of white-collar professionals in the income from home wealth. The capitalist class, constituting fewer than 2 percent of all households, accounted for 35 and 51 percent of income from wealth in respectively 1989 and 2000. In sum, the big jump in the share of the capitalist class in the aggregate economic pie appears to have come from their income from wealth.

The redistribution of aggregate income and income from wealth in favor of the capitalist class and the redistribution of base income toward the more well off segments of earners (i.e., managers and white-collar professionals) led to an increase in inequality between 1989 and 2000 (Figure 13). The Gini coefficient for CI rose by 8.3 Gini points, from 40.8 to 49.2 Gini points. Inequality rose in the EI measure also, but to a lesser extent (4.5 Gini points). Measured inequality is substantially lower in the official measure (EI) as compared to our measure (CI), with a gap of 7.2 and 11.1 Gini points, respectively, in 1989 and 2000. Why do the level and change in inequality differ in such a marked way between the two measures?

We use the so-called “natural decomposition” method to answer these questions. The idea here is to express the Gini coefficient as a sum of the contributions (k_i) made by the various sources of income (base income, income from wealth, etc.),

$$G = \sum_{i=1}^{n} k_i \qquad (7)$$

The contribution made by each source is the product of its concentration coefficients (c_i) and share (b_i) in aggregate income:

$$k_i = b_i c_i \quad (8)$$

The difference between the Gini coefficients of the two measures can thus be resolved into differences between the contributions made by income components. The results from the decomposition analysis are shown in Table 11. We discuss the estimates for 1989 because the pattern of differences was the same in both years. Base income contributed 6 Gini points more to inequality in EI than in CI. However, this was more than offset by the higher contribution of income from nonhome wealth, by 9.9 Gini points, to inequality in CI than in EI. Further widening of the gap in the Gini coefficients stemmed from taxes. They reduced inequality to a greater extent in EI than in CI, a difference of 2.9 Gini points. Since both CI and EI are post-tax measures, taxes enter with a negative sign and, hence, their contribution to inequality will be negative. The lower contribution of taxes to inequality, it should be noted, was not due to any differences in their share in the two measures. Instead, the concentration coefficient for taxes was lower in CI than in EI (0.359 versus 0.467 in 1989), reflecting the fact that taxes were more equally distributed across the CI distribution than the EI distribution. The implicit tax schedule was less progressive for the CI distribution because the bulk of the income for those at the top of the distribution was made up of imputed lifetime annuity from nonhome wealth, a form of income that is obviously not subject to taxation.

Results from the decomposition analysis also shed light on why the increase in CI inequality was higher than that in EI between 1989 and 2001 (8.3 versus 4.5 Gini points; *see* Figure 14). The rise in CI inequality was driven by the rising contribution from income from nonhome wealth. Increase in the contribution made by base income was the principal factor behind the rise in EI inequality (Figure 14). However, the inequality-enhancing effect of income from nonhome wealth in CI far outweighed the similar effect of base income in EI (9.6 versus 5.3 Gini points). The two sources of income differ drastically in terms of their effect on the change in inequality in CI and EI. Base income played only a negligible role in the change in CI inequality and income from nonhome wealth played only a modest role in the increase in EI inequality. Since base income is the same in both measures, we can conclude that the difference in the picture of

inequality was primarily due to the difference in the way income from nonhome wealth is reckoned in the two measures.

6. Conclusion

Perhaps, our most notable finding is the large increase in the size of the capitalist class and also in their relative well-being. The capitalist class according to our definition jumped from 1.1 to 1.9 percent of all households over this period, largely due to the very large gains in household wealth over the period. Moreover, according to our Comprehensive Income (CI) measure, the capitalist class had 12.4 times the median CI of unskilled workers in 2000, up from 10.8 in 1989. Almost 85 percent of CI of the capitalist class came from income from nonhome wealth in 2000, compared to 30 percent overall. For all other groups, the share of income from nonhome wealth was under 24 percent (under 18 percent excluding the self-employed).

Median well-being (as measured by CI) for the capitalist class increased much faster over the 1989-2000 period than that of any other class. Over the 1989-2000 period, income from nonhome wealth increased as a share of total CI from 19 to 30 percent. Among the capitalist class, the share rose from 82.9 to 84.6 percent. The average tax rate of the capitalist class also fell over this period, whereas it increased for all other classes except the self-employed (for whom it was largely unchanged).

Differentials in median CI were much less marked among the non-capitalist classes. In 2000, the ratio of median CI by occupational class to that of the unskilled class ranged from 1.21 for skilled blue-collar workers to (only) 1.61 for the managerial class.

The managerial class was characterized by the largest CI differentials by age class (ranging from a ratio of 1.52 to that of unskilled workers for the under 35 age group to 1.67 for age group 51-64) in 2000, even though the differentials fell between 1989 and 2000. The managerial class also exhibited the second highest return to a college degree (after the self-employed) as measured by the ratio of median CI of college graduates to high school graduates and below in 2000 (a ratio of 1.36) and the greatest increase (in a

tie with the self-employed) in this ratio between 1989 and 2000. In terms of the ratio between the median CI of the group to that of unskilled workers, the managerial class ranked highest among all occupational groups in 2000, with a ratio of 1.58.

Inequality in CI is much higher than the inequality in the most expansive official definition of income, EI (a gap of 11.1 Gini points in 2000). Decomposition analysis suggested that the main reason behind the higher inequality in CI is due to the larger contribution made income from nonhome wealth in CI relative to EI. The lower inequality-reducing effect of taxes in CI as compared to EI also contributed to the gap between the Gini coefficients of the two measures. We also found that the growth in inequality between 1989 and 2000 was higher in our measure than in the official measure (8.3 versus 4.5 Gini points).

Class divisions among households contributed to 41 percent of overall inequality in 2000. Of obvious importance here is the huge advantage in economic well-being enjoyed by the capitalist class. Capitalist households accounted for a mere 2 percent of total households and a disproportionately large 20 percent of aggregate income. On the other extreme, unskilled worker households made up 40 percent of all households but commanded only 25 percent of aggregate income. The Yitzhaki index of overlapping that we estimated for 2000 showed that the capitalist households occupied an almost exclusive space of economic well-being, while other classes displayed a substantial degree of overlapping with each other.

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Table 1 Occupation-Class Mapping for Wage and Salary Employees, 2000 ((Percent of Employees in Each Occupation in Each Class)

Occupation	Class				
			Skilled Worker		
	Manager	Supervisor	White-Collar	Blue-Collar	Unskilled Worker
Executive, administrative and managerial	100.0	0	0	0	0
Professional specialty	0	0	100.0	0	0
Technicians and related support	0	0	100.0	0	0
Sales	0	24.5[a]	25.3[b]	0	50.2
Administrative support	0	4.0[c]	0	0	96.0
Services	0	5.2[d]	0	0	94.8
Precision production, craft and repair	0	14.8[e]	0	84.5	0.7[f]
Operators, fabricators and laborers	0	0.7[g]	0	0	99.3
Farming, forestry and fishing	4.3[h]	6.6[i]	0	0	89.1

Notes:

a. Supervisors, sales occupations

b. Sales representatives in finance and business services and sales representatives of commodities (except retail)

c. Supervisors, administrative support occupations

d. Supervisors in (i) food preparation and service; (ii) cleaning and building service;and (iii) personal service

e. Supervisors of (i) mechanics and repairers; (ii) construction occupations; (iii) extractive occupations; and (iv) precision production occupations

f. Apprentices among (i) automobile mechanics; (ii) brick mason and stone mason; (iii) carpenter; (iv) electricians; (v) plumber, pipefitter and steamfitter; (vi) tool and die maker; (vii) machinist; and (viii) sheet metal worker

g. Supervisors of (i) motor vehicle operators; (ii) material moving equipment operators; and (iii) handlers, equipment cleaners and laborers. Ship captains & mates, except fishing boats are also included here.

h. Farm managers

i. Supervisors of (i) farm workers; (ii) related agricultural occupations; and (iii) forestry and logging workers. Captains and other officers of fishing vessels are also included here.

Table 2 Class Structure of Households

GROUP	**1989**	**2000**
Capitalist	1.1	1.9
Manager	11.5	13.1
Supervisor	6.5	5.8
Skilled Worker	28.1	28.6
White-Collar	17.6	19.9
Blue-Collar	10.5	8.7
Unskilled Worker	40.2	40.0
Self-Employed	12.6	10.6
All	*100.0*	*100.0*

Notes: The class location of a household is determined by its wealth and the class location of its reference person. A "capitalist" household had a net worth of either $5 million or business equity worth $2 million (in 2000 dollars). For non-capitalist households, the reference person is the householder, if that person is an earner; otherwise, it is the person with the highest labor income. Note that the householder is the person who owns or rents the housing unit. If the ownership or lease is joint then the Census Bureau randomly designates one person as the householder.

Table 3 Selected Characteristics of Capitalist Households and All Households, 2000
(Percent of total number of households)

Characteristic	Capitalist [1]	All [2]
A. Race/Ethnicity		
White[3]	88	73
Nonwhite	12	27
B. Gender		
Men	69	59
Women	31	41
C. Age		
Less than 35	9	29
35-50	32	41
51-64	36	25
65 and over	23	6
D. Education		
Less than high school	4	11
High-school	14	30
Some college	12	20
College graduate	70	39

Notes:

(1) Based on the characteristics of the householder.

(2) Based on the characteristics of the reference person.

(3) "White" refers to only non-Hispanic whites. Everyone else is classified as "Nonwhite."

Table 4 Derivations of Measures of Income

Our measure	Official measure
Money income (MI)	Money income (MI)
Less: Property income and Government cash transfers	*Less*: Property income and Government cash transfers
Plus: Employer contributions for health insurance	*Plus*: Employer contributions for health insurance
Equals: Base income	*Equals*: Base income
Less: Taxes	*Less*: Taxes
Income taxes[1]	Income taxes
Payroll taxes[1]	Payroll taxes
Property taxes[1]	Property taxes
Consumption taxes	
Plus: Income from wealth	*Plus*: Income from wealth
Annuity from non-home wealth	Property income and realized capital gains (losses)
Imputed rent on owner-occupied housing	Imputed return on home equity
Plus: Cash transfers[1]	*Plus*: Cash transfers
Plus: Noncash transfers[1, 2]	*Plus*: Noncash transfers
Equals:Comprehensive Income (CI)	*Equals*: Extended Income (EI)

Notes:

1. The amounts estimated by the Census Bureau are modified to make the aggregates consistent with the NIPA estimates.

2. The government-cost approach is used. The Census Bureau uses the fungible value method for valuing Medicare and Medicaid. The main difference between the two methods is that, while the fungible value method assigns an income value for a benefit according to the recipient's level of income, the government cost approach assigns an insurance value that is independent of the recipient's income.

Table 5 Economic Well-Being by Class and Measure (Median Values in 2005 dollars)

A. Level and Change in Well-Being

Group	1989			2000			Percent Change		
	CI	**MI**	**EI**	**CI**	**MI**	**EI**	**CI**	**MI**	**EI**
Capitalist	431,708	159,639	128,781	530,086	137,303	120,060	22.8	-14.0	-6.8
Manager	65,669	78,876	69,144	69,028	81,153	72,432	5.1	2.9	4.8
Supervisor	56,772	64,454	59,066	57,872	63,216	59,578	1.9	-1.9	0.9
SW,White-Collar	61,159	70,718	62,931	64,869	76,612	68,884	6.1	8.3	9.5
SW, Blue-Collar	50,545	54,259	50,877	51,772	56,026	52,413	2.4	3.3	3.0
Unskilled Worker	39,937	40,125	39,722	42,760	41,376	42,406	7.1	3.1	6.8
Self-Employed	50,210	59,557	53,441	57,464	63,703	58,674	14.4	7.0	9.8
All	*50,066*	*54,786*	*50,786*	*53,945*	*57,724*	*55,070*	*7.7*	*5.4*	*8.4*

B. Ratio of Each Group to Unskilled Worker

Group	1989			2000		
	CI	MI	EI	CI	MI	EI
Capitalist	10.81	3.98	3.24	12.40	3.32	2.83
Manager	1.64	1.97	1.74	1.61	1.96	1.71
Supervisor	1.42	1.61	1.49	1.35	1.53	1.40
SW,White-Collar	1.53	1.76	1.58	1.52	1.85	1.62
SW, Blue-Collar	1.27	1.35	1.28	1.21	1.35	1.24
Self-Employed	1.26	1.48	1.35	1.34	1.54	1.38

Table 6 Composition of Income (CI) by Class, 1989 and 2000

Group	Mean CI (2005 dollars)	*Percent of Mean CI*					
		Base income	Income from home wealth	Income from nonhome wealth	Trasnsfers	Taxes	Total
				1989			
Capitalist	592,360	20.5	4.6	82.9	1.5	-9.5	100.0
Manager	76,135	111.2	7.1	13.8	3.2	-35.4	100.0
Supervisor	64,535	109.3	6.3	9.4	4.6	-29.5	100.0
SW,White-Collar	71,187	108.5	6.4	13.3	4.0	-32.1	100.0
SW, Blue-Collar	55,292	104.7	5.8	9.1	6.2	-25.8	100.0
Unskilled Worker	46,809	95.3	5.7	9.2	12.5	-22.7	100.0
Self-Employed	63,181	106.4	8.4	18.2	7.2	-40.2	100.0
All	64,633	95.5	6.3	19.2	6.8	-27.8	100.0
				2000			
Capitalist	848,603	17.6	4.1	84.6	1.1	-7.4	100.0
Manager	89,265	112.4	4.6	17.3	4.3	-38.6	100.0
Supervisor	70,200	108.4	4.5	13.9	5.7	-32.4	100.0
SW,White-Collar	81,895	110.3	4.7	17.1	4.7	-36.8	100.0
SW, Blue-Collar	60,226	102.9	4.3	13.8	7.4	-28.4	100.0
Unskilled Worker	52,224	92.1	4.0	13.7	14.7	-24.5	100.0
Self-Employed	81,390	103.1	5.2	23.4	8.2	-39.9	100.0
All	83,161	86.5	4.4	29.9	7.0	-27.8	100.0

Table 7 Results from the Yitzhaki Decomposition, 2000

A. Inter-Class Inequality and the Remainder

	Gini	Share
Total	0.492	100%
Inter-Class	0.204	41%
Intra-Class	0.288	59%

B. Contribution of Each Class to the Remainder

Class	(1) Population share (p_i)	(2) Income share (s_i)	(3) Overlap index (O_i)	(4) Gini (G_i)	(5) Contribution to the remainder ($s_iO_iG_i$)	(6) Share in the remainder ($s_iO_iG_i/I_r$)
Capitalist	0.02	0.20	0.036	0.459	0.003	0.01
Manager	0.13	0.14	0.858	0.384	0.046	0.16
Supervisor	0.06	0.05	0.910	0.351	0.016	0.05
White-collar, skilled worker	0.20	0.20	0.889	0.377	0.066	0.23
Blue-collar, skilled worker	0.09	0.06	0.902	0.324	0.018	0.06
Unskilled worker	0.40	0.25	0.976	0.366	0.090	0.31
Self-employed	0.11	0.10	1.021	0.459	0.049	0.17
Total	1.00	1.00	0.5	0.492	0.288	1.00

Table 8 Overlapping between Households in Various Classes

	Capitalist	Manager	Supervisor	White-collar, skilled worker	Blue-collar, skilled worker	Unskilled worker	Self-employed
Capitalist	1.00	0.03	0.01	0.02	0.01	0.01	0.04
Manager	0.17	1.00	0.95	0.98	0.90	0.76	0.85
Supervisor	0.09	1.00	1.00	0.99	0.99	0.86	0.87
White-collar, skilled worker	0.15	1.01	0.98	1.00	0.95	0.81	0.87
Blue-collar, skilled worker	0.05	0.94	0.98	0.95	1.00	0.89	0.84
Unskilled worker	0.06	0.98	1.04	0.99	1.08	1.00	0.91
Self-employed	0.18	1.13	1.11	1.12	1.08	0.96	1.00

Table 9 Average Rank of a Class in the Distribution of Other Classes

	Capitalist	Manager	Supervisor	White-collar, skilled worker	Blue-collar, skilled worker	Unskilled worker	Self-employed
Capitalist	0.50	0.99	1.00	0.99	1.00	1.00	0.99
Manager	0.01	0.50	0.58	0.52	0.63	0.70	0.57
Supervisor	0.00	0.42	0.50	0.45	0.56	0.64	0.50
White-collar, skilled worker	0.01	0.47	0.55	0.50	0.61	0.68	0.54
Blue-collar, skilled worker	0.00	0.36	0.45	0.39	0.50	0.59	0.45
Unskilled worker	0.00	0.30	0.37	0.32	0.42	0.50	0.39
Self-employed	0.01	0.41	0.49	0.44	0.53	0.60	0.50

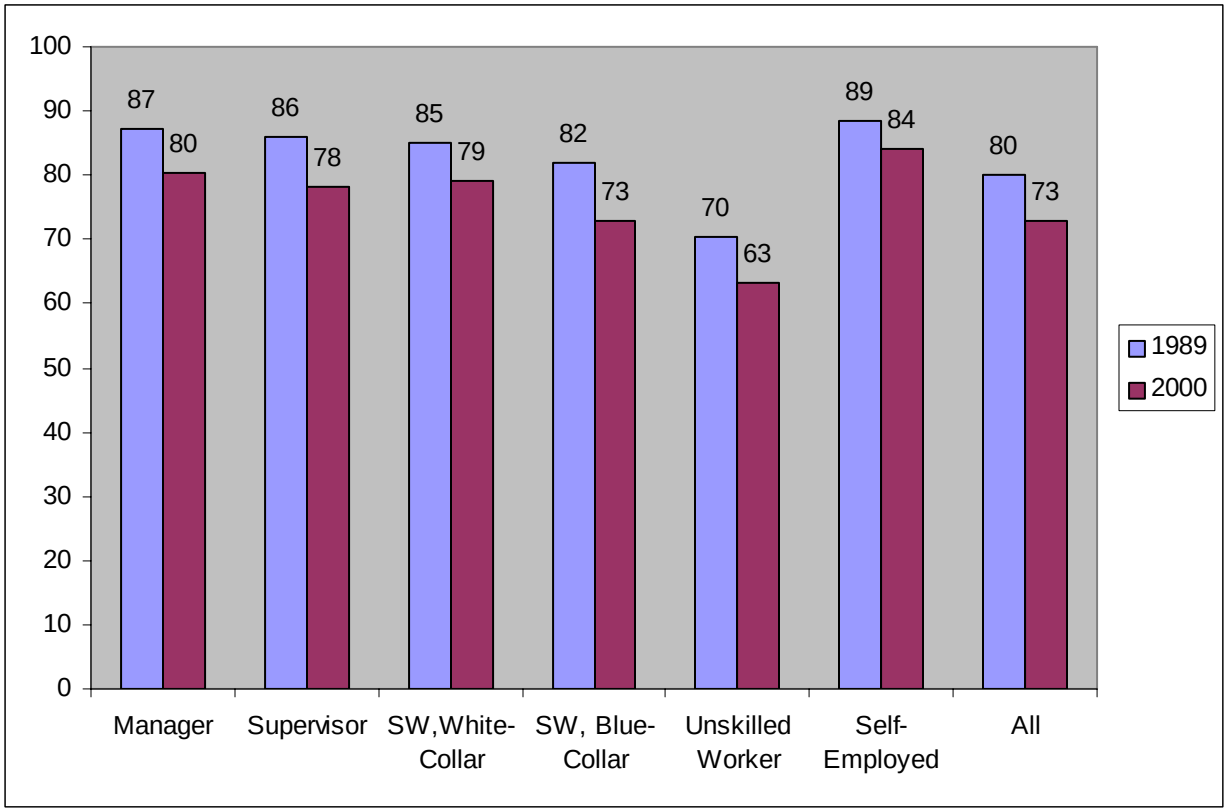
Table 10 Shares in Aggregate Income by Source of Income and Class

	1989						
Group	Base income	Income from wealth	Income from home wealth	Income from nonhome wealth	Transfers	Taxes	CI
Capitalist	2.2	34.9	7.4	43.8	2.3	3.5	10.2
Manager	15.8	11.1	15.3	9.7	6.5	17.2	13.5
Supervisor	7.4	4.0	6.5	3.2	4.4	6.9	6.5
White-collar, skilled worker	22.0	14.9	19.7	13.4	11.5	22.4	19.4
Blue-collar, skilled worker	9.8	5.3	8.3	4.3	8.3	8.3	9.0
Unskilled worker	29.0	17.0	26.3	13.9	54.0	23.8	29.1
Self-employed	13.8	12.9	16.5	11.7	13.1	17.9	12.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2000						
	Base income	Income from wealth	Income from home wealth	Income from nonhome wealth	Transfers	Taxes	CI
Capitalist	4.0	50.9	18.4	55.8	3.0	5.2	19.7
Manager	18.2	9.0	14.6	8.1	8.6	19.5	14.0
Supervisor	6.2	2.6	5.0	2.3	4.0	5.8	4.9
White-collar, skilled worker	25.0	12.4	20.7	11.2	13.1	25.9	19.6
Blue-collar, skilled worker	7.5	3.3	6.1	2.9	6.6	6.4	6.3
Unskilled worker	26.7	13.0	23.0	11.5	52.6	22.2	25.1
Self-employed	12.4	8.7	12.2	8.1	12.1	14.9	10.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 11 Decomposition of Gini by Income Source

	1989					
	CI			EI		
	Concentration Coefficient	Share in Income	Contribution to Gini	Concentration Coefficient	Share in Income	Contribution to Gini
Base income	0.324	0.955	0.310	0.350	1.059	0.370
Income from wealth	0.753	0.255	0.192	0.580	0.159	0.092
Income from home wealth	0.483	0.063	0.030	0.426	0.068	0.029
Income from nonhome wealth	0.840	0.192	0.162	0.697	0.091	0.063
Trasnsfers	0.094	0.068	0.006	0.044	0.058	0.003
Taxes	0.359	-0.278	-0.100	0.467	-0.276	-0.129
Total		1.000	0.408		1.000	0.336
	2000					
	CI			EI		
	Concentration Coefficient	Share in Income	Contribution to Gini	Concentration Coefficient	Share in Income	Contribution to Gini
Base income	0.359	0.865	0.310	0.401	1.057	0.424
Income from wealth	0.824	0.343	0.282	0.589	0.162	0.096
Income from home wealth	0.559	0.044	0.025	0.313	0.052	0.016
Income from nonhome wealth	0.863	0.299	0.258	0.719	0.110	0.079
Trasnsfers	0.188	0.070	0.013	0.097	0.063	0.006
Taxes	0.412	-0.278	-0.114	0.512	-0.282	-0.144
		1.000	0.492		1.000	0.381

Figure 1 Racial/Ethnic Composition, 1989 and 2000 (Percent of Non-Hispanic Whites in Each Group)



Note: SW indicates skilled-worker

Figure 2 Gender Composition, 1989 and 2000 (Percent of Women in Each Group)

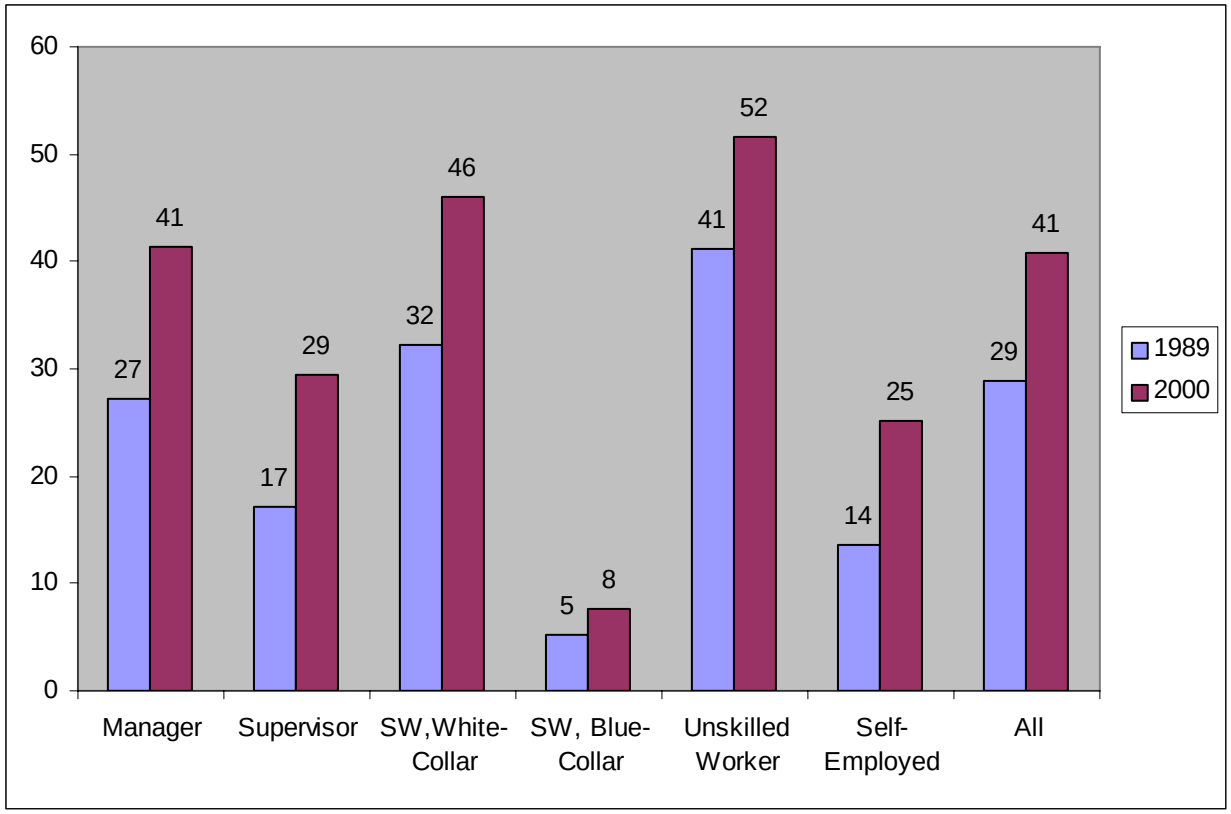


Figure 3 Age Composition, 2000 (Percent of each age group within each class)

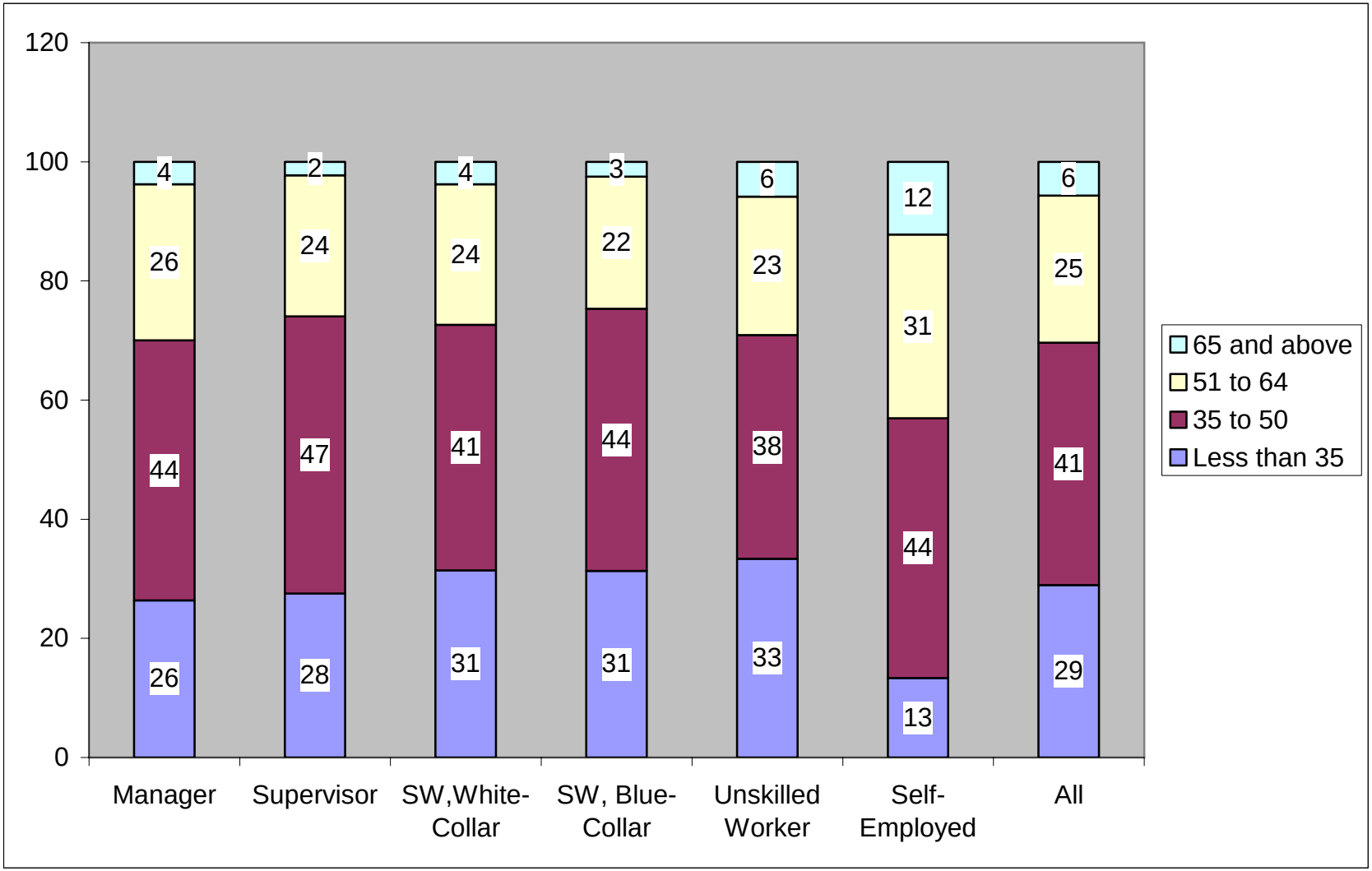


Figure 4 Educational Attainment by Class, 2000 (Percent with a given education level within each group)

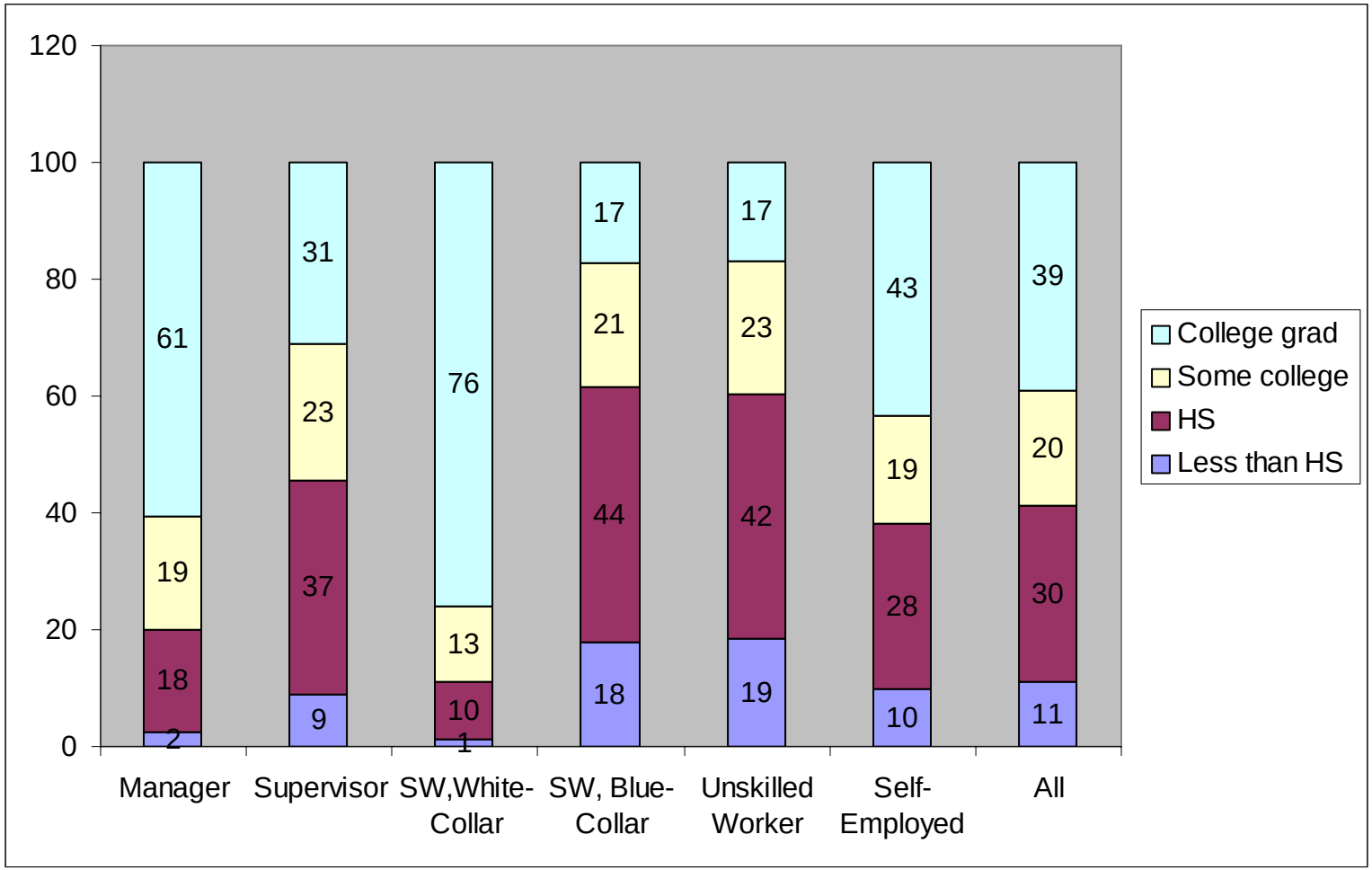


Figure 5 Racial Disparity by Class (Ratio of Nonwhite/White Median Values)

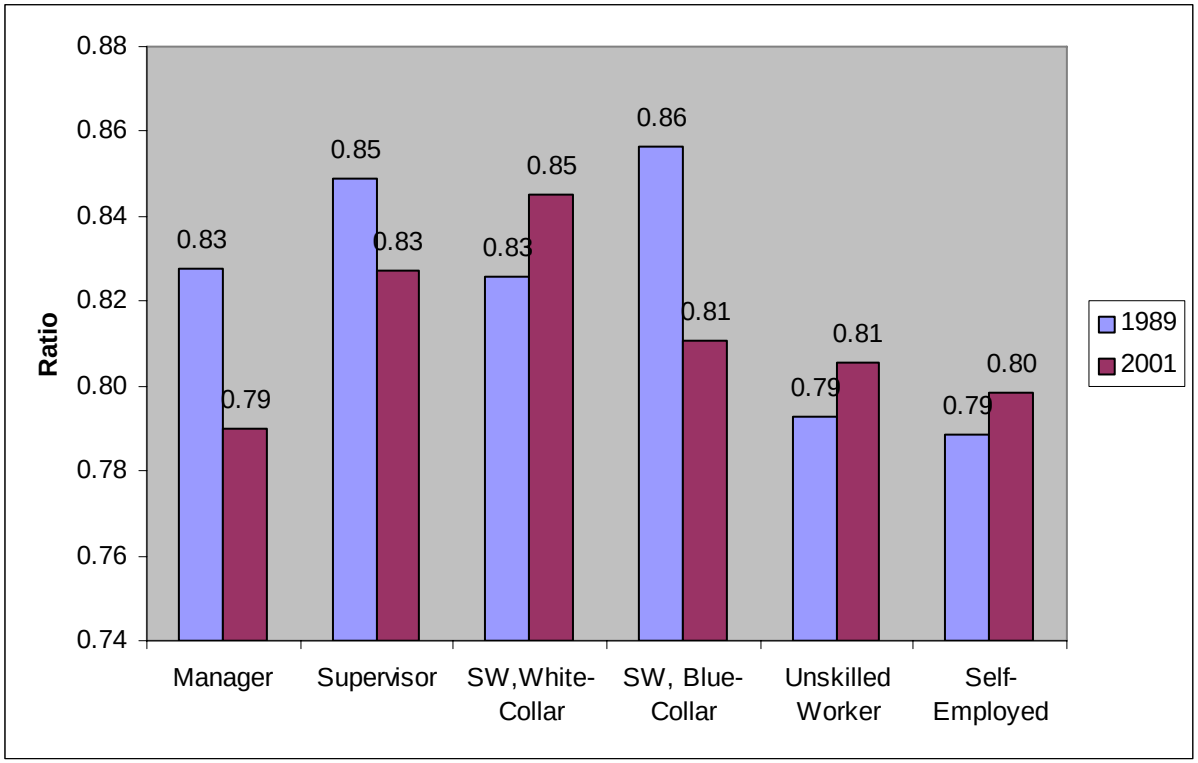


Figure 6. Class Disparity by Race, 2000 (Ratio to Unskilled Worker Median Value within Each Race/Ethnicity)

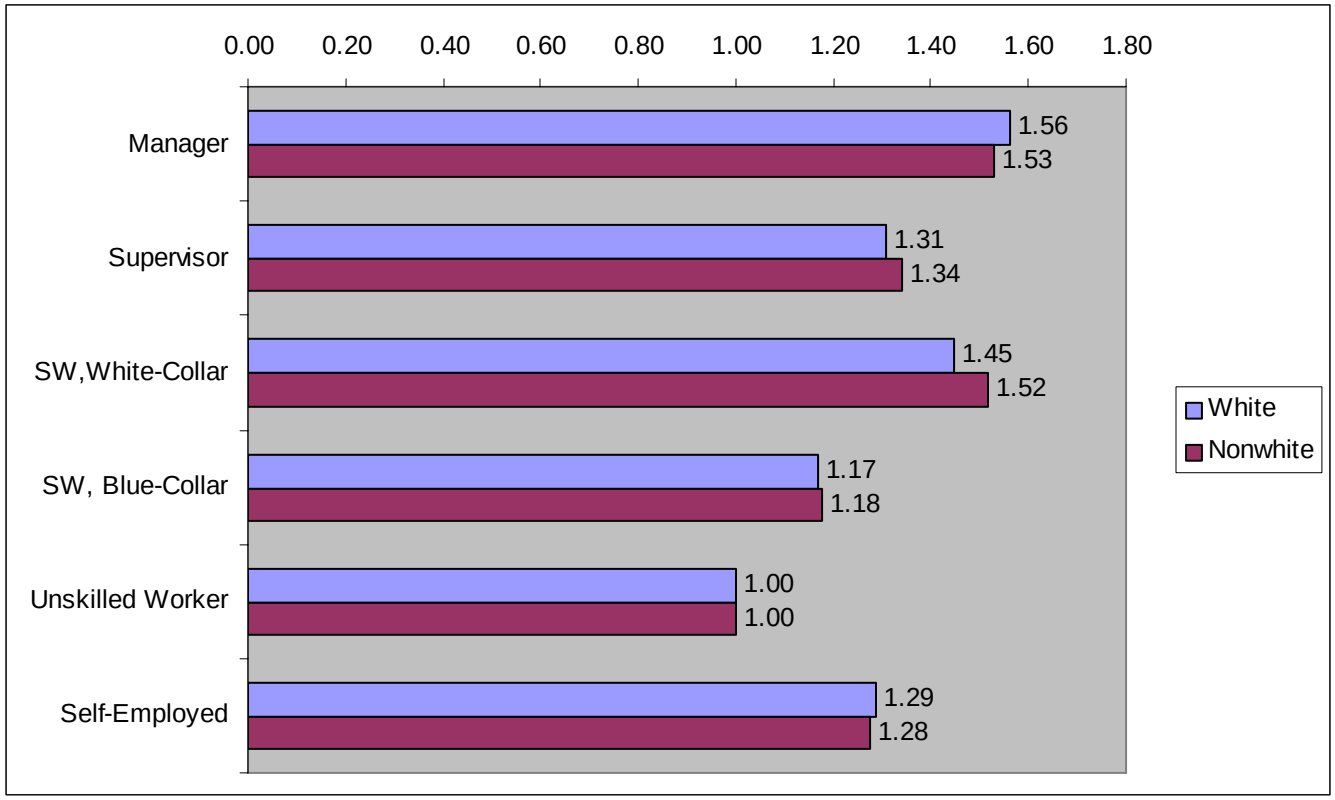


Figure 7 Gender Disparity by Class (Ratio of Women/Men Median Values)

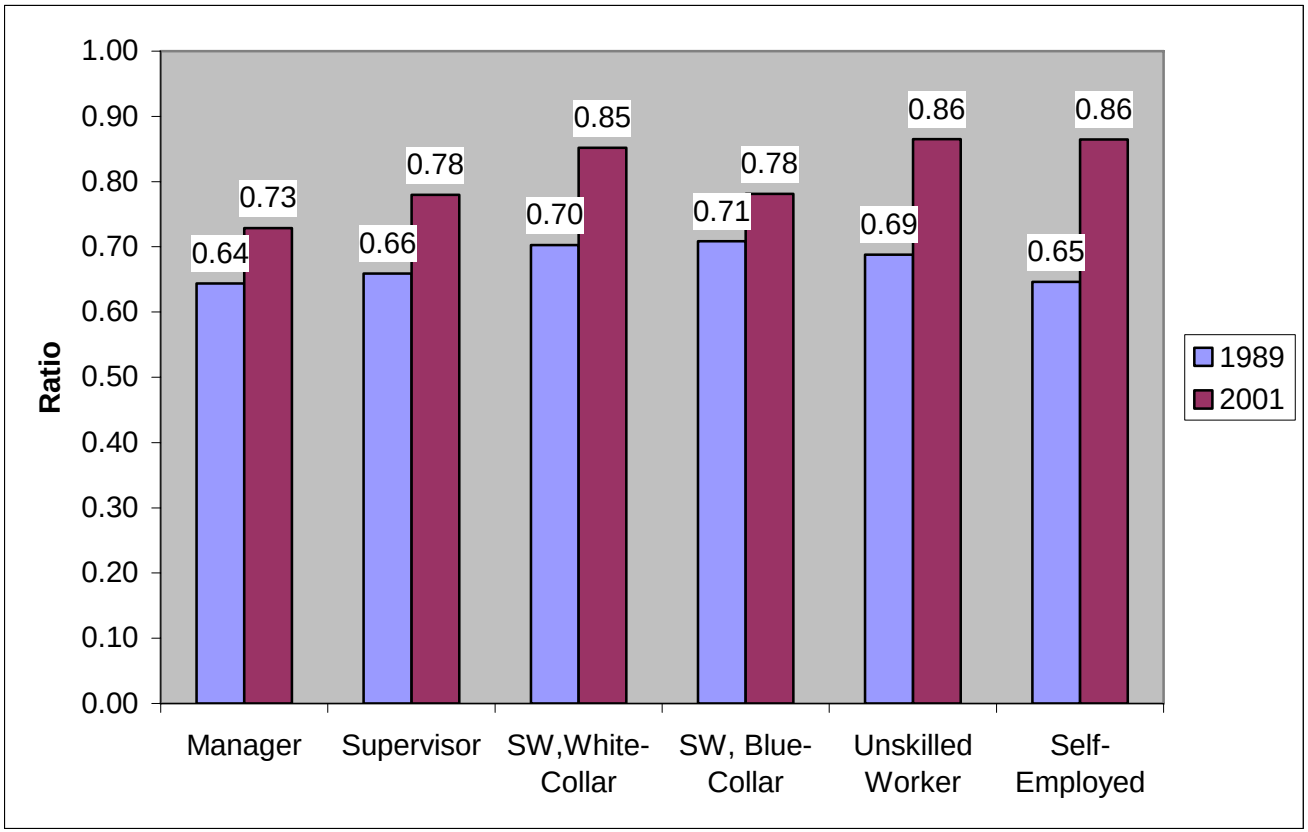


Figure 8 Class Disparity by Gender (Ratio of Women/Men Median Values)

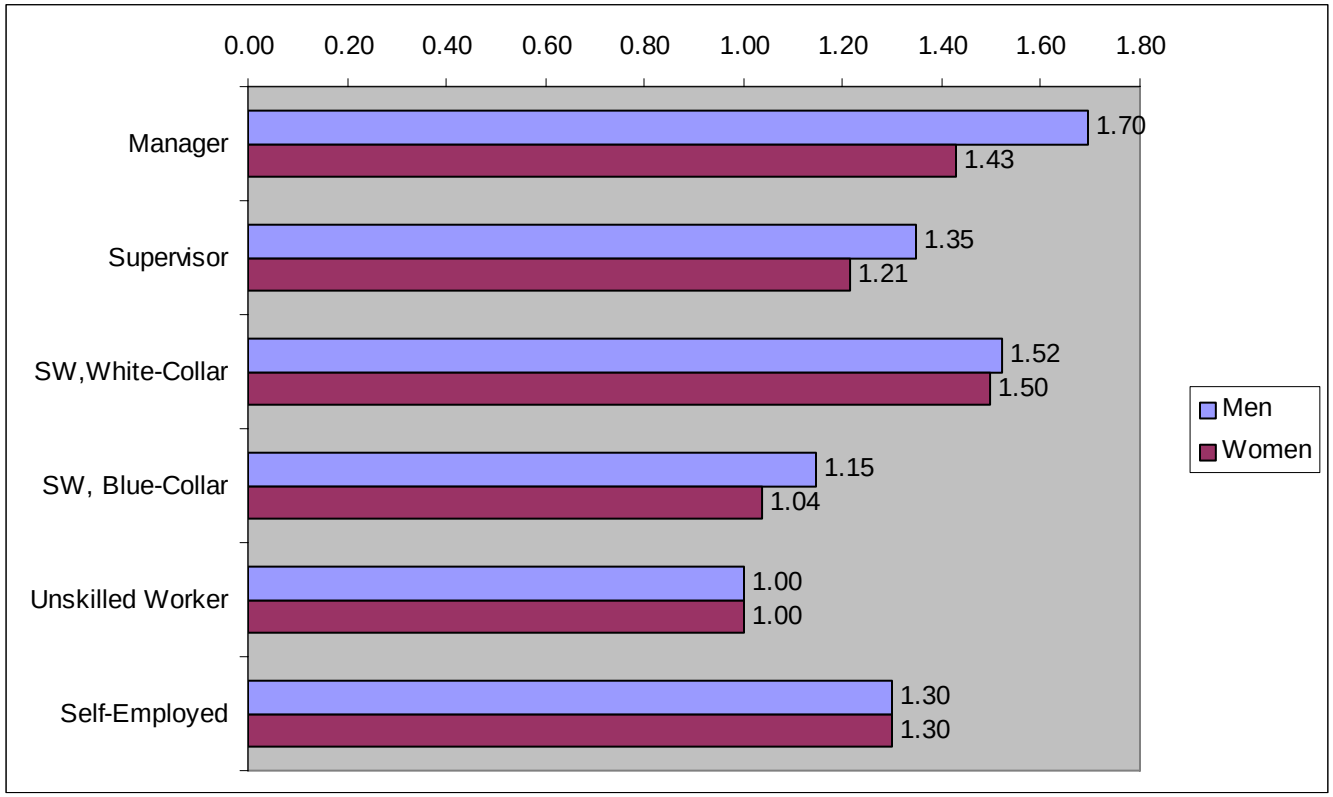


Figure 9A: Age Disparity by Class: Ratio of 35-50 group to less-than-35 group (ratio of medians)

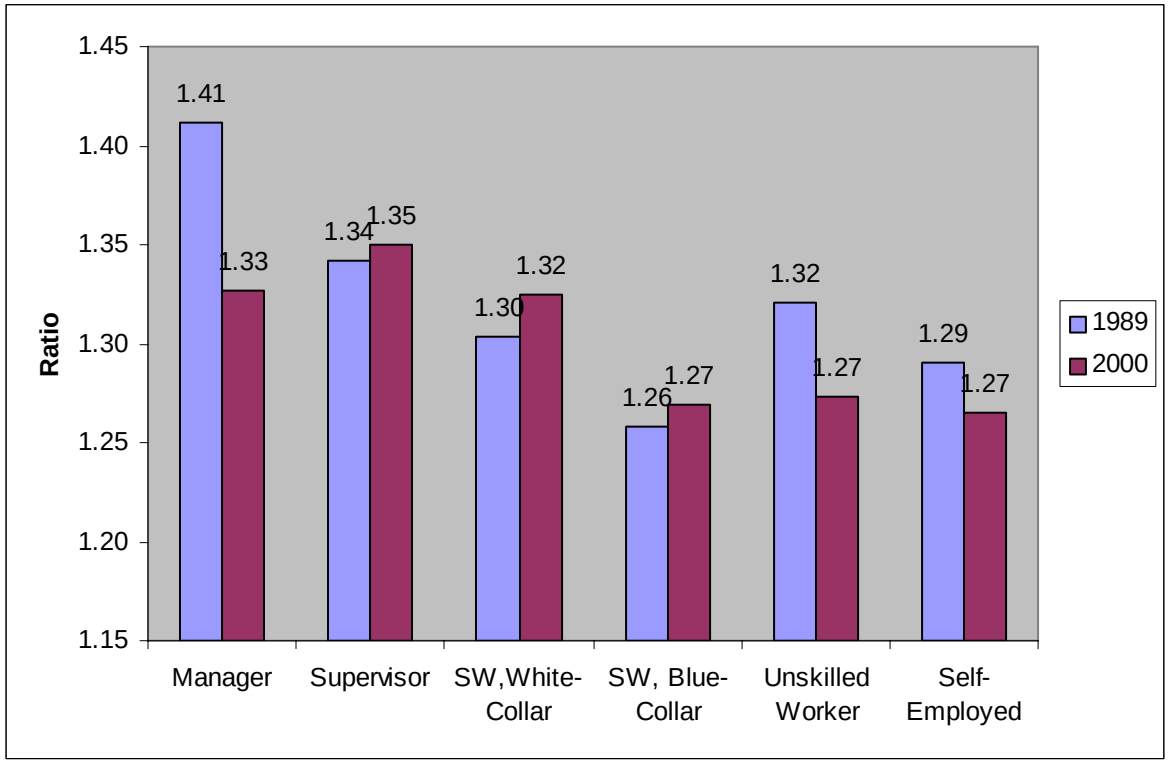


Figure 9B: Age Disparity by Class: Ratio of 51-64 group to less-than-35 group (ratio of medians)

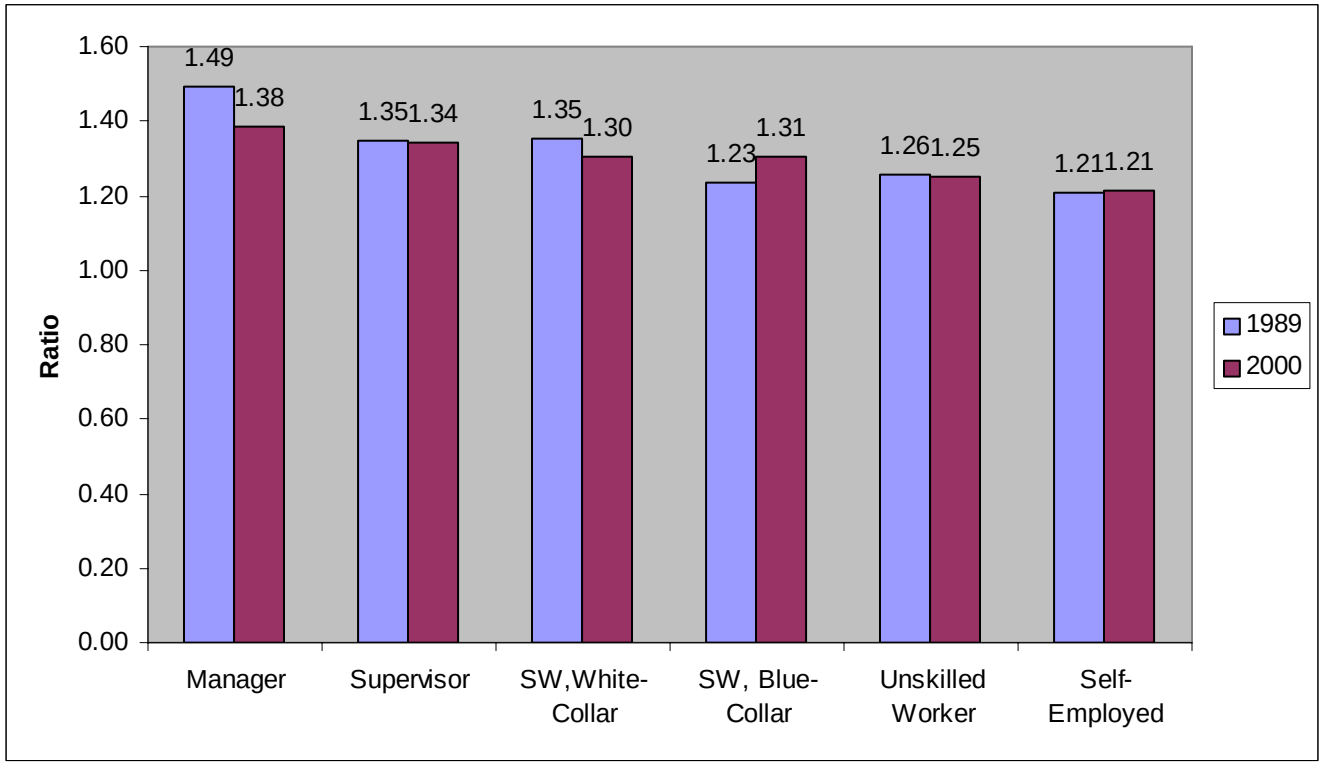


Figure 10 Class Disparity by Age, 2000 (Ratio to Unskilled Worker Median Value in Each Age Group)

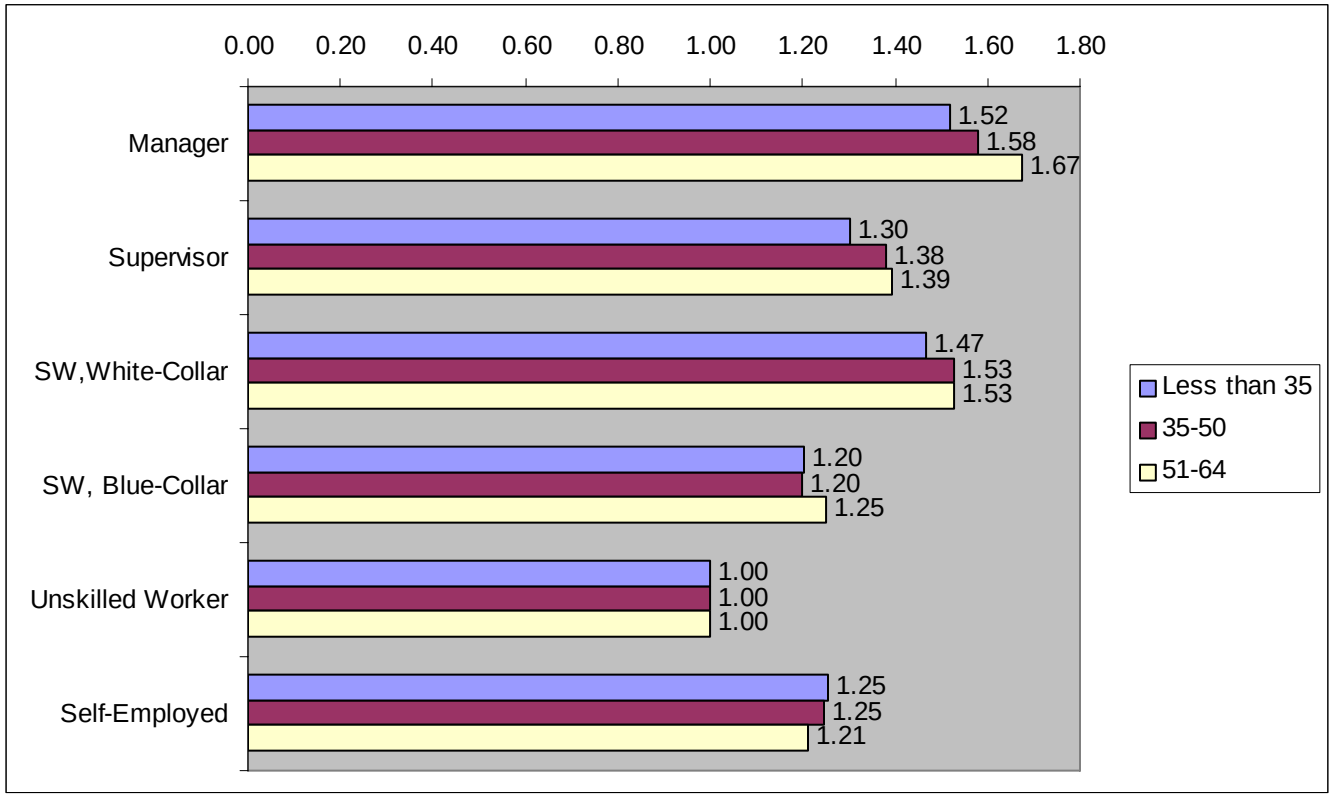


Figure 11A Educational Disparity by Class: Ratio of Some-college group to HS-or-less group

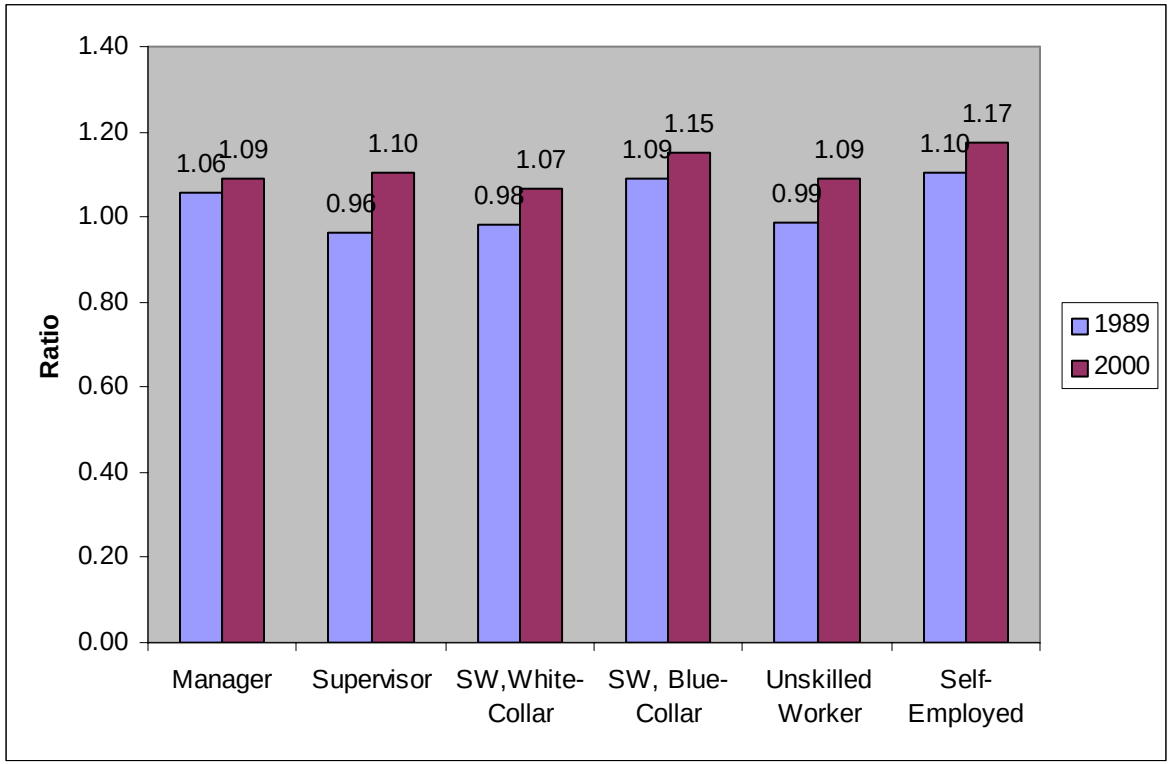


Figure 11B Educational Disparity by Class: Ratio of College-grad group to HS-or-less group

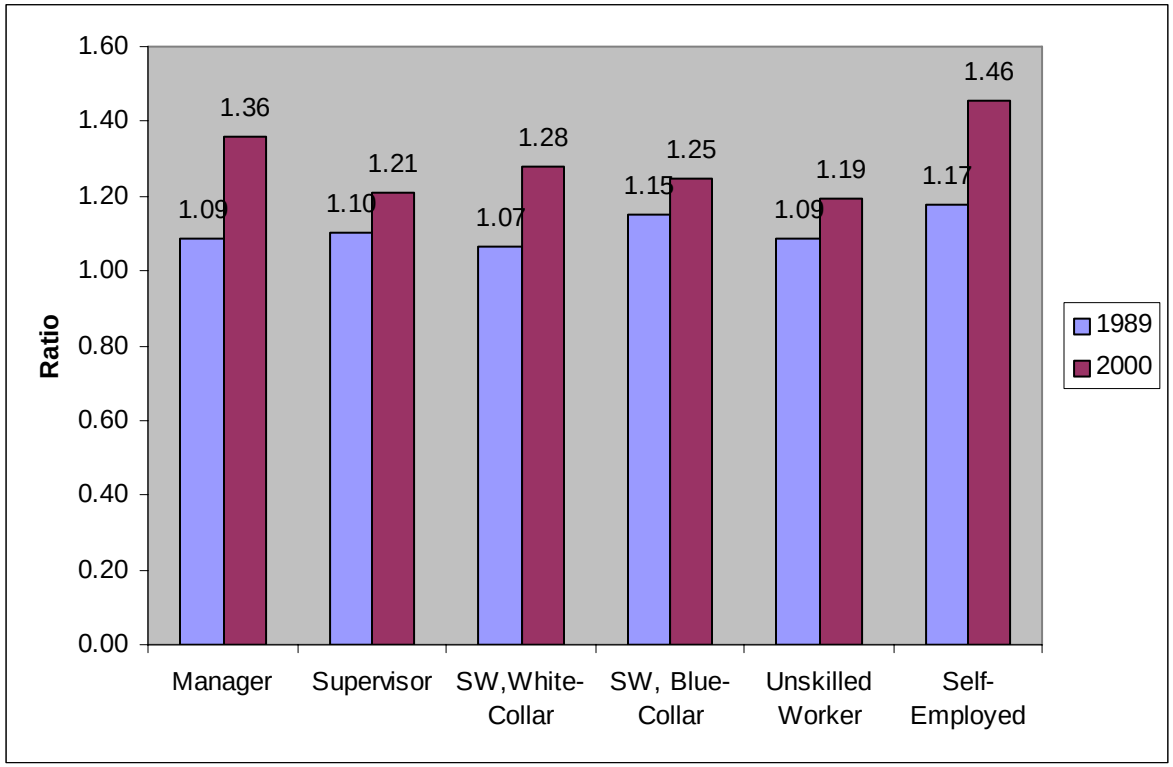


Figure 12 Class Disparity by Level of Education, 2000 (Ratio to Unskilled Worker Median Value in Each Educational Group)

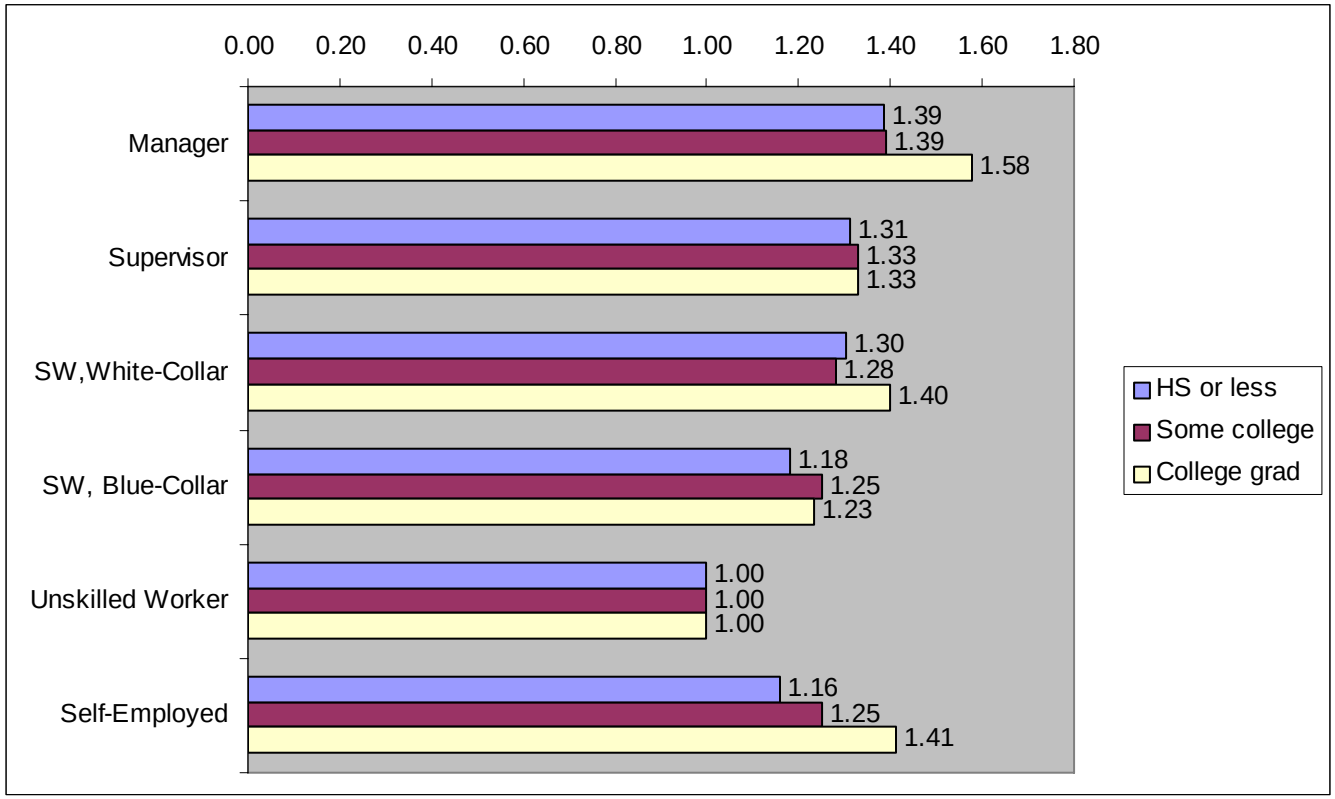


Figure 13 Inequality by Measure of Income (Gini coefficients)

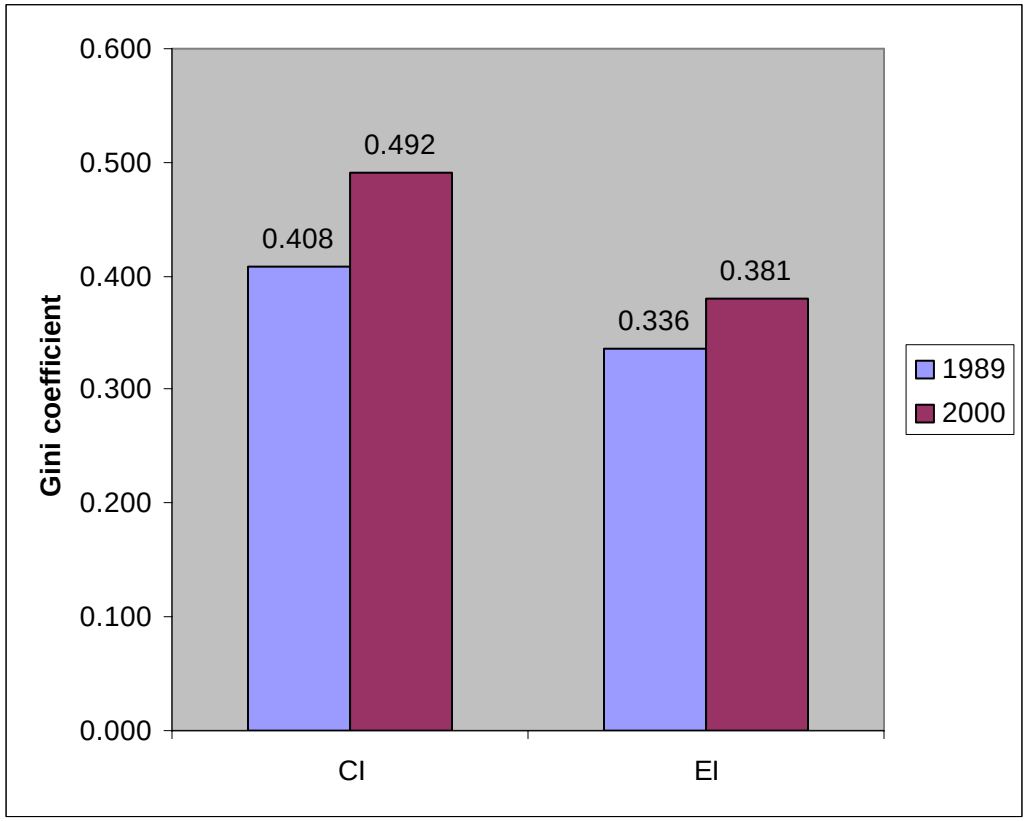


Figure 14 Contribution to the Change in Gini, 1989 to 2000