

# Effects of Growing Wage Disparities and Changing Family Composition on the U.S. Income Distribution

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## ABSTRACT

U.S. income inequality soared after 1979. Most economists recognize that growing wage inequality was at least partially responsible for this trend. The present paper estimates the contribution of increased earnings inequality to the surge in overall income inequality between 1979 and 1996. The direct contribution of increased earnings inequality is surprisingly modest. Even if male and female earnings inequality had remained *unchanged* at their 1979 levels, about two thirds of the observed increase in overall U.S. inequality would have occurred. Other factors contributing to higher overall inequality include the growing correlation of husband and wife earned incomes and the increasing percentage of Americans who live in single-adult families, families that typically have much more unequal incomes than husband-wife families.

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## I. Introduction

AMERICAN INEQUALITY SURGED in the 1980s and early 1990s. By 1993 it reached a peak not seen since the end of the Great Depression. The Census Bureau estimates that the Gini coefficient of family income inequality rose from 0.365 to 0.425 or about 16 percent between 1979 and 1996.<sup>1</sup> Other indexes of inequality show similar trends, including several indexes that measure a broad concept of after-tax cash and noncash income.

Growing family income inequality coincided with a dramatic increase in earnings inequality, especially among American men. Between 1979 and 1996 annual earned income in the bottom one-fifth of the male earnings distribution fell 19 percent while real wages in the top one-tenth climbed 10 percent or more. Women working in full-time jobs experienced a similar jump in pay disparities. Those with annual paychecks in the bottom one-fifth of the female distribution experienced earnings growth of 8 percent, while women in the top fifth enjoyed real earned income gains of more than 40 percent.

The rise in pay disparities is the most visible of several trends contributing to the jump in American income inequality. It is also the trend that has attracted the most attention from journalists, policymakers, and economists. Indeed, many politicians and journalists believe the trends in family income and individual earnings inequality are not only closely connected, they spring from the same common cause. Observers do not all agree, of course, about the exact nature of the common cause.<sup>2</sup>

The view that increased pay disparities and growing income inequality have a common source rests on an implicit assumption. If both trends can be traced to a common cause, it must be the case that this cause is directly affecting both wage disparities and income inequality or is indirectly affecting family income through its impact on wage patterns. While growing pay disparities have undoubtedly contributed to the trend in overall inequality, a close examination of the income statistics suggests less than half the rise in overall U.S. inequality is directly traceable to changing American pay patterns.

The remainder of this paper examines the connection between trends in wage disparities

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<sup>1</sup> For a comparison with inequality in other OECD countries, see Atkinson, Rainwater, and Smeeding (1995).

<sup>2</sup> The growth in U.S. earnings inequality has stimulated a vast amount of research by economists. For surveys see Levy and Murnane (1992), Burtless (1995), and Freeman (1997).

and overall income inequality. I use two approaches to the data. In the next section I examine the trend in pay among prime-age workers, focussing on the changing relationship of pay received by adults in the same family. A moment's reflection suggests why this relationship is crucial for understanding how changing pay disparities affect overall inequality. Most families contain two (or more) adult members. Events that push down the wages of one member may cause the wages of the other member to rise, offsetting part or all of the income loss suffered by the first member. The wage statistics mentioned earlier show that women's earnings have improved while male earnings shrank. If the men who experienced the largest losses were married to women experiencing the most rapid gains, the combined effect of changing pay disparities on the final distribution of income might be small. On the other hand, if married partners share characteristics that tend to make their wages move in the same direction, changes in the wage distribution can have an amplified effect on the final distribution of income. In the second section of the paper I directly examine the sources of change in the distribution of equivalent personal income. Rather than focussing on differences in earned income received by individuals I analyze the sources of change in the distribution of income received by members of families. My findings are straightforward. While the jump in earnings disparities contributed significantly to the increase in overall inequality, its direct effects do not account for even one-half of the total rise.

## **II. Trends in Individual Earnings**

The growing gap between the wages of poorly paid and highly paid U.S. workers is well known. Table 1 contains summary statistics on the inequality of annual earned incomes received by working-age men and women, classified here as people aged 25-59. I focus on this population because men and women between 25 and 59 are less likely than younger or older people to be affected by schooling or retirement. Table 1 displays two types of statistics to measure earnings inequality, Gini coefficients and the ratio of annual earnings at selected points in the distribution. While the Gini coefficient may be a better measure of overall inequality, it is sensitive to the Census Bureau's treatment of top coding.<sup>3</sup> I calculated the statistics for two

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<sup>3</sup> To minimize the effects of this problem for my analysis, I top-coded male and female earnings in a consistent way in the two years. I converted all male earnings above the 97.3rd percentile in a particular year into the value of earnings at the 97.3rd percentile in that year. Similarly, I converted all female earnings above the 99.5th percentile into earnings at the 99.5th percentile.

groups of men and women. The first group consists of men and women who have at least \$1 of labor earnings (which is measured as the sum of wage and salary income and net income from self-employment). The second consists of full-time year-round workers. A person is a member of this group if he or she holds a full-time job for at least 48 weeks during the year.

The statistics displayed in the table unambiguously imply that earnings inequality jumped significantly among men. The situation among women is more complicated, in part because of the rise in the number of women holding jobs (see top row in the table). Among all women who hold jobs, there has been little trend in inequality. The Gini coefficient is unchanged, and the estimates of earnings ratios suggest that a growing gap between the wages of highly paid and median-wage workers has been offset by a shrinking gap between the wages of poorly paid and median-wage workers. On the other hand, women on full-time, year-round work schedules have seen inequality increase approximately as fast as it has among men.

Even though the trend toward inequality is quite noticeable at the level of the individual male or female worker, it is less visible on the other side of the labor market. Increased inequality among workers of both sexes has not been reflected in an equally dramatic surge in the disparity of hourly wages paid by employers. There are two reasons for this. First is the fact that work hours among the least well paid have shrunk while average hours worked among people with average and above-average pay have increased. This means that while low wage workers have seen sharp declines in their annual earnings, the proportion of all hours of work that are compensated at a low rate has not increased as fast. Among working men in the bottom one-fifth of the male earnings distribution, for example, annual hours of work fell 6 percent between 1979 and 1996 while among men in the top fifth of the distribution, average hours increased 5 percent. A second reason is the shrinking difference in hourly wages paid to men and women. Because women as a group earn lower wages than men, their relative gains have tended to offset part of the rise in inequality among men and women when inequality is measured among each sex separately. It is straightforward to calculate the inequality of hourly wage rates in the entire U.S. economy, weighting each hourly wage rate in proportion to its contribution to total hours worked by the labor force. Wage inequality measured in this way has risen from 0.290 to 0.325 (about 12 percent), considerably more slowly than the inequality of annual earnings among full-time year-round men and women, when the two sexes are examined separately.

The statistics in Table 1 shed no light on the contribution of pay inequality to overall income inequality. By omitting nonearners, the table ignores the effects of changes in the percentage of people at work on family income disparities. By ignoring the relationship between the incomes of adults who are members of the same families the table disregards the impact of the changing correlation of husband-wife earned incomes on total family income. Table 2 sheds light on this latter relationship. It contains information about the earnings, marital status, and spouse's earnings of men according to their rank in the male earnings distribution. I have divided men aged 25-59 into five equal-sized groups, ranked according to their own earned incomes. I then tabulated basic statistics on the earnings and marital status of men in each quintile.

The tabulations show trends in marriage and earned incomes for all working-age men, including both those with and without earned incomes and those with and without spouses. In the bottom quintile, for example, the average male's earnings fell 44 percent between 1979 and 1996 (column 1).<sup>4</sup> This sharp drop was caused partly by a decline in hourly wages and average hours worked and partly by a fall in the proportion of men with jobs. The percentage of men who were married in this group fell about 14 percentage points, tumbling from 57 percent to 43 percent. The fraction of men married to a working wife fell 7 percentage points (to 28 percent) in spite of the increase in the labor force participation rate of wives to whom the men were married. The sharp fall in the proportion of men with wives offset an increase in the employment rate of wives. Nonetheless, the jump in the earned incomes of working wives (from \$11,992 to \$19,897) caused the total contribution of wives' earnings to increase. Column 4 shows the average annual earnings of working wives. This is an estimate of the average earnings of wives who actually work. Column 5 shows the average contribution of the wife's earnings to family income, counting as zero the contribution of wives who do not work and also counting as zero the "spouse earnings" of men who are unmarried. The sum of husband and wife earnings is shown in column 6. For men in the bottom quintile, this sum fell 11 percent between 1979 and 1996. The increase in working wives' incomes was more than offset by the decline in the male's earnings. In addition, the drop in the percentage of men who were married reduced the impact of rising female earnings.

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<sup>4</sup> All wage and income statistics are converted to 1996 prices using a standard consumer price deflator, the CPI-U-X1 index.

Statistics for the second and third quintiles are generally similar to those in the bottom quintile. Male earnings fell steeply, and this loss was larger than the extra contribution of wives' earnings to family income. In addition, there was a fall in the percentage of men in these quintiles who are married. This decline more than offset the increase in wives' labor force participation rates. By 1996, fewer men were married to working wives than had been the case in 1979. In the fourth male earnings quintile, the gain in wives' earned incomes was large enough to offset the decline in the real value of men's earnings. Combined husband-wife earnings rose 4 percent in the fourth quintile. At the top of the male earnings distribution both male and female earnings grew. The growth was reinforced by a sharp increase in the proportion of men married to working wives and a 72-percent increase in the average earnings of their working wives. The average contribution of wives' earnings to family income more than doubled, rising from \$7,747 to \$16,495. The sum of husband and wife earnings increased by 14 percent.

These tabulations have three main implications for family income inequality. First, rising wage disparities have clearly had a large impact on families containing men. Second, changing marriage patterns have reinforced this effect. Men with lower earnings (and in groups with the biggest percentage declines in earnings) have experienced the steepest fall in marriage rates. Third, changes in women's earnings patterns have partly offset and partly reinforced the effect of rising male wage inequality and changing marriage patterns. Even among men with low average earnings there has been an increase in the average contribution of wives' earnings to family income, and this has prevented combined husband-wife earnings from falling as fast as would have been the case if female earnings had remained unchanged. On the other hand, men with a high rank in the male earnings distribution are married to women who have experienced the fastest percentage gains in employment rates, annual hours of work, and annual earnings. Their wives' earned income gains have contributed substantially to the growing income gap between high-earnings men and men with a lower rank in the earnings distribution.

The calculations performed for men in Table 2 can also be performed for working-age women. For the sake of brevity, the calculations will not be displayed here. They reveal a generally similar pattern to that shown in Table 2. When I rank women according to their own earnings, I find that changing marriage patterns tend to reinforce the effect of widening pay disparities. Women with the highest ranks in the female earnings distribution have seen the

smallest declines in marriage rates. The changing correlation of husband and wife earnings has tended to reinforce the effect of greater pay disparity. Women with high rank in the female earnings distribution are married to men who have experienced the largest earnings gains or suffered the smallest earnings declines among working men. The combination of husband and wife earnings fell 15 percent or more among women in the bottom two quintiles of the female earnings distribution. The sum of husband and wife earnings grew 2 percent, 16 percent, and 36 percent, respectively, in the third, fourth, and fifth quintiles of the female earnings distribution. These patterns point to a clear conclusion. Shifting marriage patterns and the changing correlation of husband and wife earnings have played major roles in pushing up overall income inequality.

### **III. The Distribution of Equivalent Personal Income**

The statistics in Table 2 provide only a partial summary of family income and its distribution. They exclude people younger than 25 and older than 59, and they ignore sources of family income other than husband and wife earnings. Moreover, the calculations ignore family size when counting the incomes available to different families. Even though working-age men in the bottom earnings quintile saw their wages decline 44 percent between 1979 and 1996, their welfare may have been unaffected if their families contained a smaller number of members. The fact that family size declined is implied by statistics on U.S. marriage patterns. The proportion of 25-to-59 year-old men who were married fell 16 percent between 1979 and 1996. Unmarried men typically support fewer family members than married men. Indeed, many unmarried men live alone and support just one person.

In this section, I examine the trend in overall inequality using the concept of equivalent personal income.<sup>5</sup> This concept differs significantly from the cash income concept typically used to measure American income inequality. Most U.S. Census Bureau measures of inequality are based on tabulations of the *unadjusted* cash incomes received by households or families. In contrast, measures of equivalent personal income make a family-size correction to reflect economies of scale in consumption enjoyed by people who live in larger family units. Using the concept of equivalent income, people who are members of the same nuclear family are each

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<sup>5</sup> The concept is described in detail in Karoly and Burtless (1995). That paper also compares trends in inequality under alternative definitions of equivalent income.

treated as receiving an identical income. Inequality is measured by ranking all persons represented in the Census file according to their equivalent personal income.

The definition of equivalent income I use here is

$$Y_A = \frac{Y_U}{\frac{F}{H} \times H^\theta} \tag{1}$$

where  $Y_A$  = Adjusted money income per person,  
 $Y_U$  = Unadjusted total family income,  
 $F$  = Number of persons in nuclear family unit,  
 $H$  = Number of persons in household, and  
 $\theta$  = Adjustment for family size.

(Note that one household may contain more than one family unit. Each nuclear family or unrelated individual is considered a separate “family unit.”) When family size is identical to household size  $F = H$ , implying that  $Y_A = Y_U / F^\theta$ . For a person in a single-person household, equivalent personal income will then be equal to unadjusted total income. For a person in a larger family, adjusted income will be less than unadjusted family income, depending on the assumed value of  $\theta$ . In this analysis I assume  $\theta = 0.5$ , which is similar to the adjustment for family size implicit in the official U.S. poverty thresholds. As in the official U.S. poverty index, for example, a quadrupling of family size yields a doubling of income needed to sustain an equivalent consumption level.<sup>6</sup>

My estimates reflect the experiences of unrelated individuals as well as members of families and subfamilies. Each family unit is weighted by the number of persons in it. Families containing eight members receive four times the weight of families containing just two members, for example. Persons, of whatever age, receive weights that sum to the total population

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<sup>6</sup> An alternative assumption is that  $\theta=1.0$ . Under this assumption, adjusted income is equal to average income per person in the family. The assumption is equivalent to believing there are no economies of scale in consumption. In contrast, the Census Bureau implicitly assumes that  $\theta=0$  when it



represented by the Census file. My calculations only include pre-tax cash incomes. Noncash incomes are poorly measured and difficult to treat appropriately, and previous studies show that shifting tax burdens have had only a small effect on the recent trend in U.S. inequality.

Using the concept of adjusted personal income described above, I have calculated the Gini coefficient for all persons represented in the Current Population Survey (CPS). The calculations were performed using the public use versions of the March 1980 and March 1997 Current Population Survey files, covering incomes received in 1979 and 1996, respectively. The trend in inequality measured using my method is similar to the trend in unadjusted family cash incomes reported by the Census Bureau. My estimate of the Gini coefficient of equivalent personal income increased from 0.348 to 0.400 between 1979 and 1996, an increase of 15 percent. In comparison, the Census Bureau estimates that the Gini coefficient of family income inequality increased from 0.365 to 0.425, or about 16 percent, between those two years.

Changes in the Gini coefficient do not shed much light on the exact nature of income changes that have generated the increase in inequality. Figure 1 is helpful in understanding the movements in equivalent personal income that caused the Gini coefficient to change. Each point along the heavy line in Figure 1 shows the annual percentage change in equivalent real income for persons at successive points in the income distribution. On the left, at the third percentile of the distribution, equivalent real income fell 2.4 percent a year between 1979 and 1996, producing a cumulative reduction of 34 percent in real income between the two years. After 1979, equivalent incomes fell in the bottom 40 percent of the U.S. income distribution. On the right, at the 97th percentile of the distribution, average equivalent income rose 1.4 percent per year, producing a cumulative income gain of 27 percent between 1979 and 1996.

Over the 17-year period, differences in the rate of change in equivalent income yielded dramatic movements in relative well-being. At the 5th percentile, equivalent income fell 30 percent; at the 40th percentile, income was unchanged; at the 50th percentile, income rose 4 percent; and at the 95th percentile, income rose 25 percent. In 1979, equivalent income at the 95th percentile was 12.9 times equivalent income at the 5th percentile. Seventeen years later, income at the 95th percentile was 22.9 times income at the 5th percentile.

The disappointing performance of real adjusted income among families with average- and below-average incomes is only partly explained by growing inequality. The shrinking

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calculates family income inequality.

average size of family units has meant that gains in unadjusted income per person have not translated into equal gains in equivalent income per person. Between 1979 and 1996 unadjusted income per capita grew faster than average equivalent income per person. Average family unit size fell from about  $2 \frac{1}{2}$  in 1979 to slightly more than 2 in 1996. Because families were smaller, they required more unadjusted income per member to achieve the same equivalent income per member. An optimistic interpretation of this development is that Americans have used a growing share of their income to purchase the “luxury” of living alone or in smaller families.

To estimate the impact of rising earnings inequality on overall income inequality, I use a straightforward procedure. I hold constant the level of earnings inequality and then calculate how much the Gini coefficient would have changed under this assumption. The procedure is simple to explain in the case of male earnings inequality. Male earnings inequality rose between 1979 and 1996, as we have seen. To preserve the same amount of inequality in the two years, it is necessary to assign males with a low rank in the 1996 wage distribution more earnings than was reflected in their responses to the 1996 income survey. The simplest procedure is to assign to 1996 workers the earnings level to which their rank in the male earnings distribution would have entitled them in 1979. This preserves the exact 1979 earnings distribution, but it ignores the change in average male earnings between the two years. My procedure was to assign to each 1996 male worker the income to which his rank in the 1996 distribution would have entitled him in 1979, multiplied by the ratio of total male earnings in 1996 to total male earnings in 1979. This procedure preserves the 1979 distribution of *relative* male earnings, but the sum of 1996 male earnings remains the same.<sup>7</sup> Of course, an identical procedure can be used to assign to men in 1979 the earnings distribution observed among men in 1996. This alternative procedure provides estimates of how the income distribution would have changed if the 1996 male earnings distribution had remained unchanged between the two years.

The results of my calculations are displayed in Table 3. The top row shows the unadjusted trend of inequality in equivalent personal income. The second row shows what the

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<sup>7</sup> For these calculations I only looked at males identified as family or subfamily heads or as independent individuals by the Census Bureau. A small number of prime-age males do not have their incomes adjusted under this procedure because they do not head a family or subfamily or maintain an independent household. However, these males account for a very small percentage of adult male earnings. Their income is included in “other family income” and is left unchanged in my simulations.

trend would have been if the 1979 pattern of male earnings inequality been preserved in 1996. The Gini coefficient would have risen from 0.348 in 1979 to 0.385 in 1996 under this assumption, representing an increase in inequality of 10.7 percent. The right-hand column shows that this increase is 72 percent of the observed Gini coefficient change. In other words, nearly three-quarters of the observed change in overall inequality would have been observed even if the 1979 distribution of male earnings had been maintained. The next row in the table shows how much inequality would have changed if the 1996 distribution of male earnings had been maintained in both periods. This way of performing the calculations suggests that 61 percent of the observed change in the Gini coefficient would have occurred, even if male earnings inequality had remained unchanged.

The next two rows show the effect of holding constant the female distribution of earned income. Whether female inequality is maintained at its 1979 level or its 1996 level, almost all of the observed increase in the Gini coefficient would have occurred. Rising earned income inequality among women played only a small role in the trend toward higher overall inequality. The next two rows show the effect of holding constant the distributions of *both* male and female earnings. Even if earnings inequality of both sexes had remained unchanged, two-thirds of the observed increase in overall inequality would have occurred. By implication, one-third of the rise in overall inequality is due to the increase in male and female earnings inequality; two-thirds is attributable to other factors. The estimated impact of changing earnings inequality is larger if we hold earnings inequality fixed at the level observed in 1996. Even under this assumption, however, significantly less than half the increase in overall inequality can be explained by rising earned income inequality.

The effect on the income distribution of holding male and female earnings inequality constant at their 1979 levels is displayed in Figure 1. The lighter line in the figure shows the pattern of income changes that would have occurred between 1979 and 1996, assuming that the pattern of earnings inequality observed in 1979 had been maintained in 1996. (As noted above, the heavier line shows the *actual* pattern of income changes.) Income losses would have been larger among persons in the bottom 10 percent of the income distribution, and income gains would have been slower among persons in the top 17 percent of the distribution. But for people between the 10th and 87th income percentiles incomes would have been higher in 1996 if the 1979 pattern of earnings inequality had been maintained. Readers may be surprised to learn that

people in the very lowest ranks of the American income distribution would have suffered even heavier income losses if the 1979 pattern of earnings inequality had been maintained. But many people in this population are poorly paid single women and their children. Most of these women work on part-time schedules or in part-year positions. As shown in Table 1, there was a significant *narrowing* in the earnings gap between employed women in the middle of the female earnings distribution and employed women at the 10th percentile of the distribution. (The ratio of annual earnings at the 50th percentile to earnings at the 10th percentile fell from 8.13 in 1979 to 5.06 in 1996.) Without the income gains that occurred as a result of this narrowing, people in families headed by a single woman would have suffered even larger declines in annual income.

The results in Table 2 suggest that the changing correlation of husband-wife earnings and changing marriage patterns have also contributed to rising inequality. I examined the role of the husband-wife earnings correlation on the overall income distribution by holding constant this correlation and then calculating the change in the Gini coefficient. To hold the husband-wife correlation constant at the 1979 level, for example, I adjusted earnings amounts in the 1996 CPS file to reflect the correlation pattern in 1979. There are several ways to make this calculation. My procedure was to calculate the earnings ranks of men and women separately for both 1979 and 1996. A man with rank  $r$  in 1979 may have been married to a woman with rank  $s$  in the 1979 female earnings distribution.<sup>8</sup> To preserve the 1979 husband-wife correlation in 1996, I assigned the 1996 man with rank  $r$  (if he was married) to the woman with rank  $s$  in the 1996 distribution. To implement this procedure I assumed that the earnings of the woman with rank  $s$  was available to the family headed by the married male with rank  $r$ .<sup>9</sup> After the correlation of husband and wife earnings is held constant in this way, the Gini coefficient is recalculated. As the figures in Table 3 show, the changing correlation of husband-wife earnings had a noticeable impact on the trend in overall inequality. Eighty-seven percent of the observed change in overall inequality would have occurred, even if the husband-wife earnings correlation remained unchanged. This implies that 13 percent of the rise in overall inequality occurred because of an increase in the correlation of husband and wife earned incomes. (The Spearman rank correlation of husband and wife earnings increased from 0.012 to 0.145 between 1979 and 1996.)

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<sup>8</sup> Note that there will be many persons with a tied rank. In particular, every nonworker is tied at the lowest rank of the earnings distribution.

<sup>9</sup> The other alternative is to make the earned income of the man with rank  $r$  available to the family

Marriage patterns have also changed. More families contain only a single adult member, and fewer contain married couples. This is an advantage for some single people, because their incomes are spread among fewer family members. It is a disadvantage for others, because they are deprived of the potential earnings contributions of a married partner. Equivalent income is more equally distributed among people who live in married-couple families than it is among people who live in single-adult-head households. The proportion of Americans who live in married-couple families is shrinking. In 1979, 74 percent of adults and children lived in married-couple households. By 1996, the fraction had shrunk to 65 percent. To obtain a crude estimate of the impact of this development on overall inequality, I adjusted the sampling weights on the 1996 CPS file to preserve the distribution of families at their observed proportions in 1979. I classified families in three categories: married-couple families, single-male-adult families, and single-female-adult families. The bottom two rows in Table 3 show how overall inequality would have changed assuming that the proportion of persons living in each family type had remained unchanged. These estimates suggest that one-fifth to one-quarter of the jump in inequality can be traced to the changing pattern of family composition.

#### **IV. Summary**

U.S. median income growth slowed and inequality increased after 1979. The analysis in this paper shows that at least three factors contributed to the trend. Male heads of family saw a steep rise in earnings inequality, and women experienced a less dramatic increase in earned income inequality. The combined impact of higher earnings inequality among men and women may explain 33 percent to 43 percent of the increase in overall inequality. The growing positive correlation of husbands' and wives' earnings has tended to increase the income gap between affluent dual-income families and other kinds of households. This factor may account for 13 percent of the increase in overall inequality. Finally, there was a sharp decline in the proportion of Americans who live in families where a married couple is present. This trend has boosted the percentage of families headed by a single person. Families of this type have much more inequality than married-couple families, and a high proportion of their members can be expected to have low equivalent incomes. This factor may account for 21 percent to 25 percent of the increase in overall inequality.

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of the woman with rank  $s$ .

Table 4 provides a summary of the contribution of four factors boosting U.S. income inequality between 1979 and 1996. The summary calculations are based on estimates shown in Table 3 and are derived holding constant the distributions observed in 1979. For example, Table 4 shows that 28 percent of the 1979-1996 rise in overall personal income inequality was due to the jump in male earnings inequality. This estimate is obtained by calculating how much overall inequality *would have risen* if male earnings inequality had remained frozen at its 1979 level while all other sources of increased income inequality were permitted to take their observed course. Table 4 shows that the first four factors listed in the table account for about two-thirds of increased income inequality. The remaining one-third is explained by a variety of miscellaneous factors, including the growing inequality of nonwage sources of income, the declining anti-poverty effectiveness of government transfers to the very poor, and the increased importance of some kinds of unearned income that are received disproportionately by the very affluent (such as interest and dividend income).<sup>10</sup>

American economic progress over the past two decades has been uneven. Families and workers at the top of the economic ladder have enjoyed rising incomes. In fact, at the very top of the U.S. income distribution, real incomes and earnings rose as fast after 1979 as they did in the early post-war period. Families in the middle ranks of the income distribution have continued to experience small equivalent income gains. The rate of income growth is simply much slower than it was for the first 30 years of the post-war era. Workers at the bottom of the income distribution have suffered a sharp erosion in their relative income position. Contrary to a popular view, however, the growing inequality of earned income is not the only reason behind the jump in overall income inequality. In fact, its direct effect on income inequality is not large enough to explain even one-half the recent increase in overall inequality.

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<sup>10</sup> See Burtless (1998).

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**Table 1.**  
**Earnings Inequality among Working-Age Men and Women, 1979-1996**

<b>Group / Measure of inequality</b>	<b>Men</b>		<b>Women</b>	
	<b>1979</b>	<b>1996</b>	<b>1979</b>	<b>1996</b>
<b>Percent with earnings</b>	93.9	91.0	67.2	77.6
<b>Among those with earnings:</b>				
<b>Gini coefficient</b>	0.313	0.361	0.401	0.401
<b>P90 / P50</b>	1.87	2.25	2.16	2.26
<b>P50 / P10</b>	2.94	3.18	8.13	5.06
<b>Among those with full-time year-round employment:</b>				
<b>Gini coefficient</b>	0.272	0.317	0.256	0.304
<b>P90 / P50</b>	1.78	2.12	1.79	2.03
<b>P50 / P10</b>	2.14	2.31	1.85	2.15

Source: Author's tabulations of March 1980 and March 1997 Current Population Survey files.

Note: Sample represents the noninstitutionalized U.S. population aged 25 to 59. P90 / P50 is ratio of 90th percentile to 50th percentile earnings; P50 / P10 is ratio of 50th percentile to 10th percentile earnings.



**Table 2.**  
**Marital Status, Own Earnings, and Spouse Earnings among**  
**Working-Age Men, by Earnings Quintile, 1979 - 1996**

	Average male earnings (1)	Married (% of quintile) (2)	Working spouse present (%) (3)	Spouse's earnings, if working (4)	Average spouse earnings (unconditional) (5)	Husband and wife labor income (6) = (1)+(5)
<b>Bottom quintile</b>						
1979	\$5,818	56.8	34.6	\$11,992	\$4,149	\$9,967
1996	3,287	43.1	28.1	19,897	5,591	8,878
<i>change (%)</i>	<i>-44</i>	<i>-24</i>	<i>-19</i>	<i>66</i>	<i>35</i>	<i>-11</i>
<b>Second quintile</b>						
1979	22,263	72.0	50.7	13,010	6,596	28,859
1996	16,949	55.4	42.4	17,099	7,250	24,199
<i>change (%)</i>	<i>-24</i>	<i>-23</i>	<i>-16</i>	<i>31</i>	<i>10</i>	<i>-16</i>
<b>Middle quintile</b>						
1979	33,133	78.9	55.3	14,409	7,968	41,101
1996	27,765	64.9	51.9	19,882	10,319	38,084
<i>change (%)</i>	<i>-16</i>	<i>-18</i>	<i>-6</i>	<i>38</i>	<i>30</i>	<i>-7</i>
<b>Fourth quintile</b>						
1979	44,102	83.9	54.1	14,881	8,051	52,152
1996	40,561	73.2	59.6	22,487	13,402	53,963
<i>change (%)</i>	<i>-8</i>	<i>-13</i>	<i>10</i>	<i>51</i>	<i>66</i>	<i>3</i>
<b>Top quintile</b>						
1979	70,350	89.0	49.0	15,811	7,747	78,098
1996	72,893	81.3	60.7	27,175	16,495	89,388
<i>change (%)</i>	<i>4</i>	<i>-9</i>	<i>24</i>	<i>72</i>	<i>113</i>	<i>14</i>
<b>All quintiles</b>						
1979	35,133	76.1	48.7	14,161	6,902	42,036
1996	32,291	63.6	48.5	21,861	10,611	42,902
<i>change (%)</i>	<i>-8</i>	<i>-16</i>	<i>-0</i>	<i>54</i>	<i>54</i>	<i>2</i>

Source: Author's tabulations of March 1980 and March 1997 Current Population Survey files.

Note: Sample represents noninstitutionalized U.S. males and their spouses aged 25 to 59.

**Table 3.**  
**Gini Coefficient of Equivalent Personal Income under**  
**Alternative Assumptions about Earnings and Demography, 1979 - 1996**

Gini coefficient	1979	1996	1979 - 96 Change (%)	As a % of 1979 - 96 Change
<b>Actual Gini coefficient</b>	0.348	0.400	14.9	100
<b>Holding male earnings inequality constant --</b>				
At 1979 level	0.348	0.385	10.7	72
At 1996 level	0.367	0.400	9.1	61
<b>Holding female earnings inequality constant --</b>				
At 1979 level	0.348	0.398	14.2	95
At 1996 level	0.350	0.400	14.2	95
<b>Holding both male and female inequality constant --</b>				
At 1979 level	0.348	0.383	9.9	67
At 1996 level	0.369	0.400	8.4	57
<b>Holding husband-wife earnings correlation constant --</b>				
At 1979 level	0.348	0.393	13.0	87
At 1996 level	0.354	0.400	13.0	87
<b>Holding proportions in single and married families constant --</b>				
At 1979 level	0.348	0.389	11.8	79
At 1996 level	0.360	0.400	11.2	75

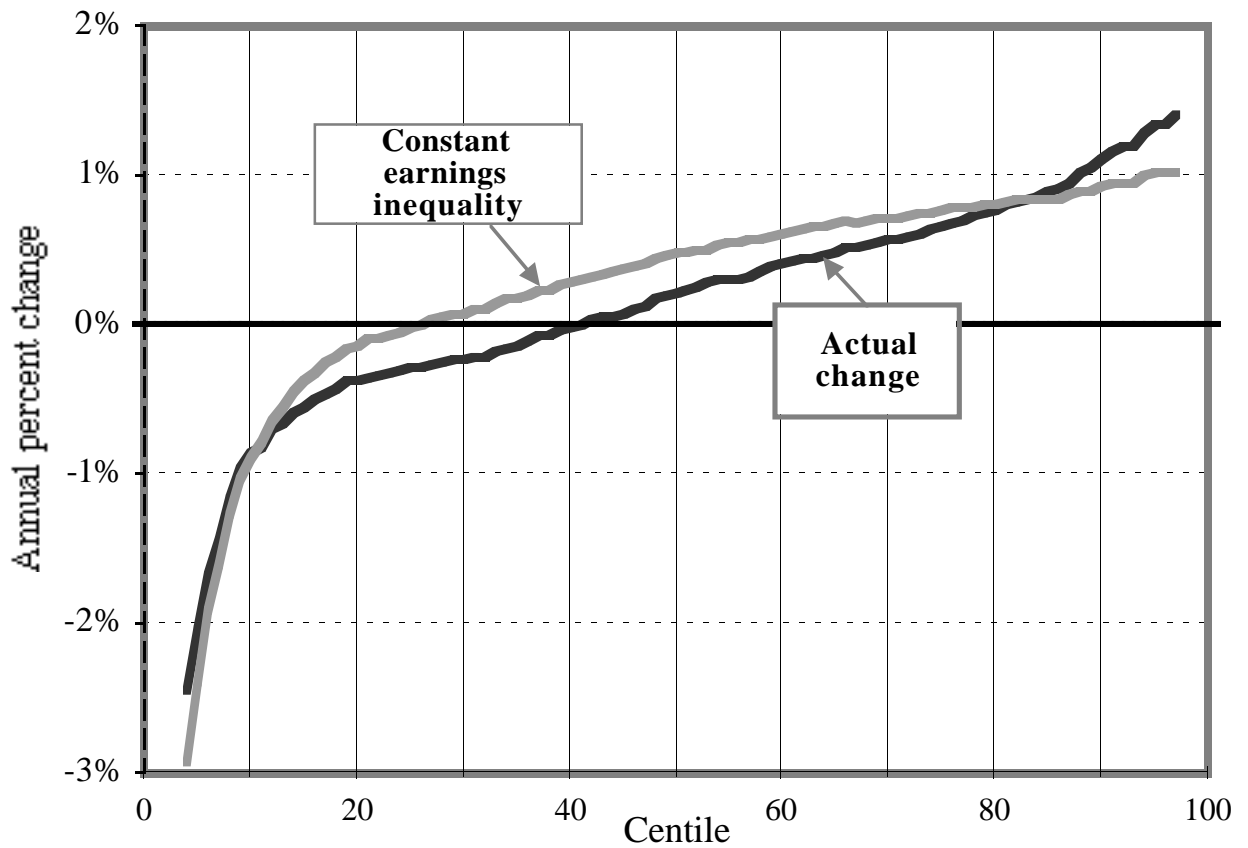
Source: Author's tabulations of the March 1980 and March 1997 Current Population Survey files.

**Table 4. Sources of Change in U.S. Personal Income Inequality, 1979-1996**

<b>Source of change</b>	<b>Percent explained <sup>a</sup></b>
Increased male earnings inequality	28%
Increased female earnings inequality	5%
Higher correlation of husband and wife earnings	13%
Declining percentage of Americans in husband-wife families	21%
Other	33%

<sup>a</sup> Percentage of change in Gini coefficient explained (using 1979 distributions as a benchmark).

**Figure 1.**  
**Annual Percentage Change in Real Equivalent Income,**  
**by Centile of U.S. Income Distribution, 1979-1996**



Note: "Constant earnings inequality" line reflects change in income distribution if male and female earnings inequality had remained unchanged at their 1979 levels.