# The Changing Fortunes of American Families in the 1980s

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After the recessions of 1980 and 1981–82, family income in the United States expanded through most of the 1980s. The decade brought gains in living standards to most families, but these gains were not distributed evenly. While high-income families enjoyed above-average gains, the incomes of low-income families declined; the rich grew richer but the poor grew poorer. This paper examines shifts in the sources of family income and family work patterns between 1979 and 1988 in order to address the question: Why were the period's income gains so unevenly distributed?

The first section of the article describes the changes that occurred in the distribution of family income in the 1980s, and how the decade's income gains were apportioned among various family types defined along such dimensions as age of head, headship type, presence of children, and education of head. Low-income families in general, and some types of low-income families in particular, did not share fully in the decade's income gains. Several hypotheses to explain such changes in the income distribution are then discussed.

Part II examines sources of family income, focusing on growing inequality in the distribution of earned income among nonelderly families during the 1980s. This growing earnings inequality was reinforced by changes in the distribution of interest and dividend income. Earnings grew faster for families with high incomes than for those with low incomes because both men's and women's earnings became more unequal. High-income men's earnings rose, while lower-income men's earnings fell; wives' labor force participation increased faster at the upper end of the family income distribution. Not surprisingly, the types of families left behind in the earnings-driven income growth of the 1980s were those with limited access to the labor market.

## I. Income Trends in the 1980s

The 1980 and 1981–82 recessions battered family incomes in the United States. As Chart 1 shows, the dip in real incomes was much deeper than those associated with the 1970 and 1973–75 recessions. But income grew steeply after the twin recessions of the early 1980s, and median family income in 1987 was 3 percent higher than the previous peak level attained in 1979.[1] Median family income fell, very slightly, in 1988.

Not everyone's income rose in tandem in the 1980s. Table 1 shows that average family income rose 8.3 percent between 1979 and 1988.[2] But the average income of families in the lowest quintile (one-fifth of all families) declined steeply in the first part of the decade and recovered only slightly in the second part. The average income of families in the top two quintiles increased in both periods. As Table 1 shows, over the entire period, the lowest quintile's income fell, while higher-income families' income grew, and the richest quintile's income grew the most.[3]

Note that these data involve comparisons over time of snapshot cross-sections, not a panel study that actually tracks the income changes of specific families. The data for the lowest quintile report the average income of the 12 million families with the lowest incomes in 1979 and another group of 13 million families with the lowest incomes in 1988. Table 1 shows, therefore, that members of the group in 1988 had lower incomes than members of the 1979 group, not that incomes fell between 1979 and 1988 for the individual families in either group.

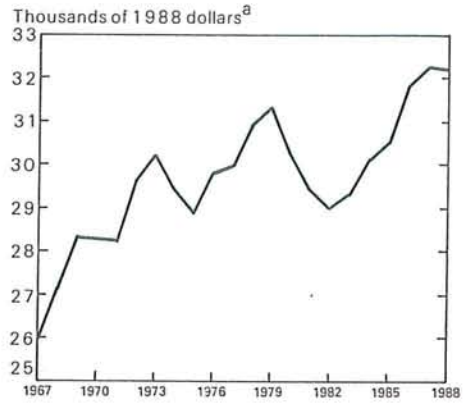
Table 1
*Average Family Incomes*

| Quintile | 1979 | 1984 | 1988 | Percent Change 1979–88 |
|---|---|---|---|---|
| First (poorest) | $ 9,350 | $ 8,300 | $ 8,850 | −5.4 |
| Second | 20,650 | 19,450 | 20,700 | .4 |
| Third | 31,150 | 30,100 | 32,250 | 3.5 |
| Fourth | 42,900 | 43,050 | 46,300 | 7.9 |
| Fifth (richest) | 70,950 | 75,900 | 81,400 | 14.7 |
| All | 35,000 | 33,350 | 37,900 | 8.3 |
| Number of families (000) | 59,550 | 62,706 | 65,837 | 10.6 |

Note: Average income is measured in constant 1988 dollars, as defined by the CPI-U-X1, and rounded to nearest $50.
Source: Author's calculations based on U.S. Bureau of the Census, Current Population Survey (March), 1980, 1985, 1989, machine-readable data files.

Chart 1

*Median Family Income, 1967 to 1988*




[a] Using CPI-U-X1.

Source: U.S. Bureau of the Census, "Money Income and Poverty Status in the United States: 1988" (Advance Data from the March 1989 Current Population Survey), *Current Population Reports*, Series P-60, No. 166 (Washington, D.C.: Government Printing Office, October 1989), Table B, as corrected in personal communication.

### *Who Gained and Who Lost?*

Even though they do not track individual families, these data clearly indicate that the general boost in income was not spread evenly. Furthermore, families with certain characteristics lost ground relative to others.[4]

***Younger families fell behind.*** The youngest and oldest families have the lowest incomes, on average. During the 1980s, the fortunes of the youngest and oldest families moved in opposite directions.

Elderly families' average incomes rose. They moved in greater numbers into higher quintiles, having started the period heavily concentrated in the lowest quintile (Table 2).[5] Despite these substantial gains, the elderly remained a relatively low-income group.

By contrast to the improving situation of elderly families, young families were under increasing pressure. In 1979, about two-fifths of families with head under age twenty-five were in the lowest quintile of nonelderly families.[6] By 1988, almost half of young

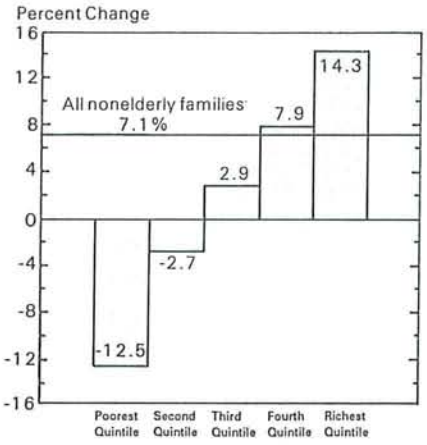
Table 2
*Incomes of Elderly Families*

| Quintile | Percentage of Elderly Families in Each Family Income Quintile 1979 | 1988 |
|---|---|---|
| First (poorest) | 41.6 | 30.1 |
| Second | 28.4 | 30.3 |
| Third | 14.0 | 18.2 |
| Fourth | 8.7 | 11.4 |
| Fifth (richest) | 7.4 | 10.0 |
| Total | 100.0 | 100.0 |
| Number of families (000) | 8,996 | 10,626 |
| Average Income | $23,400 | $28,550 |

Note: Elderly families are headed by someone age 65 or older. Average income is measured in constant 1988 dollars, as defined by the CPI-U-X1, and rounded to nearest $50.
Source: See Table 1.

Chart 2

*Change in Average Family Income by Quintile, 1979-88*
(Nonelderly Families)




families had low incomes. Part of this deterioration is attributable to a changing mix of family types among the young: the proportion of young families that were headed by women with no husband present grew, and female-headed families typically have low incomes. But shifting composition is not the full explanation, for all types of young families—husband-wife as well as others—moved into lower quintiles.

The elderly are excluded from the remainder of the analysis in this article because elderly heads and their spouses are generally retired from the labor force and rely mostly on retirement income sources. This exclusion focuses the remaining discussion on factors related to the labor market and shifts in income sources other than pensions and Social Security. Table 3 repeats for nonelderly families the income distribution-related data that were reported in Table 1 for all families.

Table 3
*Average Incomes of Nonelderly Families*

| Quintile | 1979 | 1984 | 1988 | Percent Change 1979–88 |
|---|---|---|---|---|
| First (poorest) | $10,450 | $ 8,450 | $ 9,150 | −12.5 |
| Second | 23,300 | 21,150 | 22,650 | −2.7 |
| Third | 33,600 | 32,050 | 34,600 | 2.9 |
| Fourth | 45,000 | 44,950 | 48,550 | 7.9 |
| Fifth (richest) | 72,950 | 77,550 | 83,400 | 14.3 |
| All | 37,050 | 36,800 | 39,700 | 7.1 |
| Number of families (000) | 50,554 | 52,900 | 55,211 | 9.2 |

Note: Average income is measured in constant 1988 dollars, as defined by the CPI-U-X1, and rounded to nearest $50. Nonelderly families are headed by someone under age 65.
Source: See Table 1.

The general patterns of income change are quite similar, although the decline in income of the poorest quintile is much sharper when the elderly are excluded. (See Chart 2.) By 1988, the richest quintile received 9.1 dollars of income per dollar received by the lowest quintile, up from a ratio of 7.0 to 1 in 1979.

***Husband-wife families and childless families pulled ahead.*** Husband-wife and female-headed families (no husband present) made slight gains in the 1980s, and the relative position of male-headed families (no wife present) worsened. (Compare columns 2 to 4 and 6 to 8 in Table 4.) Thus, the sizable income gap between husband-wife families and other families increased. Families without children also gained relative to families with children, regardless of headship type. The fraction of childless families in the lowest quintile declined and in the highest quintile rose during the 1980s, while families with children slipped slightly.

*The education gap widened.* The payoff to higher education increased in the 1980s. Several analysts have noted a growing gap between the average wages of college-educated workers and high school graduates (Levy 1989; Blackburn, Bloom, and Freeman 1990). Families in which the head did not complete high school were much more likely to be in the poorest quintile in 1988 than in 1979. High school graduates with no college were somewhat more likely to be in the poorest quintile and much less likely to be in the richest quintile.

*Stratification increased along demographic lines.* These data show a consistent pattern of growing intergroup disparities in the 1980s: husband-wife families pulled further ahead of one-head families, families with children lost ground to childless families, and more strongly, the young fell further behind older families and the income gap between families with less-educated and more-educated heads expanded. In general, the family types that slipped down the income scale were those that already tended to have lower incomes. Not only did these families become more concentrated at the bottom of the income distribution, but in addition, the average income at the bottom declined.

### *Potential Sources of Change in the Income Distribution*

Several hypotheses about what might account for these income patterns are described below. A number of studies have highlighted changes in the distribution of individual earnings, particularly increasing inequality in the earnings of male workers (Henle and Ryscavage 1980, Lawrence 1984, Bluestone and Harrison 1986, Burtless 1990). Aside from Levy (1989) and Rose and Fasenfest (1988), researchers have not examined changes in other income sources, however, or the relationship between changes in individual earnings and the distribution of family incomes.

*Shifting mix of income sources.* If the mix of income sources received by families with different characteristics or income levels differs, then some family types or income levels will gain or lose relative to others as sources grow at different rates. For example, when interest rates rise, higher-income families would benefit disproportionately, since they hold most interest-earning assets. Similarly, low-income families would lose ground and family income inequality would increase if transfers aimed at reducing poverty declined.

*Changing composition of families.* A number of hypotheses about the changing distribution of family income relate to shifts in the mix of families. For example, husband-wife families have higher incomes, in general, than families with no spouse present, as Table 4 showed. Thus as the husband-wife fraction of all families declines, the number of families with low incomes should increase. Similarly, since incomes vary by age and education, the aging of the baby boom and rising educational attainment among family heads would shift the distribution of family income.[7]

By the same token, changes in the work patterns of family heads or spouses would change the family income distribution. The declining labor force participation of men, for example, would be expected to increase the fraction of families that have low incomes, while the increasing labor force participation of wives would boost family income. And the shift of national economic activity from the manufacturing sector of the economy to the service-producing sector may increase inequality by replacing "healthy" middle-class manufacturing production jobs for male family heads with an uneven mix of many low-wage jobs and a few high-wage professionals.

*Family work patterns and changing incomes within groups.* Another set of hypotheses relates to shifts in the shape of the income distribution for specific types of families. For example, a rise in women's labor force participation would add to family income inequality if it were concentrated among families with high-wage husbands or high incomes from other sources. Even if participation increases were similar across all family income levels, the resulting income gains would be greater at the upper end of the distribution if the working wives of high-income men earned more than the working wives of low-income men. Such changes would be more complicated than the shifts in mix described in the previous section.

Similarly, different income groups might experience different changes in income. When the distribution of individual earnings becomes more unequal (as others have found), this would be likely to translate into a more unequal distribution of family income. If the earnings of low-wage workers rise more slowly than those of high-wage workers, the same will be true of the incomes of low-income families as opposed to high-income families, unless family work patterns counteract the obvious association between individual earnings and family income.

*Changes in earnings over the business cycle.* The distribution of individual earnings generally becomes

Table 4
*Income and Demographic Characteristics of Nonelderly Families*
Percent

| Family Type | 1979 Percent of nonelderly families (1) | 1979 Percentage in Poorest Quintile (2) | 1979 Percentage in Middle Three Quintiles (3) | 1979 Percentage in Richest Quintile (4) | 1988 Percent of nonelderly families (5) | 1988 Percentage in Poorest Quintile (6) | 1988 Percentage in Middle Three Quintiles (7) | 1988 Percentage in Richest Quintile (8) |
|---|---|---|---|---|---|---|---|---|
| All nonelderly families | 100.0 | 20.0 | 60.0 | 20.0 | 100.0 | 20.0 | 60.0 | 20.0 |
| Age of head | | | | | | | | |
| Under 25 | 7.5 | 40.8 | 57.3 | 1.9 | 5.4 | 48.8 | 48.3 | 2.9 |
| 25–34 | 28.1 | 22.4 | 66.1 | 11.5 | 27.3 | 24.8 | 64.0 | 11.1 |
| 35–44 | 24.2 | 16.3 | 60.6 | 23.1 | 29.5 | 15.7 | 61.0 | 23.4 |
| 45–54 | 21.3 | 14.6 | 54.7 | 30.7 | 20.5 | 13.6 | 56.4 | 30.0 |
| 55–64 | 18.9 | 18.9 | 57.2 | 23.8 | 17.2 | 18.4 | 59.5 | 22.1 |
| Headship | | | | | | | | |
| Husband-wife | 82.5 | 13.1 | 63.7 | 23.2 | 78.6 | 11.9 | 63.9 | 24.2 |
| Female head, NSP | 14.7 | 57.3 | 40.1 | 2.7 | 17.0 | 54.8 | 41.6 | 3.6 |
| Male head, NSP | 2.8 | 27.9 | 56.5 | 15.6 | 4.4 | 29.1 | 60.1 | 10.8 |
| Presence of children | | | | | | | | |
| Fam. with children | 63.0 | 22.8 | 59.5 | 17.1 | 60.9 | 23.9 | 59.4 | 16.7 |
| Fam. w/no children | 37.0 | 15.2 | 60.9 | 23.9 | 39.1 | 13.9 | 60.8 | 25.2 |
| Education of head (age 25 and over) | | | | | | | | |
| Not finished high school | 24.1 | 36.4 | 55.3 | 8.3 | 17.6 | 43.0 | 51.7 | 5.3 |
| Finished high school, no college | 31.4 | 18.8 | 65.6 | 15.6 | 33.1 | 20.9 | 66.7 | 12.4 |
| Some college, not finished | 17.7 | 14.5 | 65.3 | 20.2 | 20.4 | 14.5 | 66.5 | 19.0 |
| Finished college | 19.2 | 5.7 | 51.2 | 43.1 | 23.4 | 5.2 | 50.5 | 44.4 |

Notes: Nonelderly families are headed by someone under age 65. NSP = no spouse present
Source: See Table 1.

more unequal during economic downturns for two reasons. First, rising unemployment in recessions is not spread evenly across all workers (Clark and Summers 1979, Lerman, Moss and Barnow 1978). When the unemployment rate rises, a small percentage of workers experience unemployment and substantial earnings losses, and other workers' earnings are affected only indirectly by slack in the labor market. Second, wages at the low end of the distribution are thought to be more flexible in a downward direction than those of high-wage workers. However, when one earner in a family becomes unemployed, loses overtime, or faces lower wages, the increase in inequality during recessions will be less for family incomes than for individual earnings if other members of the family respond by seeking work. If, on the other hand, multiple earners within a family are likely to be similarly affected by an economic slowdown, perhaps because they all work in the same sector of the economy, then family earnings inequality will follow individual earnings inequality.

The next section of the article evaluates these hypotheses. First are the hypotheses relating to the shifting mix of income sources, followed by shifting demographic mix. The other hypotheses relate to family work patterns.

## *II. Sources of Income, Especially Earnings*

Wages and salaries account for over four-fifths of the income of nonelderly families, with another 6 to 7 percent contributed by other earnings, including income from self-employment. Interest and dividends

Table 5
*Average Income from Each Source, by Quintile, Nonelderly Families*

| Year and Source of Income | All Families: Average Income | All Families: Percent of Total | Poorest Quintile | Middle Three Quintiles | Richest Quintile |
|---|---|---|---|---|---|
| 1979 | | | | | |
| Wages and salaries | $30,400 | 82.0 | $ 6,550 | $29,050 | $58,350 |
| Other earnings | 2,750 | 7.4 | 550 | 1,950 | 7,250 |
| Interest and dividends | 1,400 | 3.8 | 200 | 750 | 4,550 |
| Retirement income | 1,400 | 3.8 | 1,350 | 1,250 | 1,850 |
| Transfers | 1,100 | 3.0 | 1,750 | 950 | 950 |
| Total | 37,050 | 100.0 | 10,450 | 34,000 | 72,950 |
| 1984 | | | | | |
| Wages and salaries | 30,150 | 81.9 | 5,050 | 27,800 | 62,400 |
| Other earnings | 2,300 | 6.3 | 300 | 1,650 | 6,400 |
| Interest and dividends | 1,850 | 5.0 | 200 | 1,000 | 6,100 |
| Retirement income | 1,400 | 3.8 | 1,100 | 1,400 | 1,800 |
| Transfers | 1,050 | 2.9 | 1,750 | 900 | 900 |
| Total | 36,800 | 100.0 | 8,450 | 32,750 | 77,550 |
| 1988 | | | | | |
| Wages and salaries | 32,600 | 82.2 | 5,600 | 29,850 | 67,750 |
| Other earnings | 2,700 | 6.8 | 500 | 1,950 | 7,050 |
| Interest and dividends | 1,650 | 4.2 | 200 | 950 | 5,300 |
| Retirement income | 1,550 | 3.9 | 1,200 | 1,450 | 2,200 |
| Transfers | 1,100 | 2.8 | 1,600 | 1,000 | 1,000 |
| Total | 39,700 | 100.0 | 9,150 | 35,250 | 83,400 |

Income sources defined as follows:
Wages and salaries—wage and salary earnings
Other earnings—all earned income except wages and salaries, including self-employment income
Interest and dividends—interest, dividends, and net rental income
Retirement income—social security, SSI, and private, military, and government pensions
Transfers—public assistance, welfare, veterans' payments, and child support

Notes: Parts may not sum to totals because of rounding. Nonelderly families are headed by someone under age 65. Incomes are in constant 1988 dollars, as defined by CPI-U-X1, and rounded to nearest $50.
Source: See Table 1.

(including net rental income), retirement income, and transfers round out the family income total.[8] (See Table 5. To interpret the figures shown in the table, it is important to note that they are averages for all nonelderly families, including families with zero income from a specific source. For example, about 30 percent of nonelderly families had some transfer income; these families typically received $3,700 from this source in 1988, while the other 70 percent received none.)

Over the weak 1979–84 period, the average income of nonelderly families declined slightly in constant dollars, with moderate declines in wages and salaries and transfers, and a more sizable falloff in the fairly small "other earnings" category, partially offset by a small increase in average retirement income and substantial growth in the interest and dividend category. In the expansionary years from 1984 through 1988, income increased from all sources except interest and dividends.[9]

For families of all income levels, the bulk of income comes from earnings. Low-income families, however, receive relatively less income from earnings than families with higher incomes. They also receive less income from interest and dividends, but more income, even in dollar terms, from transfers (Table 5). Interest and dividends account for a much greater fraction of the highest quintile's income than that of families with lower incomes.

### *The Shifting Mix of Income Sources*

One hypothesis offered earlier was that changes in the income distribution might reflect the mix of income sources obtained by each income group or family type. For example, since low-income families rely on transfers for a larger share of income, they would be hardest hit by a general cutback in transfer income, other things equal. Transfer income did grow relatively slowly in the 1980s and the poor were affected adversely more than others. Dividends and interest grew rapidly and the richest quintile benefited more than others.

However, differences in the mix of income sources played only a very small role in the shifts in the income distribution. Instead, almost all sources of income grew fastest for families at the top and slowest for families at the bottom of the distribution. Similarly, the mix of income sources tapped by young families would have implied below-average income growth in the 1980s, but not the sizable decline they actually experienced. Most sources, and especially wages and salaries, grew more slowly (or declined faster) for the young than for older families. Thus the mix of income sources for different income levels or family types does not explain how their total incomes moved in the 1980s.

Overall, an increasingly unequal distribution of earned income across families was responsible for most of the increase in inequality in the distribution of family income during the 1980s. Wages and salaries fell for the poorest quintile and rose rapidly for the richest quintile. These percentage changes were more extreme than were the changes in total income, indicating that the inequality of wage and salary income across families increased more than the inequality of total income in the 1980s. (The same was true for interest and dividend income, although on a much smaller scale.) Some of the disequalizing change in average wage and salary income resulted from changes in the fraction of families with no earners (that is, with zero wage and salary income). The fraction of bottom-quintile families with no wage and salary income rose, while the fraction of top-quintile families without earners fell. After looking at shifts in demographic mix, subsequent sections of the paper examine the changes in family work patterns that underlie the shifts in earnings.

### *Shifting Mix of Families*

A shift-share analysis can be used to quantify the effects of the changing mix of families on the overall income distribution. The analysis divides the total change in the median income (or other percentile) into two parts: that attributable to changes in the mix of families across various groups and that attributable to changes in income patterns within each group. The appendix describes the procedure in detail. Demographic changes provide examples of how the procedure works; the analysis then turns to changes in family labor market characteristics. Table 6 reports the results of the calculations.

Table 6
*Contributions of Changes in Demographic Mix and Labor Market Characteristics to Income Shifts, 1979–88*

| | Percentage Change in | | |
|---|---|---|---|
| | Top of Poorest Quintile | Median Income | Bottom of Richest Quintile |
| Total Actual Change, 1979–88 | −7.3 | 3.1 | 10.3 |
| Estimated Change Attributable to Shifts in | | | |
| Age of Head | 2.0 | 1.3 | .8 |
| Headship | −3.9 | −1.8 | −1.2 |
| Education of head | 5.8 | 3.5 | 3.0 |
| Labor Force Participation | | | |
| Primary Male | −2.7 | −1.4 | −.9 |
| Wife | 2.1 | 1.3 | .7 |
| Female Head | .2 | * | * |
| Unemployment 1979–84 | | | |
| Primary Male | −1.5 | −1.0 | −.8 |
| Primary Female | −.1 | −.1 | −.1 |
| Unemployment 1984–88 | | | |
| Primary Male | 1.6 | 1.0 | .6 |
| Primary Female | 2.1 | 1.1 | .7 |
| Industry Mix | | | |
| Primary Male | −.5 | −.2 | * |
| Primary Female | * | .2 | .2 |
| Part-Time Status | | | |
| Primary Male | .2 | .1 | .1 |
| Primary Female | .1 | .1 | .1 |
| Sum of Estimated Effects of Shifts in Mix | 5.4 | 4.1 | 3.2 |

Notes: Top of poorest quintile and bottom of richest quintile are 20th and 80th percentiles, respectively. Median income is 50th percentile. * = less than 0.5 in absolute value. These estimates ignore some interaction among changes analyzed and therefore are not strictly additive. Primary male is a husband in a husband-wife family or a male head of family with no wife present. Primary female is a wife in a husband-wife family or a female head of family with no husband present.

Source: Author's calculations based on distribution of income within groups in 1979. See Table 1 for data sources and see text and Appendix for explanation of calculations.

Table 7
*Labor Force Participation Rates of the Nonelderly*
Percent

| | 1979 | 1984 | 1988 |
|---|---|---|---|
| Percent of husband-wife families with wife in the labor force | 65.7 | 69.2 | 72.9 |
| Poorest Quintile | 45.8 | 48.7 | 48.5 |
| Middle Three Quintiles | 67.4 | 70.3 | 74.1 |
| Richest Quintile | 72.2 | 77.3 | 81.8 |
| Percent of female-headed families, NSP, with head in the labor force | 75.2 | 75.0 | 76.4 |
| Poorest Quintile | 64.1 | 61.0 | 63.5 |
| Middle Three Quintiles | 90.0 | 90.9 | 92.3 |
| Richest Quintile | 89.5 | 91.1 | 88.4 |
| Percent of husband-wife or male-headed, NSP, families with husband or head in the labor force | 94.0 | 92.8 | 91.0 |
| Poorest Quintile | 79.2 | 76.8 | 73.1 |
| Middle Three Quintiles | 95.5 | 94.3 | 92.0 |
| Richest Quintile | 98.5 | 97.9 | 97.9 |

Notes: These labor force participation rates are higher than those usually published because they count as participants individuals who worked or looked for work at any time during a calendar year rather than on a single survey date. Nonelderly families are headed by someone under age 65. NSP = no spouse present
Source: See Table 1.

***Demographic changes.*** Educational attainment rose in the 1980s. Among nonelderly family heads age 25 and older, the fraction who had not finished high school declined substantially and the fraction with high school and college increased. (Compare the "education" entries in columns 1 and 5 of Table 4.) Since more education leads to higher income, this shift contributed to an upward shift in the family income distribution. The shift-share technique calculates how much median family income would have risen solely because of rising educational attainment by (1) holding constant (at 1979 levels) the distribution of college-educated families across the income spectrum, and similarly the distribution of income for each of the other education groups, but (2) shifting the mix of educational attainments from that in 1979 to that in 1988. Since the 1988 mix includes more highly educated families, it results in a higher median income than in 1979. How much higher—3.5 percent, as shown in Table 6—provides a measure of how much the shifting mix of heads' educational levels contributed to the overall increase in median family income between 1979 and 1988.

To get an indication of how the shifting education mix affected overall income inequality, the shift-share technique is used in a similar way to calculate the effects on the 20th percentile (the top income in the poorest quintile) and the 80th percentile (the bottom income in the richest quintile). Just like average income in the two quintiles, the top income in the poorest quintile fell during the 1980s and the bottom income in the richest quintile rose quite a bit. Because high school dropouts are concentrated at the bottom of the income distribution and the 1988 mix has markedly fewer of them, the shift-share calculation indicates that the shifting education mix would have led to a substantial rise in the poorest quintile's income. Similarly, because college-educated families are concentrated in the richest quintile, rising educational attainment contributed to the increase in top-quintile incomes. A comparison of these calculated shifts with the actual changes indicates that the rise in educational attainment of the 1980s more than accounts for the rise in median family income (other factors partially offset this rise, as will be shown below) and accounts for part of the increase in top-quintile income, but does not explain the decline in income of the lowest quintile.

Similar calculations indicate that the aging of the baby boom would have raised family incomes, other things equal. This is the case because middle-aged families have higher incomes than the young, and the aging of the baby boom in the 1980s reduced the under-twenty-five fraction and increased the fraction of families with head aged thirty-five to forty-four. By the same token, the declining fraction of husband-wife families and increase in families headed by a male or female with no spouse present shifted the family income distribution downward.[10] Both of these shifts, however, had smaller effects than rising educational attainment.

Shift-share calculations are next reported for shifts in the mix of families along labor market-related dimensions. In the discussion that follows, the term "primary male" is defined as a husband in a husband-wife family or a male family head with no wife present, and a "primary female" is a wife in a husband-wife family or a female family head with no husband present.[11]

***Labor force participation.*** Men's labor force participation rates have fallen in recent decades while women's have risen. About 91 percent of nonelderly

Table 8

## *Income and Labor Market Characteristics of Nonelderly Families*

| Family Type | 1979 Percent of nonelderly families (1) | 1979 Percentage in Poorest Quintile (2) | 1979 Percentage in Middle Three Quintiles (3) | 1979 Percentage in Richest Quintile (4) | 1988 Percent of nonelderly families (5) | 1988 Percentage in Poorest Quintile (6) | 1988 Percentage in Middle Three Quintiles (7) | 1988 Percentage in Richest Quintile (8) |
|---|---|---|---|---|---|---|---|---|
| All nonelderly families | 100.0 | 20.0 | 60.0 | 20.0 | 100.0 | 20.0 | 60.0 | 20.0 |
| Labor force status | | | | | | | | |
| Primary males | | | | | | | | |
| Not in labor force | 5.1 | 46.9 | 47.2 | 5.9 | 7.5 | 38.3 | 56.2 | 5.5 |
| In labor force | 80.1 | 11.4 | 64.5 | 24.1 | 75.5 | 10.3 | 64.4 | 25.2 |
| Wives in husband-wife families | | | | | | | | |
| Not in labor force | 28.3 | 20.6 | 60.5 | 18.8 | 21.3 | 22.7 | 61.1 | 16.2 |
| In labor force | 54.1 | 9.1 | 65.3 | 25.5 | 57.3 | 8.0 | 64.9 | 27.1 |
| Female heads of families | | | | | | | | |
| Not in labor force | 3.7 | 82.8 | 16.1 | 1.1 | 4.0 | 84.7 | 13.6 | 1.8 |
| In labor force | 11.1 | 48.8 | 48.0 | 3.2 | 13.0 | 45.5 | 50.3 | 4.2 |
| Unemployment | | | | | | | | |
| Primary male unemployed | 7.8 | 30.2 | 62.6 | 7.2 | 7.8 | 30.5 | 60.9 | 8.6 |
| Short Spell | 4.8 | 22.4 | 69.0 | 8.6 | 4.5 | 22.0 | 67.9 | 10.2 |
| Long Spell | 3.0 | 42.7 | 52.3 | 5.0 | 3.3 | 42.4 | 51.4 | 6.4 |
| Primary male in labor force, and not unemployed | 72.3 | 9.4 | 64.7 | 25.9 | 67.6 | 8.0 | 64.9 | 27.2 |
| Primary female unemployed | 9.3 | 31.5 | 59.1 | 9.5 | 7.9 | 35.1 | 56.2 | 8.7 |
| Primary female in labor force, and not unemployed | 55.9 | 13.3 | 62.9 | 23.8 | 62.3 | 12.3 | 63.0 | 24.7 |
| Industry Mix | | | | | | | | |
| Primary Male Worked | 79.9 | 11.2 | 64.6 | 24.2 | 75.0 | 10.0 | 64.6 | 25.3 |
| In manufacturing | 23.0 | 7.4 | 68.7 | 24.0 | 18.9 | 5.9 | 69.0 | 25.1 |
| In nonmanufacturing | 56.8 | 12.8 | 62.9 | 24.2 | 56.1 | 11.4 | 63.2 | 25.4 |
| Primary Female Worked | 63.6 | 15.0 | 62.8 | 22.1 | 69.1 | 14.0 | 62.8 | 23.2 |
| In manufacturing | 11.1 | 15.0 | 67.2 | 17.7 | 9.9 | 15.6 | 65.6 | 18.8 |
| In manufacturing | 52.5 | 15.0 | 61.9 | 23.1 | 59.2 | 13.8 | 62.3 | 23.9 |
| Weekly Hours of Work | | | | | | | | |
| Primary Male Worked | 79.9 | 11.2 | 64.6 | 24.2 | 75.0 | 10.0 | 64.6 | 25.3 |
| Less than 35 hours | 4.0 | 33.4 | 57.6 | 9.0 | 3.6 | 35.8 | 52.8 | 11.3 |
| 35 hours or more | 75.9 | 10.1 | 65.0 | 25.0 | 71.4 | 8.7 | 65.2 | 26.0 |
| Primary Female Worked | 63.6 | 15.0 | 62.8 | 22.1 | 69.1 | 14.0 | 62.8 | 23.2 |
| Less than 35 hours | 18.7 | 17.5 | 62.9 | 19.6 | 19.4 | 18.1 | 62.5 | 19.4 |
| 35 hours or more | 44.9 | 14.0 | 62.8 | 23.2 | 49.7 | 12.5 | 62.9 | 24.7 |

Notes: Nonelderly families are headed by someone under age 65. People in the labor force were working and/or looking for work during the year. Unemployed people were laid off or looking for work for more than one week in the year. A long unemployment spell is defined as lasting 14 or more weeks. "Worked" refers to a person who held a job for one week or longer during the year. Primary male is a husband in a husband-wife family or male head of family with no wife present. Primary female is a wife in a husband-wife family or female head of family with no husband present.

Source: See Table 1.

primary males participated in the labor force in 1988, down from 94 percent in 1980.[12] (See Table 7.) By contrast, 73 percent of wives in nonelderly husband-wife families were in the labor force in 1988, up from 66 percent in 1979. Female heads of families with no husband present have historically had higher participation rates (75 percent in 1979) than wives, but their participation barely increased in the 1980s.

Having a primary male in the labor force significantly increases family income. As Table 8 indicates,

Table 9
*Unemployment Rates of Nonelderly Family Members*
Percent

| | 1979 | 1984 | 1988 |
|---|---|---|---|
| Primary Males | 9.7 | 12.5 | 10.4 |
| Poorest Quintile | 25.7 | 36.3 | 30.6 |
| Middle Three Quintiles | 9.4 | 11.8 | 9.8 |
| Richest Quintile | 2.9 | 3.5 | 3.5 |
| Primary Females | 14.3 | 14.6 | 11.3 |
| Wives | 13.1 | 13.2 | 10.0 |
| Of Not-Unemployed Men | 11.8 | 11.3 | 8.4 |
| Of Unemployed Men | 25.0 | 26.0 | 21.7 |
| Of Men Not in Labor Force | 12.7 | 13.4 | 14.5 |
| Female Heads (No Husband Present) | 19.8 | 21.0 | 16.8 |
| Addendum: Long Unemployment Spells as Percent of All Spells | | | |
| Primary Males | 38.5 | 51.9 | 42.2 |
| Primary Females | 33.3 | 40.8 | 38.2 |

Notes: These unemployment rates refer to any spell of unemployment in a calendar year and therefore are higher than standard unemployment rates that refer to a single date. Unemployment rate is ratio of unemployed persons to persons in the labor force in the calendar year. Unemployed were laid off or looking for work one week or longer. Labor force participants worked or looked for work in the year. "Not-unemployed" were employed part or all of the year and were not unemployed during the year. Primary males are husbands or male heads with no wife present; primary females are wives or female heads with no husband present. Long unemployment spell defined as 14 or more weeks.
Source: See Table 1.

almost one-quarter of families with a primary male in the labor force were in the richest income quintile in 1979, while almost one-half of those with a primary male *not* in the labor force were in the poorest quintile. So the decline in male labor force participation that occurred in the 1980s would have reduced family incomes, especially at the low end, other things equal (Table 6). Conversely, because having a wife in the labor force augments a family's income, the shift of wives into the labor force was responsible for raising family incomes. The increasing labor force participation of wives would have raised incomes at the bottom of the distribution more than at the top, because husband-wife families with working wives are relatively rare in the poorest quintile.[13]

***Rising unemployment.*** In any year, a spell of unemployment, especially for the primary male, sizably increases the odds that a family will have low income (Table 8). The rise in nonelderly primary men's unemployment rates[14] from 1979 to 1984, as shown in Table 9, was responsible for part of the decline in family incomes in the period. But these changes were reversed as unemployment fell from 1984 to 1988. Women's unemployment rates are typically higher than men's and less cyclical. As Table 9 shows, for wives, unemployment had almost come back down to 1979 levels by 1984, and then fell still further in the continuing expansion. For the 1980s as a whole, these changes in female unemployment contributed to the increase in family income.

***Fewer manufacturing jobs.*** The primary male was working in manufacturing[15] in over one-fifth of nonelderly families in 1979, and these families were better off, on average, than the families in which the primary male worked in nonmanufacturing. As Table 8 shows, having a primary male working in manufacturing kept most families out of the lowest quintile.[16] Manufacturing did not provide similarly "good" jobs to women workers in 1979, however. Families with the primary female working in manufacturing were not as well off as those with the primary female working in nonmanufacturing, on average. (This was the case despite the fact that wives with manufacturing jobs were more likely to have husbands with manufacturing jobs than were wives with nonmanufacturing jobs.)

The shift from manufacturing to nonmanufacturing jobs for primary males that occurred between 1979 and 1988 accounts for a small decline in family income, concentrated at the bottom of the income distribution. The shift for primary females accounts for an even smaller increase in family income both at the median and in the top quintile. Thus the declining importance of manufacturing caused incomes to fall and to become more unequal, but only very modestly.[17]

***Declining part-time work.*** Part-time workers generally earn considerably less in a year than full-time workers. As Table 8 shows, one-third of families with the primary male working part-time were in the poorest quintile in 1979, compared with only 10 percent of the families of men working full-time, and similarly, many more of the full-time than the part-time group were in the richest quintile.[18] Among working primary males and females, the fraction working part-time fell slightly in the 1980s, and this contributed modestly to the increase in family incomes (Table 6).[19]

***Combined effects of shifting composition.*** The sum of the calculated effects of demographic and work-related shifts in the mix of families is somewhat larger than the change in median family income that actually occurred in the 1980s (Table 6).[20] Thus these shifts roughly explain the 3.1 percent rise in the

median real family income. In addition, the shifts give a slightly smaller boost to income at the high end of the distribution, but this accounts for only a small part of the actual increase. And the shifts should have led to a sizable increase in incomes at the bottom of the distribution, other things equal, while incomes at the bottom actually fell. These discrepancies imply that the increase in inequality of family income that occurred in the 1980s is attributable to something other than the shifting mix of family types along the demographic and work-related dimensions examined here.

### *Changing Work Patterns and Earnings*

The calculations of the effect of shifting composition above are based upon the 1979 distribution of income for families with each characteristic. But the shape of the distribution changed between 1979 and 1988 for each group. For example, a noticeable fraction (over 3 percent) of families headed by women in the labor force (no spouse present) moved out of the poorest quintile, and smaller fractions of families with working wives or working primary males also moved out and up (comparing columns 2 and 6 in Table 8). This section of the paper examines hypotheses regarding changes in incomes within groups defined in terms of labor market characteristics of family members.[21]

The importance of family members' work patterns and changes in those patterns in determining family income is starkly demonstrated in Table 10. The first four columns of the first row of the table, for example, report the income of the average nonelderly family in 1979, the family's income from earnings, and average family earnings of the primary male and primary female. Included in these averages are families without a primary male or female or with a nonearning primary male or female. The next five columns report the fraction of families with some

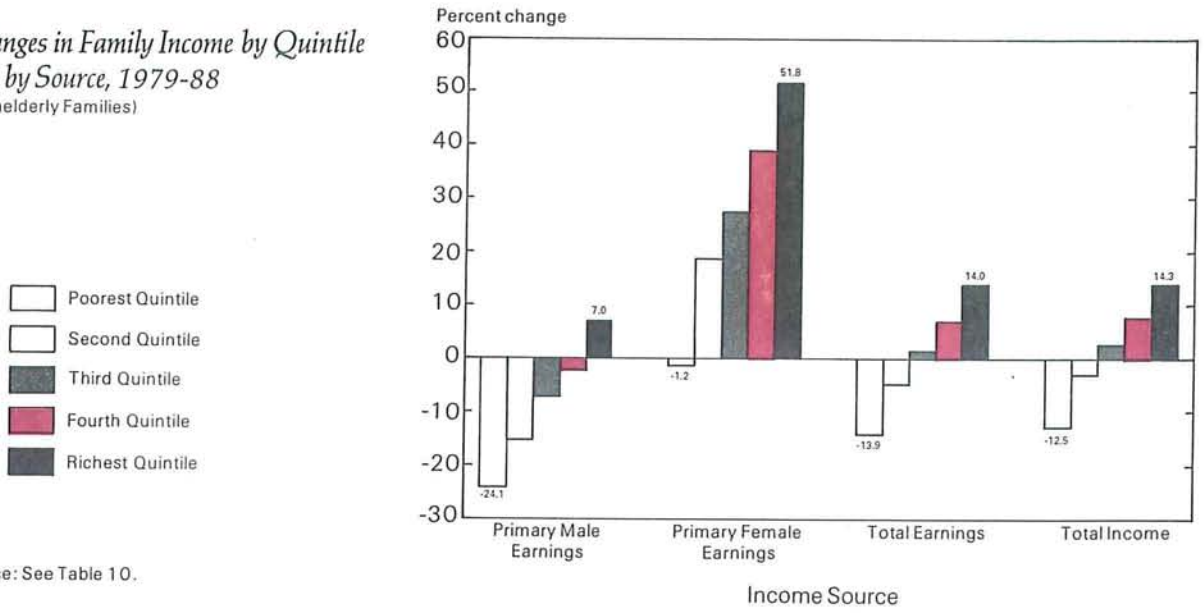
Table 10
*Earnings of Family Members (Nonelderly Families)*

| Year and Family Type | Average Total Family Income (1) | Average Family Earnings | | | Percent of Families with Earnings of: | | | Average Earnings for Those with Earnings | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total (2) | Primary Male (3) | Primary Female (4) | Primary Male (5) | Primary Female (6) | Other Member (7) | Primary Male (8) | Primary Female (9) |
| 1979 All Families | $37,050 | $33,150 | $23,200 | $ 7,250 | 80 | 63 | 27 | $29,000 | $11,550 |
| Poorest Quintile | 10,450 | 7,100 | 3,900 | 2,700 | 45 | 47 | 15 | 8,600 | 5,750 |
| Middle Three Quintiles | 33,950 | 31,000 | 21,850 | 7,100 | 86 | 66 | 25 | 25,400 | 10,800 |
| Richest Quintile | 72,950 | 65,600 | 46,550 | 12,250 | 96 | 69 | 46 | 48,250 | 17,650 |
| Husband-Wife Families | 40,500 | 37,150 | 27,400 | 7,100 | 94 | 63 | 25 | 29,200 | 11,200 |
| Female-Headed Families | 18,650 | 13,450 | 0 | 9,600 | 0 | 72 | 39 | na | 13,350 |
| 1984 All Families | 36,800 | 32,450 | 21,750 | 8,200 | 77 | 65 | 27 | 28,350 | 12,650 |
| Poorest Quintile | 8,450 | 5,350 | 2,600 | 2,350 | 40 | 44 | 15 | 6,400 | 5,300 |
| Middle Three Quintiles | 32,750 | 29,450 | 19,600 | 7,900 | 83 | 68 | 26 | 23,700 | 11,550 |
| Richest Quintile | 77,550 | 68,800 | 47,650 | 15,000 | 95 | 75 | 43 | 49,950 | 20,100 |
| Husband-Wife Families | 40,900 | 37,050 | 26,250 | 8,300 | 92 | 67 | 24 | 28,550 | 12,400 |
| Female-Headed Families | 17,950 | 13,350 | 0 | 9,700 | 0 | 70 | 38 | na | 13,850 |
| 1988 All Families | 39,700 | 35,300 | 22,800 | 9,800 | 76 | 69 | 27 | 29,850 | 14,250 |
| Poorest Quintile | 9,150 | 6,100 | 2,950 | 2,650 | 39 | 48 | 16 | 7,550 | 5,500 |
| Middle Three Quintiles | 35,250 | 31,850 | 20,400 | 9,250 | 83 | 72 | 26 | 24,700 | 12,850 |
| Richest Quintile | 83,400 | 74,800 | 49,800 | 18,550 | 95 | 80 | 40 | 52,250 | 23,300 |
| Husband-Wife Families | 44,550 | 40,450 | 27,900 | 10,150 | 92 | 72 | 23 | 30,200 | 14,150 |
| Female-Headed Families | 19,250 | 14,950 | 0 | 10,750 | 0 | 73 | 38 | na | 14,700 |

Note: Nonelderly families are headed by someone under age 65. Primary male is husband or male head (no wife present); primary female is wife or female head (no husband present); other member is any other family member. All incomes are in constant 1988 dollars, as defined by CPI-U-X1, and rounded to nearest $50. Female-headed families have no husband present. na = not applicable.
Source: See Table 1.

Chart 3

*Changes in Family Income by Quintile and by Source, 1979-88*
(Nonelderly Families)




Source: See Table 10.

(nonzero) earnings from each family member and the average earnings of those primary males and primary females who had some earnings.

For those with earnings, earnings were much higher for primary males and females in high-income families than in lower-income families (columns 8 and 9). Also, a greater fraction of high-income families had primary males, primary females, and other family members with earnings (columns 3 to 5). By the same token, female-headed families' incomes averaged less than half those of husband-wife families because they lacked a husband's typical earnings. And these disparities increased during the 1980s.

For nonelderly primary males with earnings, average earnings rose modestly in real terms during the 1980s (column 8 of Table 10). But these changes were very uneven.[22] Earnings actually fell 12 percent for working primary males in the poorest (family income) quintile while rising 8 percent for those at the top. In addition, the fraction of nonelderly families with some primary male earnings declined sharply (6 percentage points) for the poorest quintile but only slightly for the highest. Thus, low-income families received substantially less income in the form of primary male earnings in 1988 than in 1979 for two reasons: (1) a smaller fraction of these families included a working primary male and (2) primary male earnings were lower. The first group of bars in Chart 3 shows the sharp drop in primary male earnings for the poorest quintile and earnings growth for the richest.

The average family's income from the earnings of a primary female rose dramatically in the 1980s—by about 35 percent. This increase reflects both the changes in labor force participation noted earlier (which show up as changes in column 6 of Table 10) and changes in annual earnings per worker (column 9), which result from changes in unemployment, industry, hours worked and other factors. These changes, like those for men, were quite uneven, as the second group of bars in Chart 3 shows. Families in the highest quintile enjoyed a 52 percent gain in primary female earnings because earnings per worker rose 32 percent and the proportion of families with working women rose 11 percentage points. Meanwhile, the lowest quintile's fraction of families with a primary female worker rose only 1 percentage point, and earnings per worker declined.

In sum, a loss of primary male earnings accounted for most of the income losses of the poorest quintile. Increases in the earnings of both primary males and primary females, but especially the latter, were responsible for most of the richest quintile's income gains. The combined effect was to increase the inequality of the family income distribution, pulling down the lowest quintile and pushing up the top.

These percentage changes in average family earnings by quintile were larger than the corresponding percentage changes in primary male earnings per worker, indicating that the increase in family income inequality was not just attributable to the increased inequality of male earnings. Differential changes in male and female participation and female earnings per worker also contributed.[23]

### *Earnings Changes over the Business Cycle*

Without more detailed analysis and data for a recession year, this article can only hint at possible conclusions regarding cyclical changes in inequality.[24] The 1984 data in Table 10 show the uneven impact of a weak economy. Low-income families experienced sizable declines in male and female earnings from 1979 to 1984. These changes in earnings may reflect the uneven impact of changing unemployment shown in Table 9. Unemployment rates for primary males rose for all income groups between 1979 and 1984, but rose the most for the poorest quintile. These patterns of income loss and unemployment are consistent with the hypothesis that unemployment and wage rate adjustments in a weak economy are focused at the lower end of the income distribution.

While unemployment is more prevalent among women who head families with no husband present than among wives, it is higher still among the subset of wives married to unemployed men (Table 9). This positive association between husbands' and wives' employment/unemployment experience may be attributable to previously nonworking wives' attempts to find jobs when their husbands lose theirs or to a positive association between spouses' industry of employment increasing the odds of simultaneous layoffs. For whatever reason, it implies that family incomes will not necessarily move more smoothly over the business cycle than do individual earnings.

*In the 1980s, almost all sources of income grew fastest for families at the top and slowest for families at the bottom of the income distribution.*

## *III. Summary and Conclusions*

Most families made significant income gains in the 1980s as the national economy expanded. Some families, however, did not participate fully in the general growth. In the early part of the decade, job-related earnings weakened for low-income families more than for those with higher incomes, and interest and dividend income expanded faster for high-income families than for those lower on the income scale. As the expansion progressed in the latter half of the decade, families at all income levels made gains, but the poor did not recover to their previous position. Average income of nonelderly families in the two lowest income quintiles declined over the 1979–88 period, while higher-income families enjoyed income growth. As a result, the family income distribution became more unequal. Why did the bottom of the income distribution fail to keep pace?

Losing ground were young families, families with key workers unemployed, and those with poorly educated family heads. The biggest gainers were families with jobs, preferably full-time, the more the better, and especially in manufacturing. Also gaining were families with no children, husband-wife families, and highly educated families.

A critical thread in these lists is employment. As the economy expanded, families without workers were not carried along. Earnings comprise the bulk of family income, but the importance of employment does not simply reflect burgeoning earned income and a corresponding increase in family income for those with a high share of income from earnings.[25] First, earnings grew faster than average for earners in high-income families. This was especially true of primary female earnings. Second, families with two earners made faster gains than families with one (or none), and high-income families had more earners than families with lower incomes. Third, increases in work effort during the decade seem to have been a key factor. Changes in labor force participation were not proportional to rates of labor force participation at the beginning of the period. Labor force participation rates of wives in low-income families were moderately higher in 1988 than in 1979, but wives' participation rates for high-income families in 1988 were much higher than in 1979 (recall Table 7). Similarly, female-headed families made more modest income gains than husband-wife families because the labor force participation rates of wives rose much faster than participation rates of female heads.

Increased family work effort, of course, clouds the translation of family income into family well-being. But if slow productivity growth continues to keep a lid on real wage growth and the wage distribution continues to become more unequal, a critical question for family income prospects may be how much more women's labor force participation rates can or will rise.

A notable exception to the importance of employment was the elderly, who are generally retired from the labor market, but who moved up the income ladder in striking fashion in the 1980s. They benefited from continuing federal policies aimed at maintaining their living standards and also from holding savings, the returns on which grew apace in the decade.[26] By contrast, non-retirement transfer income declined over the period for low-income families.

The employment link sheds little light on why families without children would move ahead, except perhaps that they have more time available for market work, or why the young fared so poorly. The young, it turns out, experienced a sizable decline in labor force participation rates in the 1980s. Studies that have found early labor market experience to be a critical determinant of lifetime job prospects certainly heighten concern about the currently young cohort's future.[27]

In summary, for all families combined and for most types of families, the rich got richer and the poor got poorer. The shift was especially pronounced for family heads with high educational attainment as compared to low. While reinforced marginally by changes in the distribution of interest and dividends, the increase in inequality was largely attributable to changes in family earnings—the earnings of high-income families rose while the earnings of low-income families declined. High-income families' earnings rose because of steep increases in the labor force participation of wives as well as growth in earnings per worker, whether male or female. Low-income families experienced declines in primary male earnings. Thus the families that benefited most from the good times of the 1980s were those with the most earners and the most highly paid earners. A corollary is that families with less access to the rewards of market work (with the exception of the elderly) fell behind.

## Appendix: Measuring the Effects of Economic and Demographic Shifts on the Distribution of Family Income

This study uses a simple shift-share analysis to break down the total 1979–88 change in the distribution of family income into two parts: 1) the change attributable to shifts in the work patterns or demographic composition of families and 2) the change attributable to shifts in the distribution of income within each economic or demographic group. The data used in the analysis are drawn from the Current Population Survey, March 1980, March 1985, and March 1989 (machine readable data files), and report incomes for 1979, 1984, and 1988; income data are inflated to 1988 dollars using the CPI-U-X1. Incomes are grouped into 18 $5,000 intervals ranging from "under $5,000" to "$85,000 or more." Several demographic or labor force groupings are analyzed; for example, headship type, age of head, and primary male's labor force status. If $a_{ijt}$ is the fraction of families in demographic group i that have incomes in class j in year t, and $S_{it}$ is the fraction of all families in demographic group i in year t, then

$$\sum_j a_{ijt} = 1 \text{ for all i in year t, and}$$

$$\sum_i S_{it} = 1 \text{ in year t.}$$

The 20th and 80th percentiles and the median income can be estimated using linear interpolation within the income class that includes 20th, 50th or 80th percentile; such estimates do not differ substantially from those obtained directly from the data and provide the appropriate baseline for comparisons with those derived (as described below) from distributions projected using the shift-share technique.

The overall distribution of families across income classes in year t can be calculated as the weighted average of the income distributions of the demographic groups that comprise the whole. Thus the fraction of all families that have incomes in class j in year t, $b_{jt}$, is equal to

$$b_{jt} = \sum_i a_{ijt} * S_{it}.$$

To calculate what the overall distribution of families across income classes would be in 1979 if the 1988 demographic mix already held, the 1988 shares of each group (the $S_i$s) are applied to the 1979 income distribution for each group (the $a_{ij}$s). Thus

$$b_{jx} = \sum_i a_{ij79} * S_{i88}.$$

The corresponding percentile income cutoffs can be estimated from this distribution by linear interpolation as described above. These cutoffs can then be compared to the cutoffs based on the actual 1979 and 1988 distribution. The difference between the medians and other percentiles calculated using $b_{jx}$ and $b_{j79}$ is said to be attributable to the change in shares, and is reported in Table 6. The difference between $b_{jx}$ and $b_{j88}$ is attributable to shifts in the income distributions within demographic or labor market groups.

Table A shows the actual percentile cutoffs for the nonelderly family income distribution in 1979 and 1988.

Table A
## *Income Percentiles for Nonelderly Families*

| Year | Percentile 20th | 50th | 80th | Ratio 80th:20th |
|---|---|---|---|---|
| 1979 | 17,700 | 33,565 | 52,560 | 2.97 |
| 1988 | 16,410 | 34,610 | 58,000 | 3.53 |

*Notes: Percentiles rounded to nearest $5. Incomes in constant 1988 dollars, as defined by the CPI-U-X1.*
Source: See Table 1.

[1] The income data reported in this article have been translated into 1988 dollars using the CPI-U-X1, an experimental Consumer Price Index developed by the Bureau of Labor Statistics (BLS). The CPI-U-X1 consistently uses the rental equivalence approach to measuring shelter services that was incorporated into the official Consumer Price Index for All Urban Consumers (CPI-U) beginning in 1983. The BLS and Census Bureau recommend the CPI-U-X1 for analysis that needs a consistent treatment of housing costs in the years before and after 1983. The CPI-U-X1 registers less inflation during the 1980s than the CPI-U; hence the real growth in median family income just reported (3 percent) is greater than would be calculated with the CPI-U (1 percent).

[2] Because the gains were greatest at the top of the distribution, the growth in average income is considerably greater than the growth in the median (3.0 percent); the median is less sensitive to changes in the extremes of the distribution. The ceilings on income reported by the Current Population Survey also rose over the period, but imposing the lowest ceilings consistently over all years does not appreciably affect these averages.

[3] The income measure reported by the Bureau of the Census reflects all cash income before taxes and other deductions. It includes the income sources listed in Table 5 but not capital gains, other one-time payments, or noncash income such as Medicaid and employer-provided health benefits. Thus the measured distribution of income differs from the distribution of total income after taxes, fringes, and transfers. The U.S. Congressional Budget Office (1987) argued that taxes, on net, became slightly less progressive between 1977 and 1988. Low-income families' tax burdens crept up in the early part of the decade and then were reduced by the Tax Reform Act of 1986; social security taxes (which take a greater share of low-earner wages than high) rose. Capital gains augmented family incomes much more at the top than at the bottom of the distribution, and tax changes are unlikely to have fully offset the increase. Thus the difference between the rate of decline for the poorest quintile and the rate of increase for the richest might have been even greater if all after-tax income were included.

[4] Several studies have documented that the recent increases in inequality have been accompanied by greater stratification of the income distribution, in the sense that the overlap between the income distributions of various demographic groups has declined (U.S. Congressional Budget Office 1988, Michel 1989, Rauch 1989, Levy 1989, Lerman and Salzman 1990).

[5] Note that many elderly people live alone. Elderly families, included in this analysis, comprised only 54 percent of elderly households in 1979, 1984 and 1988.

[6] Demographic characteristics actually refer to March of the survey years (that is, 1980, 1985, 1989), while income is for the year before (1979, 1984, 1988). However, industry, unemployment, part-time status, and labor force participation refer to the same year as income. The article uses the income year as shorthand (and to avoid confusion) even when referring to demographic mix. The data cited in the text regarding the distribution of young families across quintiles are reported in Table 4.

[7] An earlier article in this *Review* examined changes in the distribution of family incomes between 1973 and 1984 (Bradbury 1986), focusing on the effects of changes in the demographic composition of American families.

[8] While most retirement income goes to the elderly, nonelderly families can also be recipients. For example, Social Security pays survivors' benefits to non-retirees.

[9] Improvements in the Census Bureau's data processing methods, rather than real growth, may be responsible for most of the measured increase in transfers. Beginning with the March 1989 survey (used in this article for data on 1988 incomes), the Census Bureau increased the number and detail of income categories imputed because of missing data. They also reprocessed the previous year's data with the new methods to gauge the impact of the new processing procedures. They report that the new methods increased their estimate of total income by less than 1 percent, but increased unearned income by almost 3 percent (U.S. Bureau of the Census 1989, Table D and pp. 14–17). Increases (attributable to reprocessing) in types of income falling into the transfer income category ranged from 0.7 percent for "AFDC and other public assistance" through 2.5 percent for "veterans' payments, unemployment and workers' compensations" to 9.1 percent for "child support, alimony, anything else." (Reprocessing also raised their estimates of interest and dividend income by 4 to 5 percent.) Over the 1979–1987 period (for which data processing methods were not changed), average transfer income for all families fell 8.5 percent, a stark contrast with the 1979–1988 increase of 0.2 percent.

[10] The income distribution for male-headed families (no wife present) looks similar to that of husband-wife families with wife not in the labor force. The distribution for female-headed families (no husband present) is centered at a considerably lower income level.

[11] The Census Bureau leaves the designation of family head up to the respondent of the Current Population Survey. Thus in a husband-wife family, either the husband or the wife may be designated the head. Because male wages have behaved differently from female wages and female labor force participation rates have risen so dramatically, the "primary male" and "primary female" labels seem more useful for this analysis than the Census' labels, "head" (of either gender) and "spouse."

[12] The data cited here include men and women in the military as part of the employed labor force. These labor force participation rates are higher than those usually published because they count as participants those who worked or looked for work at any time during the calendar year rather than on a specific survey date.

[13] That is, working wives move families into the middle quintiles as well as into the richest quintile.

[14] The unemployment rate used here is defined as the ratio of unemployed persons to persons in the labor force in the calendar year. Unemployed persons were laid off or looking for work one week or longer (they may have been working and/or out of the labor force for part of the year as well). Labor force participants worked or looked for work part or all of the year. Since the data refer to any spell of employment in a calendar year, they yield higher unemployment rates than the standard measure that refers to a specific date.

[15] "Industry" refers to an individual's longest job in the year.

[16] The income distribution for families with primary male in nonmanufacturing shown in Table 8 is not inconsistent with the stereotype cited earlier—that nonmanufacturing consists of lots of low-wage retail and service jobs and a few high-paid professionals. In 1979, for example, the fraction of families with primary male in nonmanufacturing in the highest quintile was actually slightly higher than that of manufacturing families, but the fraction in the lowest quintile was considerably higher.

[17] A more detailed industrial breakdown might yield different results, but the income distribution differences between manufac-

turing and nonmanufacturing for primary males are clear in Table 8, yet the shift that results is quite small.

[18] The same pattern holds true for primary females working part-time as compared to full-time, but because women are often the secondary earner in a family, the differences are much less pronounced. Part-time workers are defined as those working less than 35 hours in a typical week during the year.

[19] While the fraction fell, the number of part-time workers actually rose over the period because women are much more likely than men to work part-time and women's labor force participation rose so much. The labor force participation effects in Table 6 reflect the 1979 part-time/full-time mix for men and women.

[20] The effects shown in Table 6 are not strictly additive because each calculation does not hold constant all the factors considered in the other calculations.

[21] Another example of shifting returns is the expanding earnings gap between college graduates and high school dropouts described earlier. Why the payoff to education rose so sharply in the 1980s remains an interesting puzzle.

[22] Other researchers have pointed out that the distribution of men's earnings became more unequal in the 1980s (Levy 1989, Burtless 1990).

[23] Thus, despite the fact noted earlier that wives' earnings reduce family income inequality in any one year, these *changes* in wives' earnings added to family income inequality in the 1980s by stretching the top of the distribution.

[24] Income inequality typically increases during economic downturns and decreases as the economy expands, but a number of analysts have found that inequality has not declined noticeably during the expansion of the mid to late 1980s (Burtless 1990, Danziger, Gottschalk and Smolensky 1989, Levy 1989).

[25] Data cited earlier indicate that earned income grew somewhat more slowly than other sources in the 1980s, and in any case, the incomes of various groups did not generally grow in proportion to their mix of income sources.

[26] The growth in retirement income mostly reflected the indexation of Social Security to the Consumer Price Index (CPI-U). During the late 1970s and early 1980s, the CPI-U rose faster than wages, raising the incomes of the elderly relative to those of workers. Because the CPI-U rose faster than the CPI-U-X1 used here to convert nominal incomes to constant 1988 dollars, this indexation is measured as real income growth.

[27] Most of the 1979–88 increase in the number of young family heads not in the labor force is accounted for by heads not working or not looking for work because they are caring for other family members. The remainder of the increase is young family heads who are not in the labor force because they are attending school. The latter group presumably has much better future job prospects than the former.

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