

Recent Real Income and Wage Trends in the United States

by Eugene Kroch

The decade of the 1980s has been described as one of the longest and most impressive periods of uninterrupted growth in U.S. history. From the cyclical peak of 1979 through 1989, real GNP grew almost 3 percent per year; from the recession of 1982 through 1989, it grew an impressive 3.5 percent per year, a rate not seen over such a long period since the 1960s boom. Nevertheless, a number of analysts have suggested that these aggregate income growth rates are misleading indicators of how well the typical worker or household fared. Concern is especially great because during the 1980s real wages stagnated in the United States while they grew robustly in some of our major industrialized trading partners, such as Japan, Germany, and the United Kingdom.

Those who question whether living standards in the United States improved over the last decade note that real wages and salaries did not keep up with broader measures of real income. This article investigates this divergence by presenting the relevant real income and wage measures and by examining the economic factors underlying their movements. The most important of the trends considered are the increase in labor force participation, the rise in the share of income from nonlabor sources, and the decline in the real wages of nonsupervisory or production workers.

Contrasting income trends

Much confusion about U.S. real income trends arises from imprecise use of income measures and inappropriate comparisons of time periods. First, nominal income measures should be deflated by a common price index that reflects the purchasing power of income. Consumption-based deflators such as the consumer price index (CPI) are suitable for this purpose, but the specific choice of index makes very little difference. All the

usual indexes are derived from the same underlying Bureau of Labor Statistics (BLS) data and differ only marginally in the weights chosen to average price relatives. Second, secular trends should be isolated from business cycle movements. Comparing 1989 developments with the 1979 and 1973 peaks is informative, whereas comparing these same developments with the 1982 trough could be misleading. Third, not all income series have the same coverage or can be associated with comparable population groupings. Income series reported by the Commerce Department's Bureau of Economic Analysis (BEA) are not directly comparable with income measures compiled by the Census Bureau's Current Population Survey (CPS). BEA personal income includes income from all sources, while CPS income includes only money income.¹ Moreover, the BEA reports only aggregate income, whereas the CPS money income data are available for households, families, and individuals with income.²

Differences in the growth rates of alternative income measures can often be traced to the breadth of their coverage. The narrowest income measure discussed in this article is annual wages and salaries per worker for the entire work force, as reported in the National

¹Money income leaves out all forms of nonpecuniary income, such as employment fringe benefits and in-kind transfers (food stamps, medicare, medicaid) It is defined as "the algebraic sum of money wages and salaries, net income from self-employment, and income other than earnings." This last category includes transfer payments such as pensions, public assistance, unemployment insurance, and workmen's compensation, as well as unearned income on savings and investments and rents and royalties

²For a valuable discussion of the differences in income measures, see Paul Ryscavage, "Reconciling Divergent Trends in Real Income," *Monthly Labor Review*, July 1986, pp. 24-29, and, by the same author, "Understanding Real Income Trends: An Analysis of Conflicting Signals," *Business Economics*, January 1989, pp. 36-42

Income and Product Accounts (NIPA). A somewhat broader measure of labor income is the NIPA series on total compensation per worker, which includes the cost of nonpecuniary fringe benefits such as employer-provided health plans.³ Since 1979, when the BLS's Employment Cost Index began keeping track of non-wage and salary compensation, fringe benefits have grown at least 20 percent faster than wages and salaries each year. The broadest measure of income is the NIPA's personal income, which adds proprietors' income, dividends, rents, and transfers to compensation, but subtracts employer contributions for social insurance.

Using consistent standards of comparison helps to highlight the contrasting income trends. Broadly defined per capita incomes in the United States have grown much faster than wages and salaries. This divergence is illustrated in Chart 1, which tracks alternative income measures deflated by the CPI⁴ and normalized to 100 in

1973. The year 1973 is a suitable base because it represents both a cyclical peak and a longer period turning point for all income measures. Since 1973 both the BEA's real per capita personal income and the CPS's per capita money income have grown briskly, although at rates somewhat lower than those before 1973. By contrast, wages and salaries per worker have stagnated since 1973, actually falling from 1973 to 1979 before recovering between 1979 and 1989. What little growth occurred in compensation came in the form of nonwage supplements such as fringe benefits. Growth in nonpecuniary compensation was enough to keep total compensation from falling between 1973 and 1979 and to make it grow a total of about 4 percent from 1979 to 1989.

The divergence between the growth of real per capita personal income and the growth in worker income can be broken down into two factors: growth of the labor force participation rate and the change in compensation's share of personal income. Table 1 shows the decomposition as a simple growth-accounting identity. Most of the growth of per capita personal income in the United States over the last twenty-five years has been due to the rapid expansion of jobs relative to the population. This has been especially true for the period from 1973 to 1979, when annual employment growth exceeded population growth by 1.5 percentage points.⁵ During the period following 1979 this differential narrowed to 0.7 percentage point. Nevertheless, the total differential between the growth rates of personal income per capita and of compensation per worker was maintained because the compensation share of income

³Employer payments for fringe benefits are included in the compensation component of the NIPA, but they do not appear in the Census Bureau's CPS reports on individuals or households. Nevertheless, these forms of labor income are becoming increasingly important.

⁴To be consistent with the revision of the CPI in 1983, the retrospectively revised CPI-U-X1 is used to deflate income values before 1983. For a broader discussion of these issues, see Eugene Kroch, "Tracking Inflation in the Service Sector," in this issue of the *Quarterly Review*. Some have argued that the Personal Consumption Expenditure deflator is a better measure because it does not tend to overstate inflation as much as a fixed-weight index such as the

Footnote 4 continued
CPI. However, current-weight deflators include quantity effects as well as price effects and can understate inflation.

⁵Almost two-thirds of this employment growth was accounted for by women, whose working ranks grew by almost 62 percent, while male workers increased by about 23 percent. Since 1973 the overall labor force participation rate rose from 61 percent to 67 percent, it increased from about 45 percent to 58 percent for women, while for men it fell from 79 percent to 76 percent.

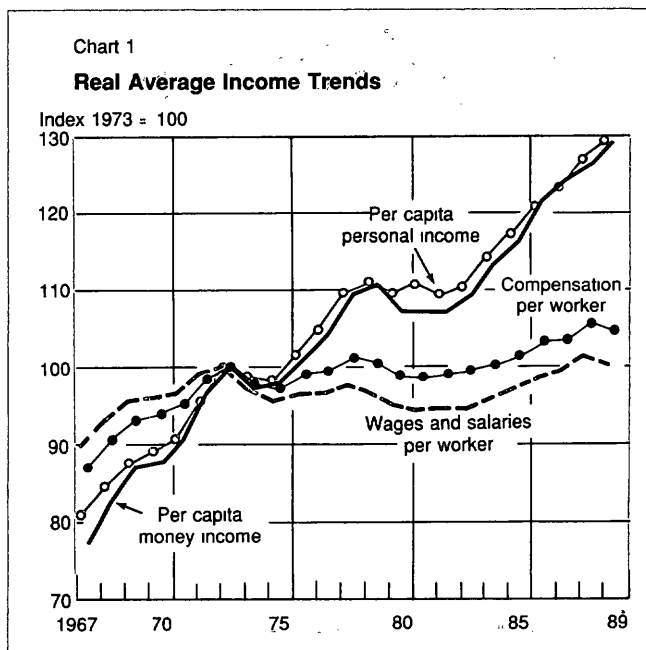


Table 1

Annual Average Growth Rates

	1967-73	1973-79	1979-89
Per capita annual income plus compensation share of income	4.3	1.7	1.6
minus worker-to-population ratio equals compensation per worker	-0.8	0.0	-0.5
	1.2	1.5	0.7
	2.3	0.1	0.4

Memo per worker wages and salaries

	1.8	-0.5	0.3
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declined, largely as a consequence of falling real hourly wage rates and the strong growth in income from non-labor sources

Wage trends

One important factor driving the decline in the compensation share of income and the slow growth in wages and salaries was the poor performance of hourly earnings for nonsupervisory and production workers in the private sector. Although by 1989 total work-force wages and salaries (including those for managers and supervisors) had returned to their 1973 levels (Chart 1), the average wages of nonsupervisory workers in the private sector actually declined during that interval nearly one-half of 1 percent per year after having grown about 2 percent per year during the period before 1973 (Chart 2). Table 2 shows that virtually all of the post-1973

decline occurred after 1979. The decline was less abrupt for year-round full-time workers,⁶ especially after 1979, indicating that the fringes of the labor force experienced the largest real wage declines.

The fall in hourly wage rates was exacerbated by a downward trend in hours per week or per year. Chart 2

⁶Female year-round full-time earnings have actually risen, even though the decline in male earnings more than offsets this trend. The male decline dominates, not only because the male decline is steeper than the female rise, but also because there are 50 percent more male than female workers and men still earn 50 percent more than women.

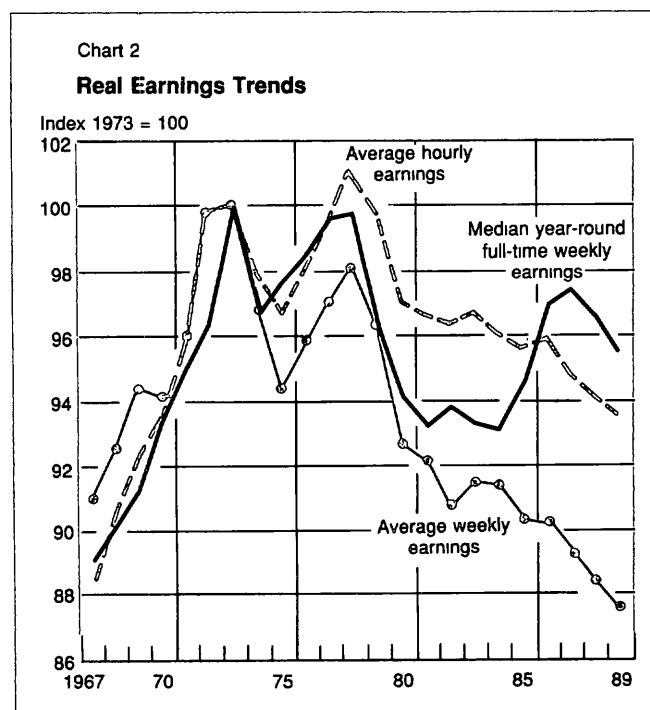


Table 2

Annual Average Growth Rates

	1967-73	1973-79	1979-89
Average hourly earnings	2.0	0.0	-0.7
Average weekly earnings	1.6	-0.6	-1.0
Median year-round full-time earnings	1.9	-0.6	-0.1

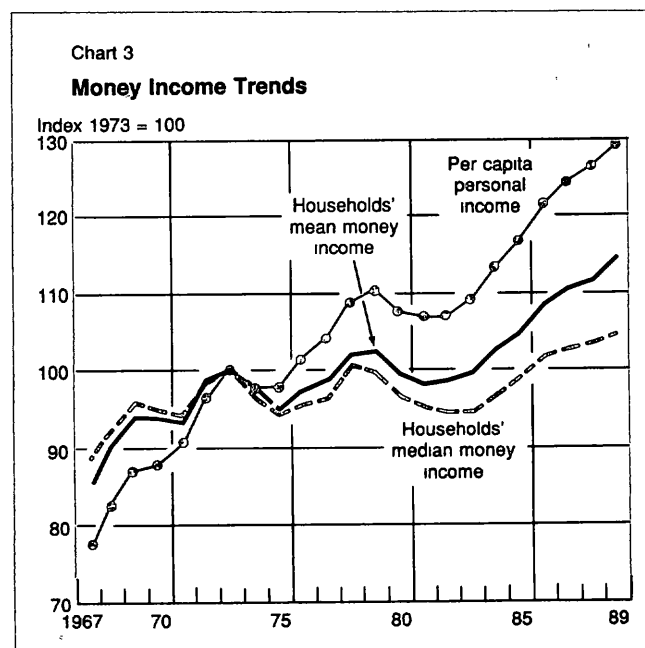


Table 3

Mean Family Money Income (1989 dollars)

Quintile	1973	1979	1989	Percent Change	
				1973-89	1979-89
Lowest	6,061	5,994	5,886	-3.2	-2.1
Second	15,416	15,306	15,107	-2.0	-1.3
Middle	25,909	25,609	25,823	-0.3	0.8
Fourth	37,946	38,680	40,374	6.4	4.4
Highest	66,364	68,230	77,716	17.1	13.9
Average	30,341	30,764	32,978	8.7	7.2

Source: U.S. Congress, Committee on Ways and Means, *Overview of Entitlement Programs* (Washington, D.C. Government Printing Office, 1991), p. 1184. These data are compiled from the Current Population Survey for March of 1974, 1980, and 1990.

shows that since 1973, a 6½ percent decline in mean hourly earnings has combined with a 6 percent decline in hours per week to lower weekly earnings by 12½ percent for all private nonagricultural, nonsupervisory workers. If the increase in leisure time—the flip side of the drop in hours worked—has value, clearly the weekly earnings decline overstates any decline in workers' true living standards. Hence, assessing living standards on the basis of weekly wage trends requires some judgment about how voluntary the decline in hours has been.⁷ (While secular declines in hours *may* be a consequence of the increased value of leisure time, cyclical declines in hours certainly do reflect involuntary reductions.⁸)

Household income trends

In many ways income trends are best understood from the standpoint of the basic economic unit, the family or household, rather than from that of the worker or the population at large. Annual household and family money income measures from the CPS have historically grown at about the same rate, especially since 1973. Although the family unit is technically a special type of household, the two are, of course, closely related in the data.⁹ Income per household has not grown as fast as per capita income, because of the steady decline in household size and the steady increase in the proportion of the population living outside of the family unit. Chart 3 shows that since 1973 household money income has grown about half as fast as per capita money income, with more of this differential occurring between 1973 and 1979 than since 1979.

Income per household has grown faster than per worker wages and salaries, however, because the number of workers per household has increased and the share of household income from sources other than labor has grown. Since 1973 the number of workers per household has increased more than 10 percent. The increase occurred largely between 1973 and 1979, a period that accounts for most of the difference between

household income growth and worker income growth since 1973.

The median rather than the mean income best shows how the typical household has fared, because it represents the income of the "middle" household and hence is not significantly affected by large shifts in the incomes of either very rich or very poor households. Chart 3 reveals that median household incomes have grown even more slowly than mean household incomes, especially since 1979. This finding suggests that the household income distribution has become more skewed toward the upper brackets. Table 3 documents this change in the distribution of family income since 1973. The table gives annual average money incomes by quintile. It shows that the rise in real family incomes has been driven by the top two quintiles at the expense of the bottom 40 percent of families. Income inequality increased markedly during the period from 1979 to 1989: the top quintile incomes grew almost 14 percent while the bottom quintile incomes contracted more than 2 percent. These trends are consistent with the decline in the labor earnings share of income (Table 1) and with the greater decline in nonsupervisory wage earnings (Chart 2).¹⁰

Conclusion

Over the past two decades, the growth rates of per capita income and per worker wages have diverged substantially in the United States. Although real wages have stagnated, rapid employment growth has caused personal incomes to expand. The bulk of the difference between per capita income growth and per worker compensation growth can be traced to the rapid growth in labor force participation, especially from 1973 to 1979. During the period since 1979, however, an increasingly important factor underlying the divergence has been the decline in the real hourly wage rates of nonsupervisory or production workers. This decline in the wage rates of production workers, together with an increase in the share of personal income from nonlabor sources, has contributed to the increase in income inequality in the United States during the 1980s.

⁷See Gary Burtless, *A Future of Lousy Jobs?* (Washington, D.C. Brookings Institution, 1990)

⁸Many economists have used hourly wage rates in this spirit to reflect the value of time and to impute income from nonmarket activities in order to broaden traditional measures of income. One of the most famous studies is by James Tobin and William Nordhaus, *Is Growth Obsolete?* National Bureau of Economic Research, 1972; for a more recent discussion, see Dale W. Jorgenson and Barbara Fraumeni, "Investment in Education and U.S. Economic Growth," in Charles Walker, Mark Bloomfield, and Margo Thorning, eds., *The U.S. Savings Challenge: Policy Options for Productivity and Growth* (Westview Press, 1990)

⁹Households can consist of a single individual or any number of individuals living together without regard to relationship. Families consist of two or more individuals related by kinship or marriage

¹⁰They are also consistent with the finding that the dispersion in real wages and salaries has increased since the early 1970s. See Barry Bluestone and Bennett Harrison, "The Great American Jobs Machine: The Proliferation of Low Wage Employment in the U.S. Economy," a study prepared for the Joint Economic Committee of the U.S. Congress, 1986. This report led to a raft of publications largely corroborating its findings and searching for explanations, including Harrison and Bluestone's "Wage Polarization in the U.S. and the 'Flexibility' Debate," *Cambridge Journal of Economics*, vol. 14, no. 3 (September 1990), pp. 351-73. An excellent collection of related articles can be found in John D. Kasarda, ed., *Jobs, Earnings, and Employment Growth Policies in the United States* (Boston: Kluwer Academic Publications, 1990)