Income Progress across the American Income Distribution, 2000-2005

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by

GARY BURTLESS*

* John C. and Nancy D. Whitehead Chair in Economic Studies, The Brookings Institution, 1775 Massachusetts Avenue, N.W., Washington, D.C., 20036. I gratefully acknowledge the excellent research assistance of Charles Baschnagel in preparing this testimony. The views expressed are solely my own and should not be ascribed to the staff or trustees of the Brookings Institution.

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GARY BURTLESS
The Brookings Institution

Summary

Since the end of the last recession the American economy has grown at a moderate pace. Standard measures of income progress show decent levels of overall improvement. GDP per capita measured in constant prices increased 1.5% a year from the end of the most recent business cycle peak in 2000 through 2006. In the same six-year period real disposable income per person rose 1.4% a year, and real personal consumption per person increased even faster – 2.1% a year. Of course, income gains were considerably faster in other recent periods, including the late 1980s and late 1990s. Those periods did not include a recession, however. If we look at income gains at the same point in the last economic recovery, the gains of the past six years look reasonably good. Between 1989 and 1995, for example, real GDP per capita increased only 1.1% a year and real disposable personal income rose just 0.8% a year.

The recent gains in average income and consumption do not seem to be making much impression on average Americans. A CBS News poll in mid-April 2007 shows that large majorities of adults believe the U.S. middle class is falling behind. When asked whether life for the middle class over the past 10 years has gotten better, worse, or remained the same, 59% of respondents said the situation of the middle class has worsened. Only 30% thought life for the middle class has gotten better. (CBS News, "CBS Poll: The Middle Class Squeeze," http://www.cbsnews.com/stories/2007/04/15/opinion/polls/printable2684929.shtml, downloaded May 8, 2007).

There are three main reasons economy-wide income gains in the current recovery do not translate into an impression of improved well-being for most members of the middle class. One reason is that in a dynamic economy many individuals experience income reverses even when the economy is growing. Millions of workers lose their jobs or see their real wages fall every year, though the economy may be expanding. The income reverses of some Americans should be more than counterbalanced by income gains experienced by prospering families, however. A second reason respondents may be gloomy about their income progress is that some income gains or improvements in consumption are not very obvious. For example, a large part of the gain in consumption and a portion of the recent rise in labor compensation has been fueled by rapid increases in medical consumption and employer-paid health insurance premiums. These consumption gains are reflected in aggregate consumption statistics, and the premium increases are reflected in statistics on real compensation. Since we do not see this consumption reflected in our money incomes and because workers seldom know how much their employers are paying for insurance premiums, most of the consumption and income gains arising from health care are invisible to most Americans. Indeed, many people are increasingly fearful about their ability to obtain good insurance if they lose their jobs or become seriously ill.

Finally, incomes are growing less equal. Over the past quarter century Americans at the top of the income distribution have seen much faster income growth than people in the middle class. If average income grows 1% a year and top earners enjoy gains of 2% a year, many people in the middle and bottom will see their incomes grow much more slowly than 1% a year. Top income earners experienced sharp income declines in the last recession, but in the last couple of years their incomes have rebounded strongly. This reinforces the impression that the gains from prosperity have flowed disproportionately to people at the top rather than in the middle of the distribution. On an after-tax basis, however, Americans across the distribution have derived notable benefits from recent tax cuts. For many middle class families the cuts have made the difference between suffering a loss and experiencing a gain in spendable income.

Income trends

The United States entered recession in early 2001. Not surprisingly, the recession slowed the robust income growth the nation enjoyed in the late 1990s. Chart 1 shows trends in real income and real consumption over the full business cycle in 1989-2000 and during the partial business cycle from 2000 to 2006. Real income and consumption are measured using the Bureau of Economic Analysis's National Income and Products Accounts (NIPA) data (last updated by BEA on April 27, 2007). The BEA's best known measure of income is personal disposable income, that is, personal income after tax payments are subtracted. Its best known measure of consumption is personal consumption expenditures. In order to estimate income and consumption in constant prices, BEA constructs a deflator based on chained prices. The inflation-adjusted estimates are then divided by the number of U.S. residents to determine real income and real personal consumption per capita. Chart 1 shows trends over the 1989-2006 period using per capita income and per capita consumption in the year 2000 as benchmarks.

Disposable income per person rose 8.9% (or 1.4% a year) in the six years after 2000, and personal consumption expenditures per person increased 13.1% (or 2.1% a year). Consumption rose faster than income because households reduced their saving rate or sold some of their assets in order to pay for part of their consumption. Although income and consumption growth after 2000 are slower than they were in the late 1990s, they are faster than they were in the first five or six years after 1989, a period that also included a recession.

The data in Chart 1 are featured prominently in the nation's newspapers and business magazines, and they provide timely information about income and consumption changes in the aggregate. They do not tell us how incomes or consumption are changing for individual households, however. The best known statistics on progress in living standards for individual households are based on the Census Bureau's annual income survey, conducted as part of its Current Population Survey (CPS). The Census Bureau uses income reports from the survey to estimate the poverty rate and the distribution of personal and household incomes. The income reports from household surveys show much less improvement in income than the BEA estimates. In fact, the Census estimates through 2005 show real household money income actually fell after 2000.

Chart 2 shows trends in the total amount of money income reported in the Census household survey divided by the number of persons represented in the survey. The Census Bureau converts incomes reported in different years into constant dollars by deflating each year's incomes using the CPI-U-RS deflator. This price deflator is constructed using consistent methods that reflect those currently used by the Bureau of Labor Statistics to measure consumer inflation. For purposes of comparison, Chart 2 also shows the trend in real personal disposable income per person as estimated by the BEA. The two income series show a similar rate of real income improvement between the business cycle peaks in 1989 and 2000. The two series show very different trends between 2000 and 2005. Whereas the BEA measure of income increased 10.2% between 2000 and 2005, the Census Bureau's measure fell 1.2%. Since average income reported in the Census survey declined, it is not surprising that the median reported income shrank as well. Bear in mind that the Census Bureau's household income survey is the main source of information about how middle class Americans are faring. Unlike the NIPA data compiled by the BEA, the Census data reflect the experiences of individual households.

Part of the difference between the BEA and Census Bureau estimates of average income growth can be explained by the differences in the income concepts the two agencies use. The Census Bureau's best known measure of household income, "money income," includes gross earnings, income from investments (except capital gains), pensions, Social Security payments, and other government cash benefits. Nearly all of these income components are also included in the BEA estimate of disposable personal income. However, in addition the BEA counts non-cash benefits, such as food stamps, housing subsidies and medical care received from the government, as well as employer contributions to health and pension plans, and it subtracts payroll and personal tax payments.

The last of these elements – personal taxes – has been particularly important since 2000. Congress and the Administration reduced federal taxes after 2000, increasing disposable income as a proportion of total personal income. Contributing to this trend, a sharp decline in capital gains income after 2000 reduced income tax collections relative to total personal income. In combination, these two developments reduced households' personal tax payments and social insurance contributions from 18.9% of personal income in 2000 to 15.1% of personal income in 2004.[1] The share of personal taxes and household social insurance contributions in total personal income has recovered somewhat, reaching 16.1% in 2005 and 16.9% in 2006, but it remains well below the level in 2000. This means, of course, that the Census Bureau's standard estimate of income improvement based on the concept of money income understates the after-tax income gains enjoyed by Americans.

In addition to the tax cuts, there have also been notable changes in other income components that affect the difference between disposable personal income and average money income. The BEA's estimate of personal income includes employers' contributions for health insurance and pension plans. These items are excluded from the Census Bureau's money income measure. Indeed, few American workers probably know how much their employers contribute to these welfare plans. Both kinds of contributions have risen much faster than money wages since 2000.

Estimates by both the Bureau of Labor Statistics, using employer surveys, and the BEA show that average real compensation and wages increased between 2000 and 2005. Compensation per hour and for a full-time equivalent worker increased slightly faster than 1.1% a year. Money wages, which is the most important component of compensation, increased only 0.4% a year. Chart 3 shows why the growth in wages was so much slower than the growth in total compensation. The calculations are based on BEA estimates reported in the NIPA. Measured in 2005 prices, the real compensation of an average full-time equivalent employee rose $2,975, or 5.6%, between 2000 and 2005. Only 29% of the increase, or $849, was received by workers in the form of higher money wages. One quarter was paid out by employers as higher contributions to pension and profit-sharing plans, and slightly more than one third was paid as higher contributions to employer-sponsored health insurance plans. The remaining 12% of employer compensation costs was paid out as higher social insurance contributions and other miscellaneous costs. From the point of view of income measurement, less than a third of the increase in employer compensation payments is reflected in the Census Bureau's measure of

[1] BEA, NIPA Table 2.1, lines 1, 8, 24, and 25, downloaded May 7, 2007.

money income. Nearly 60% of the increase in employee compensation is included in the BEA's estimate of disposable personal income but is not reflected in the Census Bureau estimate of money income.

We do not have information on how hourly compensation gains varied up and down the household income distribution, but we do have good estimates of the pattern of real wage changes across the wage distribution. Every month the Bureau of Labor Statistics asks one quarter of wage earners interviewed in the Current Population Survey to report their hourly pay.[2] The Economic Policy Institute tabulates and publishes a distributional analysis of workers' responses. Chart 4 shows estimates derived from the EPI analyses. Both panels in the chart show annual rates of real wage growth at selected points in the hourly earnings distribution. The top panel shows estimated wage changes between 2000 and 2005. For comparison purposes, the bottom panel shows similar estimates for the last full business cycle, 1989-2000. While annual wage growth has slowed since 2000, the slowdown has been greater at the bottom of the distribution than in the middle or at the top. The 10th percentile wage increased 1.1% a year between 1989 and 2000 but only 0.1% a year between 2000 and 2005. Workers earning the median wage saw their hourly earnings climb about as fast between 2000-2005 as in the 11 years before 2000. Both in the 1990s and in the years after 2000, wage gains were faster among the top 10% of wage earners than they were among workers earning lower pay. In the most recent period, however, total compensation – including employer contributions for pensions, health insurance, and social insurance – increased much faster than money wages. In both periods, workers near the middle of the wage distribution obtained hourly wage gains averaging about 0.5% a year.

The wage changes shown in Table 1 reflect rates of change in hourly earnings. Family living standards are determined by employment and paid hours of work as well as the hourly wage rate. The recession reduced employment rates, and employment and labor force participation have not yet returned to their 2000 peaks. Between 2000 and 2005 the percentage of adults who are employed dropped 1.7 percentage points (2.7%). Even if real money wages per hour or per full-time equivalent worker continued to rise, the fall in the employment-population ratio will tend to reduce the living standards of families that now lack a working breadwinner. A small part of the decline in employment is due to population aging, which increases the proportion of adults in age groups where employment is less common. Another part is due to higher involuntary unemployment. Finally, some adults, especially those less than age 30, have withdrawn from the active labor force. It is unclear whether their withdrawal from the labor force indicates dissatisfaction with current job opportunities or a decision to invest in more education or training. In any case, the drop in adult employment has reduced the labor earnings of many households.

In sum, Census statistics on money income offer a much more pessimistic picture of the trend in U.S. living standards than the NIPA statistics. One reason for the difference is definitional. The two income statistics cover different income components. The NIPA statistics offer a more comprehensive picture of the trend in total income and consumption, but they do

[2] The wage reports in this household survey will not necessarily correspond with BLS wage estimates obtained in employer surveys or BEA estimates based on wage data in the NIPA.

not allow us to measure the situation of individual households, including families near the middle of the income distribution. The shortcomings of the standard Census money income statistics are even more glaring, however. These statistics do not reflect changes in family tax burdens, and in recent years such changes have had an important effect on net household income (see below). In addition, money income statistics do not reflect the important and growing role of health insurance and medical care spending. Insurance has a major effect on household consumption, because most health care consumption is paid for with employer- or government-financed insurance. Employer premiums for this consumption are excluded from the Census Bureau's estimate of money income, and so are the government insurance payments that finance about 45% of all health consumption.

Most observers agree that tax burdens should be taken into account when measuring the distribution and trend of family well-being. There is less agreement on how we should view unrecorded income that pays for health care consumption. If higher spending on medical care produces improved health outcomes, the increase in spending should certainly be included when we measure the trend in living standards. Employers' health insurance premiums as well as public spending on health insurance must be added to other family income sources when counting up family resources, and this is not done in the standard Census Bureau measure of money income. If we made adjustments in the standard money income statistics to reflect health consumption that is not paid for out of consumers' incomes, the recent trend in U.S. living standards would look more positive.

Many people are skeptical, however, that higher medical spending has resulted in better health care or improved health outcomes. If this suspicion is correct, the NIPA measures of average income and consumption growth may overstate the improvement in average U.S. well-being. The rise in medical costs and health care spending poses another important question for measuring American living standards: How do we assess the situation of middle class families who lack health insurance or think they are at risk of losing the insurance they have? When health spending was low and insurance comparatively inexpensive, the difference between insured and uninsured families had smaller financial implications than is the case today. A middle income family without access to a group insurance plan must now decide whether to buy a very expensive non-group policy or face the risk of a serious illness without any insurance protection. Choosing to buy health insurance greatly reduces the income left over to pay for other necessities. Choosing to remain uninsured potentially exposes the family to bankruptcy if a family member becomes seriously sick or injured.

The tax cuts

Changes in tax law enacted between 2001 and 2003 reduced federal tax burdens. Many critics of the tax cuts believe that they were tilted in favor of high-income taxpayers, reducing the benefits conferred on middle class families. This may be true, but estimates by both the Census Bureau and the Congressional Budget Office show that lower tax burdens after 2000 helped boost the incomes of households in most parts of the income distribution.

One way to calculate how tax burdens changed across the income distribution is to use the Census Bureau's imputations of federal taxes on the public use versions of the household survey files. Chart 5 shows my estimates using information in the CPS files covering household

incomes in 2000 and 2005. I estimate federal taxes as a percent of personal money income. This income definition includes all the components included in the Census Bureau's "money income" definition – wages, self-employment earnings, investment income (except capital gains), and cash social insurance and government benefits. I adjust the estimate of household money income in order to obtain a more meaningful measure of living standards, one that reflects the impact of the number of family members who share the household's income.[3] Every person in the population is then ranked from lowest to highest by his or her adjusted money income. The federal tax burden, which includes the federal income tax, the employee's portion of the FICA tax, and the Earned Income Credit, is calculated as a percentage of the person's adjusted money income. In the chart I show the federal tax burden for persons ranked from lowest to highest on the income scale. Since the income reports and tax imputations for people with very low and very high incomes are unreliable, these are not presented in the chart.

Chart 5 shows, as expected, that federal tax burdens are negative for Americans with limited incomes. For many breadwinners with low earnings, the refundable Earned Income Credit is bigger than the person's combined FICA and personal income tax liabilities. At higher income levels, tax burdens rise as a percentage of money income. According to the Census Bureau's imputations of federal taxes, a person in the exact middle of the money income distribution paid 12.7% of money income in federal taxes in 2000. This percentage fell to 11.1% in 2005. The fall in federal tax burdens – about 1.5% of the person's money income – helped offset some of the drop in money income experienced by middle income Americans. The Census Bureau's tax imputations show that between 2000 and 2005 the tax burden fell 1.1% of money income at the 25th percentile and 1.3% and 1.8%, respectively, at the 75th and 90th percentiles. The Bureau's calculations imply that the tax reductions typically raised net incomes more at higher income levels, but the reductions were proportionately larger when measured as a fraction of 2000 tax liabilities for people in the lower ranks of the distribution. Whether or not this pattern of tax cuts is fair, middle class Americans clearly enjoyed higher net incomes in 2005 than they would have if the federal tax code had been left unchanged.

The Congressional Budget Office has published tax burden calculations based on a more comprehensive measure of income than is possible using the Census Bureau survey files alone. The CBO analysis file combines records from the CPS files with statistically matched records from IRS tax files, permitting analysts to use much more accurate income estimates for high income tax payers and more reliable information about the actual tax liabilities faced by individual tax payers.[4] The most recent CBO analysis ends in 2004. It shows that changes in tax

[3] "Adjusted personal income" is simply the total amount of a household's income divided by the square root of the number of household members. Every person in a household is assumed to receive the identical amount of "adjusted personal income." This adjustment allows us to rank every person in the population using a meaningful measure of his or her economic well-being. The tax burden is estimated after performing the same household-size adjustment. That is, the Census Bureau's estimate of the household's federal tax liabilities is divided by the square root of the number of household members.

[4] For a description of the methodology, see Congressional Budget Office, *Effective Federal Tax Rates, 1979–1997* (October 2001) and *Effective Federal Tax Rates, 1997 to 2000* (August 2003).

burdens between 2000 and 2004 had a noticeable effect on the trend in after-tax incomes. After-tax incomes rose faster or fell more slowly than pre-tax incomes.

Table 1 shows estimates of real income change between 2000-2004 using three different concepts of income. The top row shows the Census Bureau's estimates of average income change in different intervals of the household income distribution. These estimates are derived using the Bureau's standard measure of (pre-tax) money income. Households are not weighted according to household size, which means that a household containing a single person is treated as equivalent to a household containing six members. When households are ranked by their incomes and placed in five equal-size groups, the households with the lowest incomes are found to have experienced the largest percentage losses between 2000 and 2004. Their losses amounted to 8.1% of the average income they received in 2000. Households in the middle fifth of the income distribution experienced an income decline of 4.1%, and households in the top fifth saw real incomes fall by 3.0%. Interestingly, income losses in the top 5% of households were larger than those experienced by households in the middle.

The second row in Table 1 shows the CBO estimates of change in personal pre-tax income. Instead of estimating income changes among fifths of U.S. households, the CBO estimates changes in equal-size groups of people. Like the estimates displayed in Chart 5, the CBO estimates in Table 1 use a household-size adjustment to reflect differences in household spending needs. (Household incomes are divided by the square root of household size to derive an estimate of personal income.) The CBO income measure is also more comprehensive than the Census Bureau's money income measure. For example, it includes an estimate of the value of employer-provided fringe benefits, benefits that are excluded from money income. When estimating income changes on a before-tax basis, CBO finds smaller income losses than reported by the Census Bureau except at the very top of the income distribution. The pattern of income losses roughly mirrors the pattern found in the Census Bureau's money income tabulations. Income reductions are bigger at both the top and bottom of the income distribution than they are in the middle. However, the CBO estimates that Americans receiving incomes in the middle three fifths of the distribution experienced modest gains or only small reductions in income between 2000 and 2004. This highlights the importance of employer fringe benefits and insurance in assessing recent trends in family well-being.

The bottom row shows CBO estimates of income change on an after-tax basis. Income losses are smaller and income gains are larger when changes are calculated using net or post-tax incomes. These estimates imply that changes in tax burdens are an important reason that income losses are smaller or income gains are bigger as a result of the tax changes. The trend in middle class living standards unquestionably looks better in the bottom row of Table 1 than in the top row.

Net income changes

I do not have access to the excellent CBO data files containing statistically matched CPS and IRS tax records. These files offer analysts the most reliable source of information about the distribution of tax burdens and after-tax incomes using a comprehensive measure of income. However, the Census Bureau has recently released a statistical file containing estimates of household tax liabilities and non-cash income sources in 2005. Using these data along with

identical information for earlier years, it is possible to estimate real income changes under the Bureau's standard money income measure and under alternative income definitions. In addition, the data can be used to examine the distribution of living standards at the person level rather than at the household level.

Chart 6 shows my estimates of 2000-2005 income changes at successive points in the U.S. income distribution using two different income measures. Income changes at a particular point in the income distribution are measured as a percentage of the income recorded at the same point in 2000. The top panel shows the percentage change in (pre-tax) money income, while the bottom panel shows the percentage change in after-tax cash plus near-cash income.[5] In the top panel, for example, I find that a person at the 6th percentile of the 2005 pre-tax distribution received an income that was 12% below that received by a 6th-percentile person in the 2000 distribution. A person receiving the median pre-tax income in 2005 received an income that was 3% less than the median pre-tax income in 2000. Only near the top of the pre-tax income distribution were income losses smaller than 1%. Clearly, the trend in pre-tax money incomes tended to favor Americans in the upper part of the pre-tax income distribution.

The lower panel in Chart 6 shows income changes when incomes are measured on an after-tax basis and when incomes are defined to include near-cash transfers (mainly food stamp benefits and public housing subsidies). The estimates in this panel indicate that net incomes declined in the bottom 60% of the U.S. income distribution and increased in the top 40%. Although the shapes of the distributions in the top and bottom panels are similar, a close comparison of the two panels shows that income progress has been faster – or income losses smaller – when income changes are measured using a more comprehensive income definition that subtracts tax payments from income.

For purposes of comparison, Chart 7 shows percentage changes in real after-tax incomes during two long business cycles, 1979-1989 and 1989-2000. As in Chart 6, every point along the line indicates the percentage change in real income between two calendar years. In Chart 7 the two years represent cyclical peaks in successive business cycles. The dark upward-sloping line shows income gains over the 1979-1989 cycle. After-tax cash plus near-cash incomes fell in the bottom 15% of the income distribution and rose by successively larger percentage amounts at higher points in the distribution. U.S. income inequality increased dramatically over the 1980s. The U-shaped curve in Chart 7 shows income changes in the 1989-2000 business cycle. Incomes increased at every point in the distribution, but they increased faster at the top and bottom of the distribution than they did in the middle. The proportional income gap dividing low- and middle-income Americans shrank during the 1990s, but the gap separating middle-income and very high income people widened. A common pattern in both business cycles is that high-income Americans enjoyed faster income gains than people with a lower rank in the distribution. This same pattern is repeated in the 2000-2005 period.

[5] Once again, incomes are measured on a person-level basis using household-size-adjusted incomes. The estimates are based in household income reports in the 2001 and 2006 CPS files, which reflect annual household incomes in 2000 and 2005, respectively.

The pattern of income changes displayed in Chart 6 is more similar to changes in the 1980s than it is to changes in the 1990s. As in the 1980s, real income gains are larger in percentage terms as we move up the income distribution. At the bottom of the income distribution, real incomes have shrunk rather than grown.

One mystery in Chart 6 is why average income gains have been so slow and why people in so many parts of the income distribution have seen a decline in real average incomes. Chart 1 shows that *average* income and consumption has increased at least moderately since 2000. Why have after-tax incomes in the middle and at the bottom of the distribution shrunk?

Wider income inequality tends to increase the proportion of people who experience below-average gains in income. If overall income rises 1% a year and Americans in the top one-fifth of the income distribution receive income gains of 1.5% a year, there would be very little income growth left to share among the Americans in the bottom four-fifths of the distribution. Under these assumptions, incomes in the bottom four-tenths of the income distribution could only rise 0.5% a year. (This calculation assumes the distribution of income follows the pattern of household money income reported by the Census Bureau for 2005.) Even though average income growth is 1% a year, four-fifths of the population will experience income growth that is only half as fast as the average rate of growth for the population at large. Income growth in the first half of this decade, and especially in the past three years, has displayed a pronounced pattern of unequal income gains. Unfortunately, this is the same pattern of income change we saw in the 1980s, a period when inequality widened and living standards at the bottom of the income distribution fell.

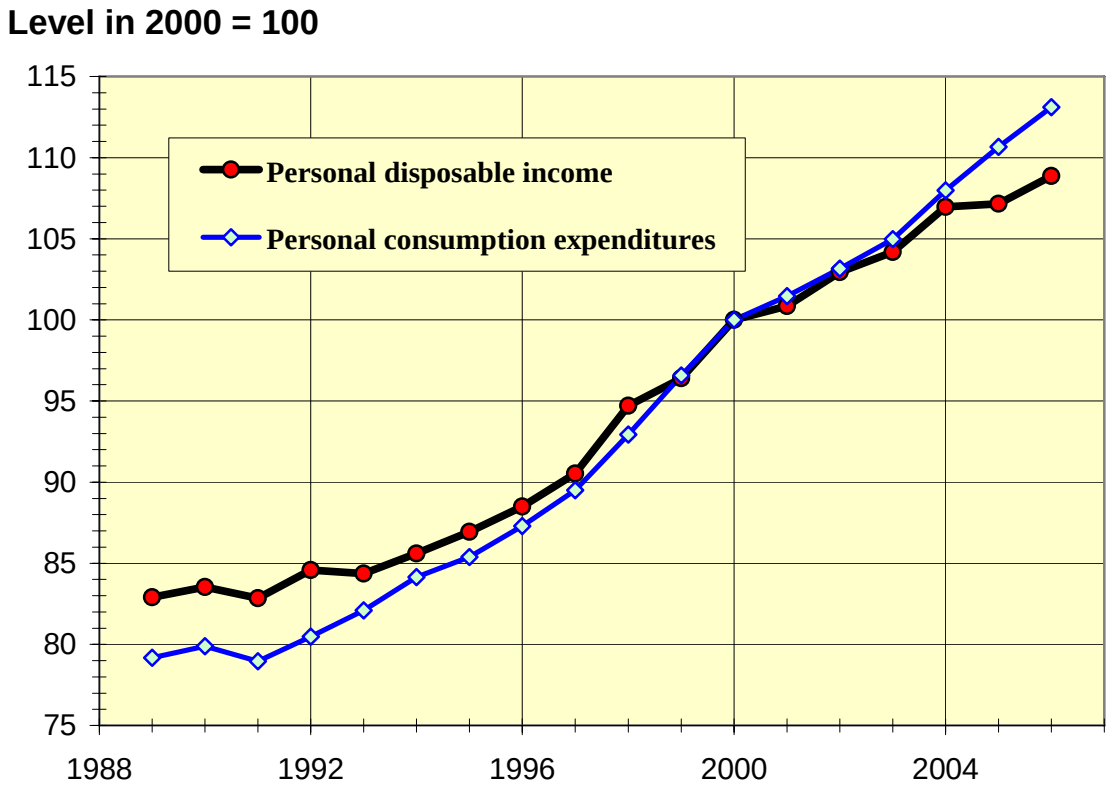
Table 1. Percent Change in Real Income at Different Positions in Income Distribution, 2000-2004

Percent

	Interval in the income distribution					
	Bottom fifth	Second	Middle fifth	Fourth	Top fifth	Top 5%
Census Bureau - Households						
1. Money income	-8.1	-5.8	-4.1	-2.8	-3.0	-4.7
CBO - Persons						
2. Comprehensive, before-tax	-4.3	-0.5	2.0	0.0	-3.8	-6.8
3. Comprehensive, after-tax	-2.0	2.8	5.4	4.0	0.0	-3.5

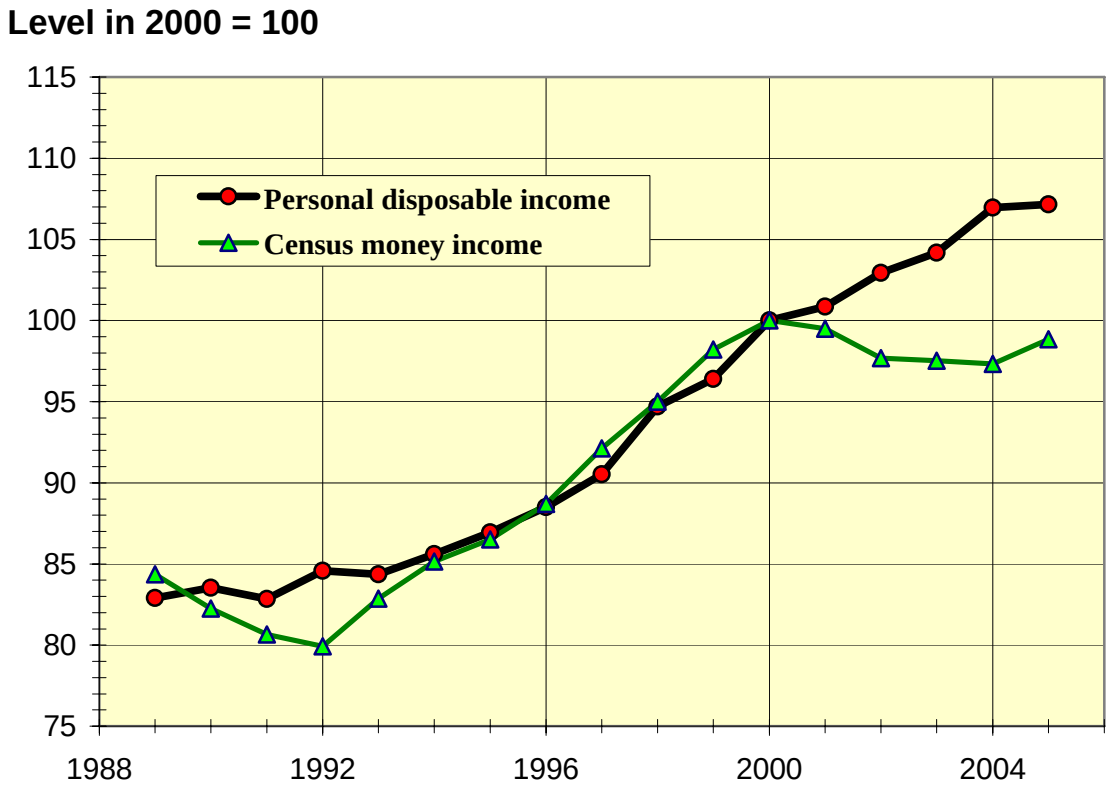
Source: Author's tabulations of U.S. Census Bureau data on household incomes (http://www.census.gov/hhes/www/income/histinc/h03ar.html) and CBO data on pre- and post-tax incomes (http://www.cbo.gov/ftpdocs/77xx/doc7718/SupplementalTables.xls, Table 1C.)

Chart 1. Trends in Real Disposable Income and Real Personal Consumption Expenditures Per Person, 1989-2006



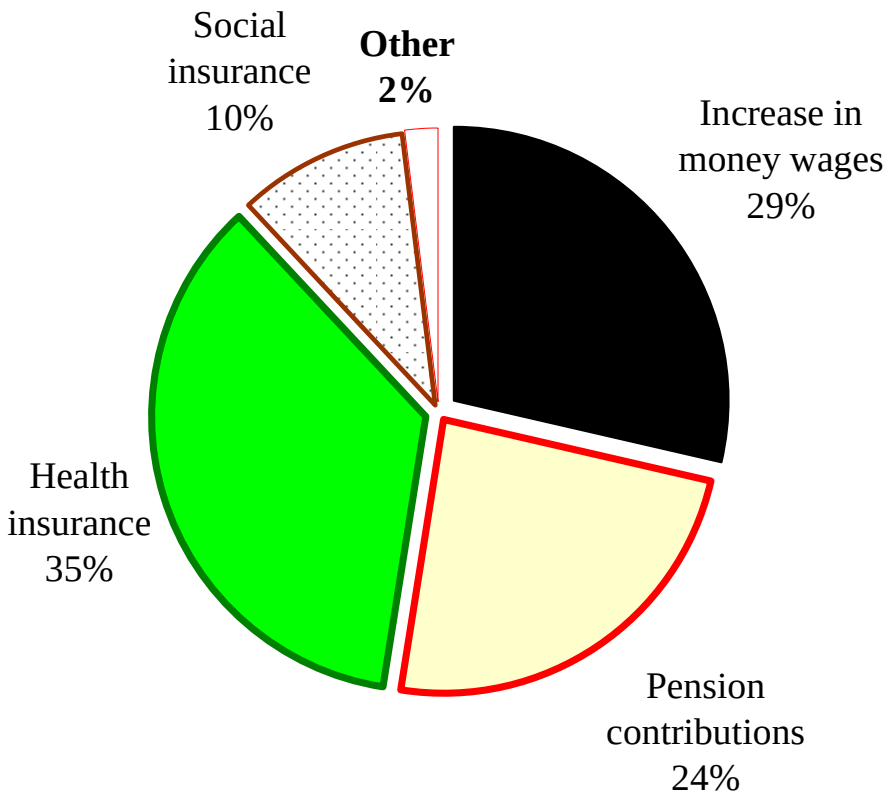
Source: Author's tabulations of U.S. National Income and Product Account (NIPA) data from Bureau of Economic Analsysis, downloaded May 5, 2007.

Chart 2. Trends in Real Disposable Income and Real Money Income Per Person, 1989-2005



Source: Author's tabulations of U.S. National Income and Product Account (NIPA) data from Bureau of Economic Analsysis, downloaded May 5, 2007, and U.S. Census Bureau household money income statistics.

Chart 3. The real average compensation paid to a full-time U.S. worker increased almost $3,000 between 2000 and 2005. Where did the increase go?

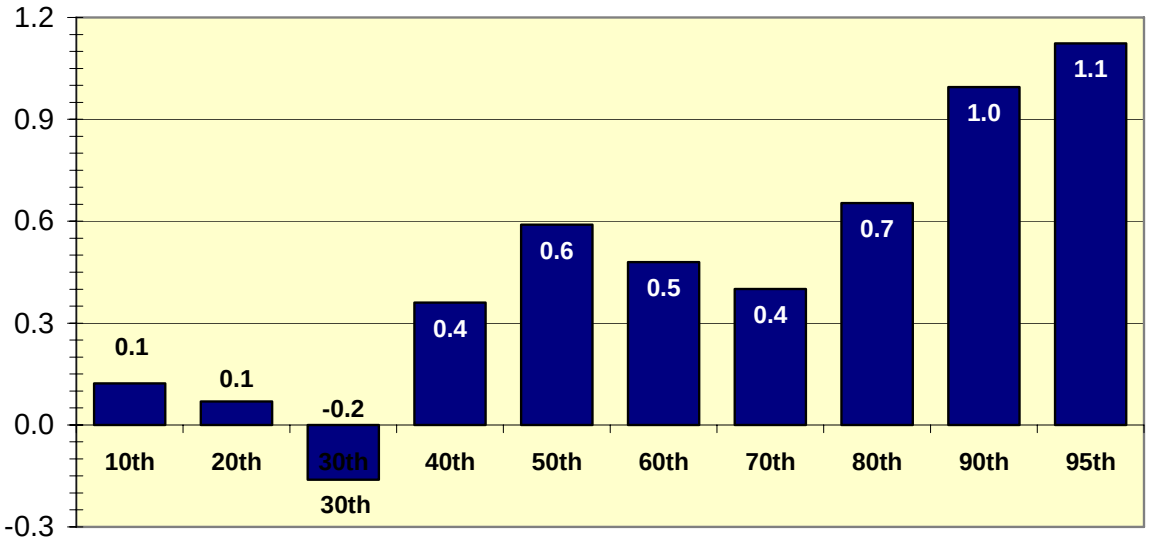


Note: Between 2000 and 2005 money wages increased $849 (or 1.9% of real wages in 2000); employer pension contributions increased $710 (34% of pension contributions in 2000); employer health insurance premiums increased $1,061 (35% of premiums in 2000); and employer social insurance contributions increased $293 (9% of contributions in 2000). Real compensation per worker, deflated using the CPI-U-RS, increased $2,975 (5.6% of compensation in 2000).

Source: Author's tabulations of Bureau of Economic Analysis, national income and product accounts data (NIPA Tables 2.1, 6.6, and 7.8, downladed May 6, 2007).

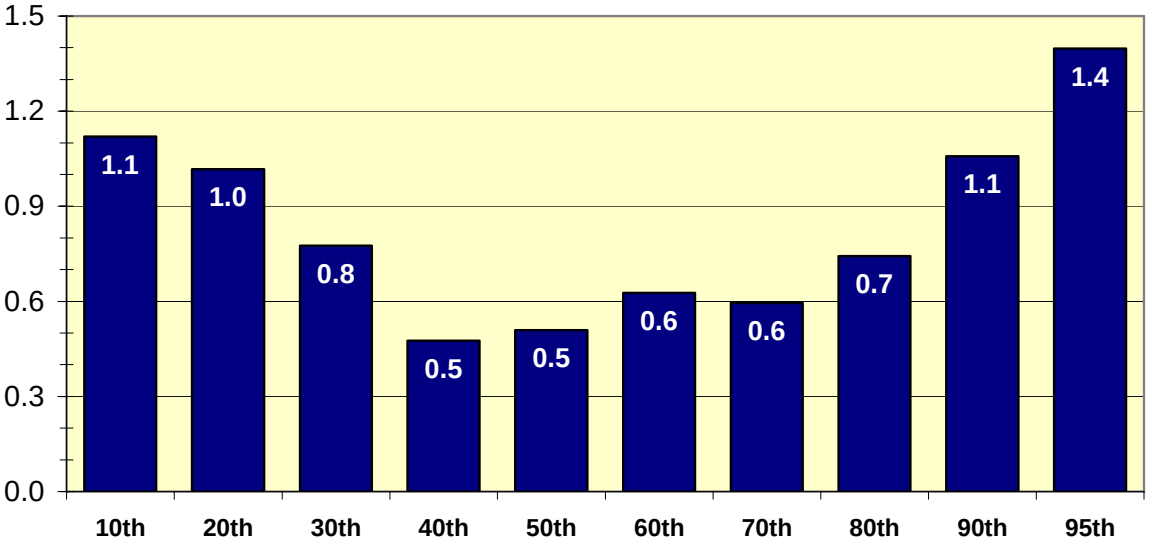
Chart 4. Trends in Real Hourly Earnings at Selected Points in the Wage Distribution, 2000-2005 and 1989-2000

Annual percent change in real hourly wage, 2000-2005



Percentile of hourly wage distribution

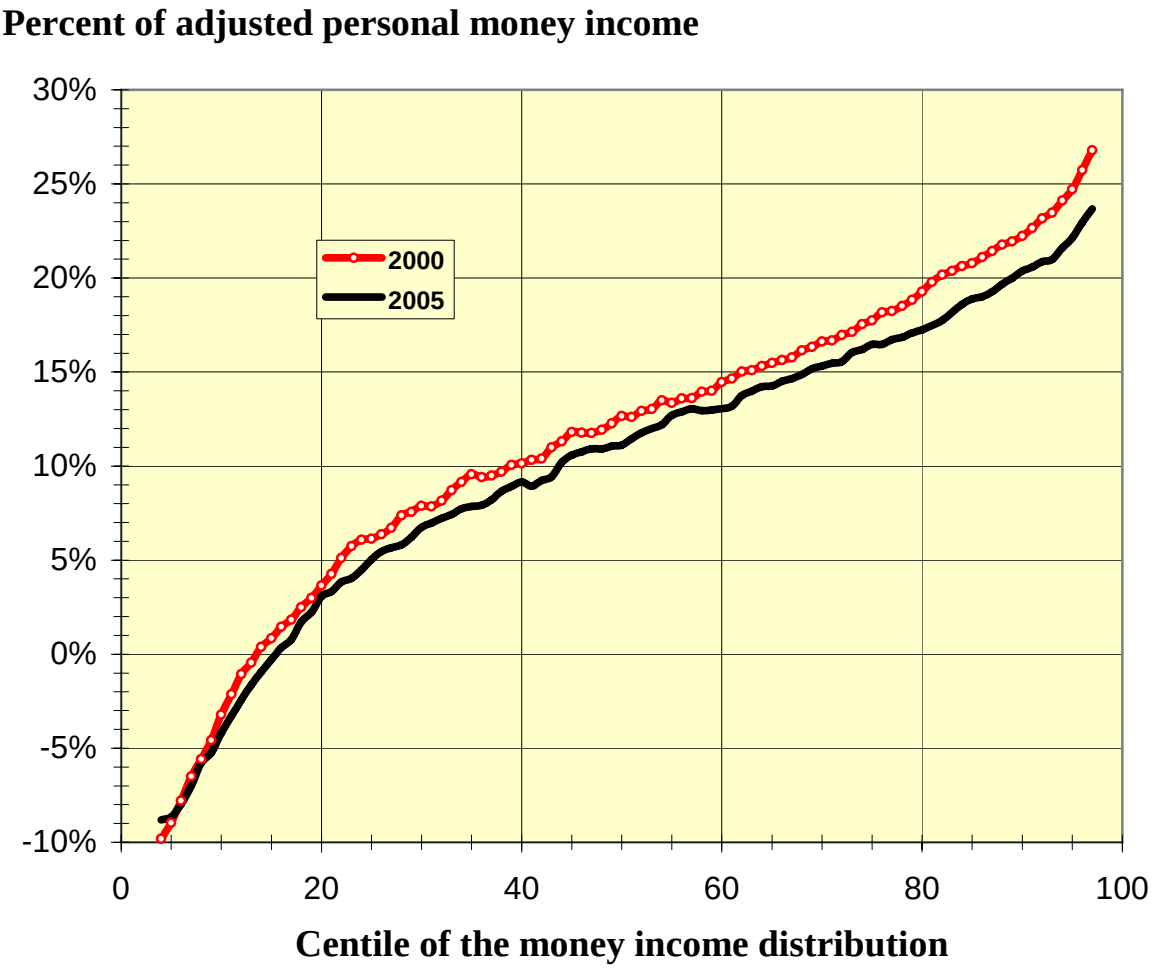
Annual percent change in real hourly wage, 1989-2000



Percentile of hourly wage distribution

Source: Author's tabulations of Economic Policy Institute estimates of hourly earnings based on the monthly Current Population Survey files (http://www.epi.org/content.cfm/datazone_dznational).

Chart 5. Federal Tax Burden as a Percent of Adjusted Personal Money Income by Position in Income Distribution, 2000 and 2005

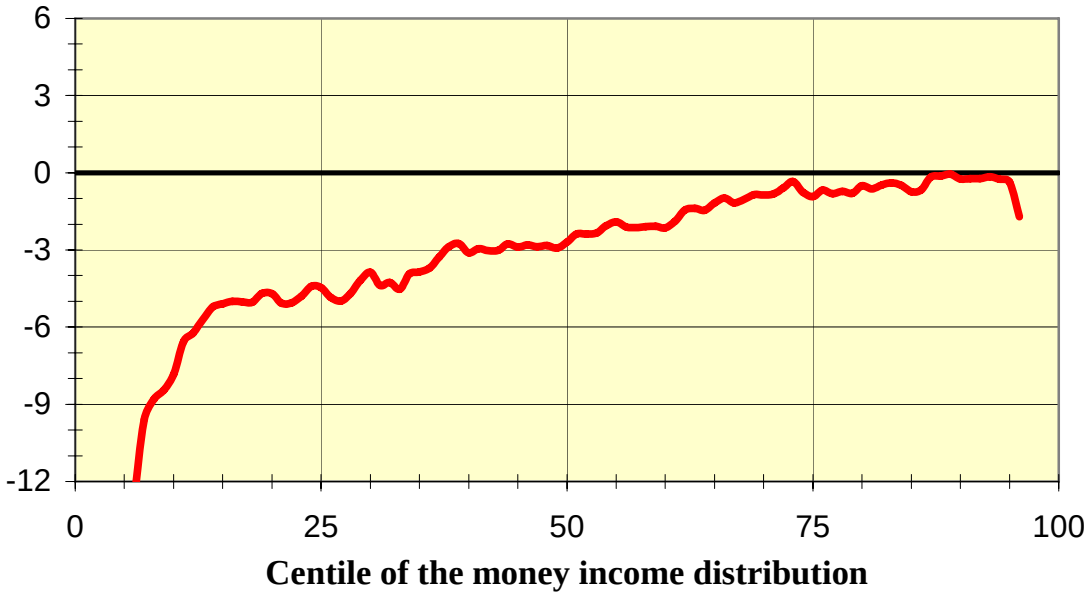


Note: Persons are ranked by their adjusted personal money income. "Adjusted personal income" is calculated using total household money income adjusted to reflect the number of persons in the household. The adjustment used is the square root of the number of household members.

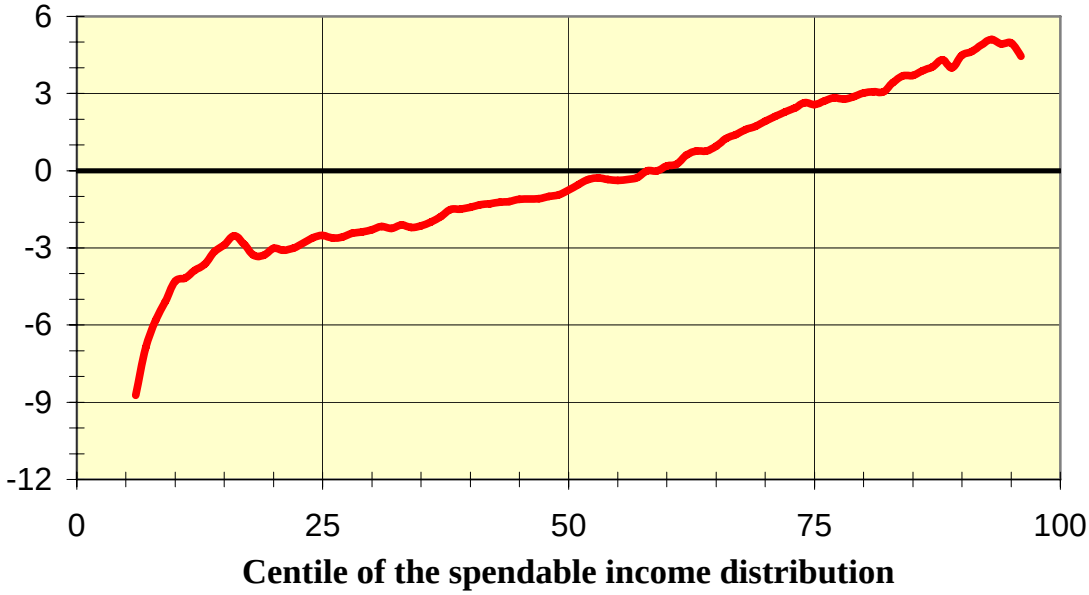
Source: Author's tabulations of U.S. Census Bureau Current Population Survey (CPS) files.

Chart 6. Change in Real Money Income and Real Spendable Income by Position in Income Distribution, 2000-2005

Percent change in real pre-tax money income, 2000-2005



Percent change in real net cash + near-cash income, 2000-2005

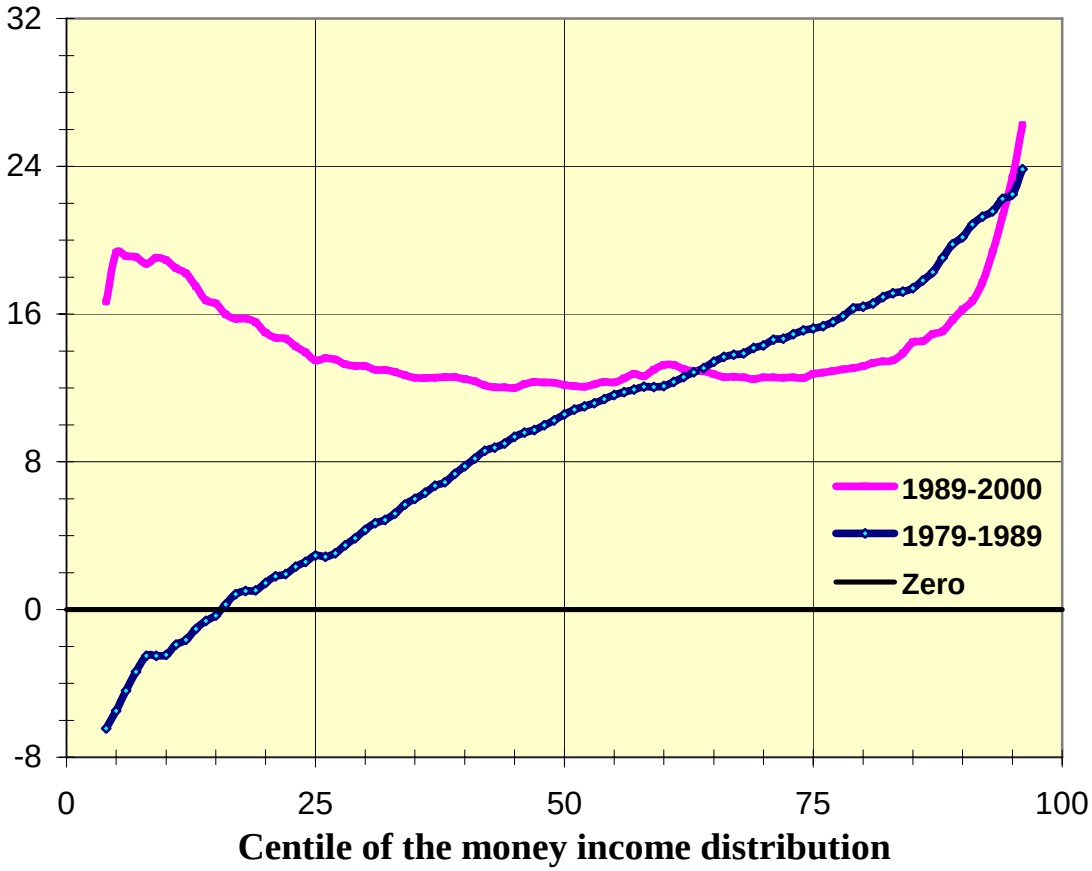


Note: Persons are ranked by their adjusted net or spendable income. "Adjusted spendable income" is calculated using net household cash plus near-cash income adjusted to reflect the number of persons in the household. The adjustment used is the square root of the number of household members (see text).

Source: Author's tabulations of U.S. Census Bureau Current Population Survey (CPS) files.

Chart 7. Change in Real Net Income in Two Business Cycles by Position in Income Distribution, 1979-2000

Percent change in real net income, 1979-1989 and 1989-2000



Note: Persons are ranked by their adjusted net or spendable income. "Adjusted spendable income" is calculated using net household cash plus near-cash income adjusted to reflect the number of persons in the household. The adjustment used is the square root of the number of household members (see text).

Source: Author's tabulations of U.S. Census Bureau Current Population Survey (CPS) files.