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# Income from Wealth and Income from Labor: Stocks, Flows and More Complete Measures of Well Being

Timothy M. Smeeding

and

Jeffrey P. Thompson

Center for Policy Research
Syracuse University

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Please send comments to Tim Smeeding (tmsmeed@maxwell.syr.edu).

## Abstract

In this paper, we employ the 1989-2004 Surveys of Consumer Finances to develop new estimates of 'more complete income', those that are accrued from the ownership of wealth. We begin with some theory and methodology related to Haig-Simons incomes. We then construct our measures of more complete income (MCI) and compare these distributions in a given period to those from traditional income measures. We note that they increase the real incomes of almost all households and by a substantial amount (46 percent on average and 24 percent at the median in 2003). We investigate the level and trend in MCI inequality and compare it to other estimates of overall and 'high incomes' in the literature. We argue that our measures are more durable and permanent than those of others based on annual 'high income' flows or annuitized wealth distributions. We also assess the level and trend in the functional distribution of income between capital and labor as we have defined it, and find a steadily rising share of income accruing to real capital or wealth from 1989 to 2003. We conclude that one cannot fully understand the distribution of economic well being and the way it affects key social and economic institutions, especially over the past decade, without also understanding how income from wealth affects consumption, tax revenues, living standards, non profits and social programs, education institutions, socio-economic mobility and well-being more generally. Indeed, we believe that the 21st Century may become the century of wealth as pension fund and other investors increasingly find high yield investments in capital hungry middle-income countries and in global firms. Based on the belief in a balanced portfolio of human and non-human wealth, and given bipartisan and highly popular policy suggestions for increasing human capital, we also suggest some policy options to broaden and deepen the ownership of non-human capital or wealth and to reap its rewards for a wider share of Americans.

## I. Introduction

There is a widespread concern about growing inequality in the distribution of household income. Over the past five years, the income distribution as normally measured by the Census Bureau has shown no change in incomes below the 90th percentile (US Bureau of the Census, 2006) and a declining median for non-elderly households. Several analysts have suggested that most, if not all, of the gains in incomes over this period of rapidly expanding productivity have accrued to the richest 1-5 percent of Americans (Gordon and Dew-Becker, 2005; Piketty and Saez, 2003; 2006).[1]

Labor economists point to the growing inequality in the US earnings distribution, also at the very top, (e.g. Autor, Katz, and Kearney, 2006; Katz, 2006; Lemieux et al., 2007; Kaplan and Rauh, 2006) and to household micro data showing earned incomes are more or less 70-75 percent of total income in most years (Cowen, 2007). Therefore, earnings are the key determinant of changes in the distribution of income according to these sources. Provocative papers like Kaplan and Rauh (2006) and Walker (2005) are able to identify only about 25-30 percent of high income earners: Wall Street types, CEO's and top 5 compensated corporate earners; and these in turn can be compared to the rock stars, athletes and celebrities pointed to by Gordon and Dew-Becker (2005).

However, it seems to us that these studies all seem to ignore the major source of growing income inequality: income from accumulated wealth. Wealth is more permanent and more durable than traditionally measured annual income. It offers a buffer against income downturns and provides a source of private security and power, especially amongst the top wealth and

[1] Only a few recent analysts doubt1+ that there has been a widespread increase in inequality that can be generally attributed to the growth of high incomes (Reynolds, 2007; Fatom, 2007; but see critiqued in Burtless, 2007).

income holders.

At the same time that micro oriented labor economists suggest labor income is the major determinant of household incomes and concentrate on its effect on inequality (e.g., Lemieux, 2006), macro economists and national income accountants find that labor income has now declined to 51.7 percent of national income, a 50 year low as a share of national income (Greenstone and Leonhardt, 2006; Aron-Dine and Shapiro, 2006; Bureau of Economic Analysis, 2006, Table 9; Goldfarb and Leonard, 2005). Macro analysts point to the rising share of corporate profits in national income, now 13.6 percent of total national income. But adding together labor income (even including benefits) and corporate profits yields a total of 77.7 percent of national income, still missing more than a fifth of the pie. Other uncounted components of National Income include net interest, proprietor's income and rental incomes, which alone are 13.9 percent of the total, an amount greater than corporate profits. The key question we address is, to whom did this income accrue?[2]

Turning back to micro data, annual income measures, even those for top incomes such as the work of Piketty and Saez (2006) or the CBO (2007), account for the flow of income from labor ( see Lemieux, et al., 2007) and the flow realized from wealth (capital) in any one year.[3] In addition, the higher one goes in the income or earnings distribution, the more likely one is to find high rates of turnover in top incomes from year to year. Indeed, advocates of high American income mobility point out that the top 1 percent of income earners have 70 percent turnover rates year-to-year (Cox and Alm, 1999).

[2] The National Income estimate for 2006 also includes a 7.8 percent share for net taxes paid on production and imports. This very high figure in part helps explain why the Congressional Budget Office (CBO) has forecast a much smaller deficit this year based on recent tax receipts, especially the Corporate income tax (Orszag, 2007). See also CBO (2006, 2006a) and discussion below

[3] Of course, unearned income from transfers, both public and private, also accrues but these are less than 10 percent of total incomes.

Moreover, earnings alone do not account for the majority of annual flows when powerful income recipients get to choose the form in which their compensation is paid, e.g., for tax reasons (Auben and Carroll, 1999; Gruber and Saez, 2002). For instance, the two founders of Google, in a widely reported pres story, took $1 each in earnings in 2005. Of course, each one also exercised much less highly taxed stock options, which left them with $1.0 billion or more in 'asset incomes' in that year (Ackerman, 2006). Indeed recent research points to the effects of high and differential marginal tax rates on the mix of taxable income between capital and labor and the elasticity of taxable income to differential tax rates (Auten and Carroll, 1999; Gruber and Saez, 2002; CBO, 2007).

At the same time, we know that wealth inequality has risen over the past 20 years and with it realized income from wealth, even if the fall in the stock market and the rise in home equity had a leavening effect from 2000 to 2003 (Kennickell, 2006; CBO, 2007). A recent PSID based paper by Pryor (2006) suggests that reported property income alone accounts for a large part of the run up in inequality between 1975 and 2000. Indeed, patterns of wealth inequality are very sensitive to where the starting and ending points lie, so that the change in the distribution looks very different from 1980 to 2000 (Wolff and Zacharias, 2006; 2006a) than 1980-2002 or 1980-2004 (Kennickel, 2006).

Because of past or anticipated changes in tax policy and compensation practices, the large majority of the gains from wealth and the consumption from accruals to wealth, such as those counted in National Income, are not realized annually. Indeed, this sporadic realization of growing incomes from wealth in both the personal and corporate sector, has led to serious miss-estimates of both individual and corporate income tax revenues at the federal and state level for the past decade, and especially in recent years (e.g., CBO, 2006; 2006a; 2006b; Orszag 2007). In a similar vein, changes in capital gains and dividend tax rates have directly affected the amount

of gains actually realized and therefore the distribution of annual income at the top end of the measured income distribution (see CBO, 2007).

The key to pulling these disparate sources and trends in economic well being together is a more full accounting of annual income from wealth, whether realized or not. Indeed, we believe that much of what has been interpreted as "consumption from wealth" is not drawing down wealth stocks at all, but comes from spending out of accretions to wealth (see Sierminska and Takhtamanova, 2006, for an international comparison). Similarly, the large declines in US savings rates (US Department of Commerce, 2007) are largely composed of spending from accumulated assets, especially owned homes and other appreciating assets. While the recent run-up in home values and dividends received have led to a spurt in consumer spending (e.g. Baker, et al, 2006), a decline in housing prices in 2007 might lead to a consumption-led recession, due to a decrease in wealth stocks (Goodnough, 2007). Clearly, wealth increasingly matters for consumption as well as for income.

The idea of accounting for income from wealth as well as income from earnings and other sources is not new (see Hansen and Weisbrod, 1968; Taussig, 1973), and has been used recently by Wolff and Zacharias (2006; 2006b; 2007) and Haveman, et al., (2006) in some fashion, to study inequality trends in the 1980s and 1990s.[4] Nevertheless, it is clearly time for a reappraisal given recent seismic changes in overall labor and capital income flows.

In this paper, we use the 1989-2004 Surveys of Consumer Finances to develop estimates of income from accrued wealth, both financial and non-financial, and debt (or more precisely,

[4] Wolff and Zacharias (2006, 2007) and Haveman, et al. (2006) use an annuity-based measure of inequality that assumes that all persons, including high income-high wealth persons consume all wealth before they die. Such measures imply the need for assumptions on discount rates, life expectancy and other variables, and they therefore assume no bequest or inter-vivos transfer behaviors and moreover, they ignite the observed behavior of the rich (e.g. see Goolsbee, 2007; Carroll, 2000). We prefer a less challenging and more straightforward estimate of income from wealth using current and long run rates of return on existing assets. This seems closer to Haig Simons income in terms of capacity to consume, without the extra baggage entailed with the annuity estimates which necessarily suggest higher incomes for much older persons, by design

net worth). We begin with some theory and methodology related to Haig Simons incomes. We then construct our measures of more complete income (MCI) and compare these distributions to those from traditional income measures. We investigate their level and trend and compare them to other estimates in the literature. We find that our estimates raise incomes all over the distribution, but especially at the top end. We also find a greater trend toward income concentration at the top of the distribution using MCI than do other analysts.

We also assess the level and trend in the functional distribution of income between capital and labor as we have defined it. We find that properly measured, the labor share is closer to 55 percent of total income than the 75 percent that ids often claimed. We conclude that one cannot fully understand the distribution of economic well being and the way it affects key social and economic institutions, especially over the past decade, without also understanding how income from wealth affects consumption, living standards, non profit and social programs, education institutions and well-being more generally. We also suggest some policy options to broaden and deepen the ownership of wealth. Indeed, the 21st Century may become the century of wealth as pension fund and other investors increasingly find good investments related to the deployment of new technology in capital hungry middle-income countries and in global firms more generally.

## II. Theory and Methodology

### Income Theory and Methodology

There are many definitions of personal (macro) and household (micro) income from both a "sources" and "uses" perspective. According to the most popular theoretical measure of income, the Haig-Simons (H-S) income definition, income (I) is equal to consumption (C) and the change in net worth (ΔNW) realized over the income accounting period. So defined, H-S

income is a measure of potential consumption or the amount one could consume without changing one's total net worth (one's stock of assets or debts). Thus according to a "uses "of income definition:

(1) $I = C + \Delta NW$

From the functional or "sources" side of income, we can arrive at the same measure by adding together income from earnings (E, including self-employment income), income from capital (KI, including capital gains plus other income from wealth), plus net transfers (NT, which includes those received minus those paid, whether private or public in nature), resulting in the following definition:

(2) $I = E + KI + NT$

If we ignore NT for now, and divide self-employment income, into income from labor and capital, we are left with the macroeconomists' functional distribution of income.

The key element that is included above but largely missing in most estimates of both micro and macro estimates of income distribution is income from capital. Desperate long-standing interests in labor vs. capital states by "factor share" macroeconomists (e.g., Goldfarb and Leonard, 2005; Guscina, 2006), microeconomists who study distribution are content with using data where only a small fraction of income from capital is realized. Interest, rent and dividends received are reported in most income definitions such as the one used by the Census Bureau. Capital gains and losses (KG, including those from realized stock options) and royalties, are counted in other income definitions such as that used by the CBO (2007) and by Federal Reserve Bank in the SCF income distribution measure.[5]

[5] Indeed Pryor (2006) attests to the importance of interest rent and dividends in resizing economic inequality using the PSID.

However, the large majority of capital income (KI) accrues to persons but is never realized (and is therefore not counted in any given year). This includes imputed rental flows for owner occupied housing; business savings in the form of corporate and non-corporate retained earnings; and unrealized capital gains. Much of this income stays with the firm that utilizes capital and is not realized by the owners of these assets (except as it is reflected the value of their enterprise, either self owned or as shares of corporate stock).

Thus, we define 'more complete income' (or MCI) as follows. We retain earnings and net transfers (E, NT), and maintain that portion of capital income (KI) received as capital gains and royalties (KG). But we then subtract *reported* interest, rent and dividends (IRD) while adding back in an *imputed* return to all forms of net worth, or "imputed capital income" (IKI). Thus, we impute interest rent and dividends to owners of assets and forego the amounts actually reported by respondents.[6] This produces:

(3) MCI=E+ NT+ (KG –IRD + IKI)

Indeed this more complete definition of capital income (KI, below) comes close to measuring the concept of 'ΔNW' that intrigued both Haig and Simons:

(4) KI= KG –IRD + IKI

MCI is an incomplete concept of income as we are unable to measure such items as employer benefits, pension fund accruals not counted as personal wealth such as defined benefit pension plans (though pension flows for elders are counted as transfers received), or unrealized stock options and other promised contractual benefits ('golden parachutes') which are not yet exercised or received. Assets in defined benefit pensions are problematic both because of the

[6] Indeed reported interest rent and dividends in the CPS is barely more than half the aggregate amount which other data suggests ought to be reported (CBO, 2007; US Census Bureau, 2005). The decision to keep realized capital gains in the base income distribution estimates may seem like double counting. But, gains realized in year *X*, emerge as assets in year *X* + 1 to the extent they are not consumed. These assets earn a return that should also be counted in income in year *X*. In any case, this decision to include or exclude realized capital gains has a negligible affect on the results presented here.

potential not to be collected and because of back loading in benefit determination. We are less worried about the distributional consequences because most such pensions accrue to the top end of the income distribution and therefore do not affect lower incomes (see Appendix Table A-8).

Our analyses also ignore non-cash public sector benefits such as those provided by health, education, and the taxes used to pay for them (see Garfinkel, et al, 2006, on the latter).While these benefits are especially important for low income persons, they pale in comparison to the levels of imputed income from assets for the large majority of households, especially middle and high income units. Hence, while MCI helps us better understand the impact and importance of growing residual wealth and the way it affects public and private finances and inequality, it does not represent a complete accounting of all flows of income from all sources.

We report modified gross income amounts where net transfers and all other income amounts are *gross* of direct taxes (as in the SCF). We also report amounts of income *net* of direct tax, including our best estimate of the amount of tax that would be paid on all components of MCI. Here we include income from the various sources of imputed income, as well as actual capital income, to get at the net of tax amounts. We take no account of the amounts of income, which might have been shifted from a heavily taxed form, earnings, to another less heavily taxed form, capital gains or dividends, for instance (Lemieux, et. al., 2007).

In calculating the implicit rate of return on various assets, we employ two techniques: first we use short term (3 year) average rates of return on 22 specific asset/debt types in each of our 6 income years; and then also long run 28 year average returns over the entire period. These long run rates allow us to separate more permanent long run returns from more volatile short run changes, and to assess more smooth trends in income from assets. They also allow us to test the sensitivity of our results to various assumed rates of return.

**Developing More Complete Income (MCI) estimates with the SCF**

Other analysts have described the limitations of standard measures of income for welfare and inequality analysis, and proposed solutions by supplementing income with wealth, as much as a half-century ago. Weisbrod and Hansen (1968) and Taussig (1973) added the annuity value of net-worth to current income to develop measures they respectively called "income-net worth" and "comprehensive income." In more recent work, Wolff and Zacharias (2006) and Goolsbee, (2007) use the annuity approach for non-housing wealth and impute rental income for homeowners.[7] We develop and analyze trends in a somewhat similar income concept using data from the Federal Reserve Board's Survey of Consumer Finances (SCF). Instead of calculating annuities, however, flows to assets are imputed based on historic returns and are not annuitized.

The SCF is a nationally representative, triennial survey that includes an over-sample of wealthy households that are underrepresented in most standard surveys.[8] The SCF contains high quality, detailed information on household assets as well as income.[9] There are 16 broad asset classes, including stocks, bonds, mutual funds, home-equity, residential real estate, and business assets, as well six broad classes of debt. The data include an income definition (SCF income) that

[7] There are a number of additional differences between the approach used in this paper and the one used by Wolff and Zacharias (WZ). WZ use SCF for 1983-2001, we use data for 1989-2004. WZ do not conduct any after-tax analysis. For their inequality measures, WZ rely primarily on the gini index and income shares of different percentile groupings (top 10%, top 1%, etc.) We use ginis as well, but rely primarily on ratios of key percentiles of the income distribution (99/50, 95/50, 99/90, etc.) because we find that the biggest impact from using the more complete income approach is found at the very highest income levels and does not have as great of an impact in the gini. We have also calculated income shares similar to WZ, and will make it available on request. In contrast to prior annuity approaches, WZ assign different rates of return to the different asset types that they annuitize. These rates are long-run returns covering 1960-2000, and generally based on federal Flow of Funds data. In addition to their annuity approach to non-home wealth, WZ do conduct some sensitivity testing based on a definition that gives all forms of wealth a 3 percent 'real' rate of return.

[8] Three different versions of the SCF data for each year are used. The household income variable and many of the broader asset and income definitions as well as key demographic details are available in the "Extract of the Full Public Data Set" (in Stata) version of the SCF. This version of the data contains the variables used in Federal Reserve *Bulletin* article. Detailed asset classes not included in the extract file were accessed through the "Full Public Data Set" (in Stata). Key variables from the full data set were merged into the extract file. Finally, the full public access version of the data was accessed a second time in SAS. This was done because the SCF tax programs are coded in SAS. Use of the SCF tax programs and NBER's TAXSIM is discussed in more detail below. (All of these versions are available at the SCF web site: www.federalreserve.gov/Pubs/oss/oss2/scfindex.html.)

[9] The sample size in 2003 and 2001 was approximately 4,500 households, a slight increase over previous years.

is broader than the standard Census money income definition. SCF income includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony, and other support payments, and miscellaneous sources of income.[10]

Income net wealth ("**income less capital**") is calculated by subtracting realized income from capital from the SCF income definition. Hence, reported interest, rents and dividends are excluded in the given income year. Further, capital gains and royalties are also excluded in counting income "less capital" to avoid double counting, as we will be imputing returns to these assets to the extent that these 2003 gains and royalties have been invested in other assets by 2004.To the extent that these gains and royalties are consumed and not re-invested, we will underestimate capital incomes in this process.

In allocating the functional share of income between labor and capital, and further in accounting for capital income flows, we partition self employment income as follows: in the cases where self-employment and business income (SEBI) exceeds income from wages, thirty percent of SEBI is considered a return to capital and is also subtracted from SCF income to complete "less capital." In cases where SEBI is less than income from wages, we treat all SEBI as income from labor. This practice is the same as that employed by others who also split SEBI into labor and capital components (e.g., see Canberra Report, 2001).

After removing income from capital from SCF income, flows to assets are imputed for the full range of assets measured in the SCF data. Separate rates of return were applied for stocks, bonds, and housing assets. Specific rates applied to the assets are based on historic returns data described in greater detail below. The return to stocks is based on the Dow Jones

[10] Household weights contained in the SCF data are used in all of the calculations.

Industrial Average. The return to bonds is based on 10-year US Treasury notes. The return to residential real estate is based on Office of Federal Housing Enterprise Oversight (OFHEO) House Price Index. In addition, flows to assets are calculated gross of the inflation rate (CPI-U), while some flows are based on the average of two different types of return (the average of the return to stocks and bonds, for example). The details are contained in Appendix Table A-1.

The following additive series of combined capital income flows are added to income, net of reported interest rent and dividends, in the order specified below:

- **"plus finance"** adds imputed flows to directly held stocks, stock mutual funds, combination mutual funds, bonds, other bond mutual funds, savings bonds, government bond mutual funds, and tax free bond mutual funds, as well as "other managed assets," such as trusts and annuities to **"income less capital**";
- **"plus retire"** adds flows to "quasi-liquid retirement accounts," such as IRA/Keoghs and account-type pensions to "**plus finance**";
- **"plus home"** adds flows to owner-occupied home equity to "**plus retire**";
- **"plus oth invest**" adds flows to investment real estate equity, transaction accounts, certificates of deposit (CDs) and the cash value of whole life insurance to "**plus home**";
- **"plus business"** adds flows to other business assets and vehicles—only vehicles worth more than $50,000—to "**plus oth invest**";
- **MCI** subtracts flows to non real estate debt, including credit card debt, installment loans, and other debt from "**plus business**"—after replacing observations, where "plus business" value incomes were below SCF income with the SCF income value.[11]

Separate estimates for each of these income concepts are created using both long-run (28-year) averages and short-run (3-year) time specific rates. The long-run rates are based on the average annual return between 1977 and 2005, with the same long run rate applied to each year of SCF data—1989, 1992, 1995, 1998, 2001, and 2004.[12] Short-run returns are 3-year averages surrounding the survey year. The short-run return for income year 1989, for example, is based on the annual average return between 1988 and 1990. Income is from the completed calendar year

[11] This adjustment was made on account of households with negative incomes even after imputation of flows to all assets. These households had large trust and royalty income, but experienced negative capital gains income that left them with relatively low (or zero) SCF income. When the trust and royalty income was subtracted from SCF income, the result was deeply negative income that dwarfed the imputed flow to their assets. This occurred in less than three percent of households in the 2003 data. The adjustment has little or no effect on the overall results.

[12] The actual long-run rates applied reduced the return to bonds and stocks by roughly 3.0 percentage points to adjust for annual rates of inflation. See Appendix Table 1 for details.

prior to the survey. Assets are valued at the time of the survey, completed in the second half of the year. Imputed flows for 1989, for example, are based on wealth stocks reported between June and December of 1990[13].

The long run nominal rates of return for stocks, bonds, housing and inflation are 7, 5, 6 and 3 percent, respectively and are smaller than the 1977-2005 and 1989-2005 averages for this period. We believe that the long run rates are modest and we know that they reflect estimates used by others. For instance, the 4 percent real return for stocks (7 percent minus 3 percent inflation adjustment) is the same as that used by the Social Security Advisory Board to score the net effects of investing Social Security funds in the private equities market. Finally, we assume a long run non-housing debt rate of 9 percent. Housing debt is factored in when determining net imputed rent on owned and other housing equity.

**Incorporating Taxes**

In addition to the MCI concepts described above, three additional after-tax income concepts are calculated. Taxes for all three are federal income taxes calculated using the National Bureau of Economic Research (NBER) TAXSIM program.[14] All of the required input for TAXSIM is generated based on programs developed by Fed economist Kevin Moore, and is available on the NBER web site.[15]

The first after-tax concept is simply reported SCF income less taxes, a version of disposable personal income (dpi). The second concept is income net wealth *and* net taxes. Income net wealth is defined as described above ("less capital") and the related taxes are calculated with TAXSIM by eliminating dividend and "other property" income, including

[13] Appendix Tables 1 and 2 include details for the long run and short-run rates of return applied to each income concept between 1989 and 2004. Returns in the 2000 income year (the average return over 2000, 2001, and 2002) were actually negative for stocks based on the 2001 stock market collapse. The year to year short run rates vary by period and asset type (see Appendix Table 2).
[14] For a discussion of the TAXSIM model see Feenberg and Coutts (1993).
[15] The TAXSIM is available online at: http://www.nber.org/~taxsim/.

interest, from the input file.[16] The final after-tax concept is based on MCI. In this case, the sum of the imputed flow to assets included in MCI is categorized as dividend income and the taxes calculated by TAXSIM.[17] The resulting federal taxes are subtracted from MCI to create "MCI less tax."

## III. Results

We begin by tracing how the addition of unrealized capital income changes the final distribution of income, in both tables and figures. Then we look at after tax income and finally we examine levels and trend in various income percentiles and the share of final income that is either from wealth (capital) or labor. We also look at the values of MCI by age and type of household. And we try to determine who high MCI households might be.

**From SCF Income to MCI**

We begin with Table 1 and Figure 1 where we apply the short run rates of return to various asset types and chart the way in which this process changes mean and median income in 2003-2004, as well as the 99$^{th}$, 95$^{th}$, 90th and 10$^{th}$ percentiles (and the Gini inequality measure). Table 2 and Figure 2 do the same with long run rates of return. The numbers in Table 1 suggest that capital income makes a great deal of difference to correctly measured income in the United States. Of course, subtracting some capital income from SCF gross income ("less capital") reduces the mean and median, but as we successively add wealth-related income components, both measures change dramatically. Moving from SCF income to MCI, mean income rises by 46 percent and the median by 24 percent. The biggest changes come from stocks; imputed rent on owned homes; and business assets. Owned homes ("plus home") affects large changes in both

[16] These are fields 9 and 10 of the TAXSIM input file.
[17] In addition these results are also calculated with the imputed flows in MCI classified as "other property income" in TAXSIM. Only for 2004 do these results actually differ from the initial classification.

mean and median as housing is the quintessential 'middle class asset' and is the only capital income flow which significantly boost the median. Stocks and bonds ("plus finance") and business assets ("plus business") have much larger affects on the mean due to the skewed distribution of returns accruing mostly to high MCI units. Indeed, the 99th, 95th and 90th percentiles rise by 81, 54 and 42 percent respectively in 2003 dollars from SCF to MCI. In contrast, the 10th percentile increases only by 16 percent across these same measures. When we take into account, the changes in the medians, the relative inequality measures, the 99/50, 95/50 and 90/50 ratios still rise by 47, 24 and 15 percent respectively. The 10/50 ratio falls by only 6 percent. The correction of negatives and the subtraction of debts, reflected in the difference between 'plus business' and MCI, seem to have little effect on the overall results.

In numerical terms, households at the 10th percentile of MCI have incomes of $13,064 (Table 1) and net assets of $21,200 (Appendix Table 11). This is income from wealth increases SCF by only $1769.This contrasts to MCI and net worth values of $184,318 and $729,200 at the 90th percentile where capital income is $54,932 in 2003. At the median MCI level of $53,266, a household has a net worth of $152,178 and a gain of $10, 137. However, at the 99th percentile of MCI, where MCI is $884,670, net worth is over $4.735 million and SCF incomes in 2003 are increased by almost $400,000 in moving to MCI.[18]

The dramatic nature and extent of these changes are easier seen in Figure 1. The mean and median values on the right side show steady increases, especially for "plus home" at the median where the appreciation of owned homes leads to a jump from one plateau to another. In contrast, the mean income rises steadily with big jumps as noted above and smaller changes at other definitional points. The 95th and 90th percentiles also rise relative to the median. The

[18] Other comparisons between the levels of assets found by SCF vs MCI vs net worth rankings are contained in Appendix Table 9.

increases are most dramatic at the very top of the distribution where the bars show that the 99/50 ratio starts at about 11 for SCF income and rises to above 16 for MCI, with the jump mostly due to business assets and "other investments." (Exact figures are found in Table 1.) Hence the gains from income from wealth accrue largely to the very top of the income distribution, even after we re-rank incomes with each successive component of wealth (or finally, debt), and compare incomes to the median household.

And we note that the MCI rich are similar to, but not the same as the 'high income' units studied by others. For instance, while 79 percent of the same households are counted in the top one percent for both SCF income and MCI, 84 percent of the same units are in the top 10 percent. These percents have fallen over the past 15 years as well. In 1989, the overlap was 83 percent in the top centile and 89 percent in the top decile. Hence the top end of the MCI is increasingly divergent from the top end of the' high income' sample. As the value of assets continue to appreciate in the longer run, and as the fraction of income from capital grows relative to labor, e we expect that the top centiles in each distribution will increasingly diverge

Table 2 and Figure 2 show similar patterns, but with more modest absolute changes due to lower long run average rates of return. Both mean and median rise, now by 31 and 16 percent respectively, and the 99/50 rises from 11.3 to 15.6—or by 38 percent. Hence the patterns of basic changes we observe are robust to the more cyclical (2002-2004 short run rates) and less cyclical (long run average) sets of rates.

**Taxes**

The after tax changes are summarized in Tables 3a and 3b, and Figures 3a and 3b, for the short and long run rates of return, respectively. We employ the NBER TAXSIM model to estimate taxes, given existing, and advantaged, rates for taxable property income. Indeed, while including taxes considerably reduces the incomes of high-income households (MCI declines

about $180,000 for the 99th percentile after including taxes), the percentage gains from adding wealth are even greater in after tax terms fat the highest income levels. The 99th percentile of after tax income rises by 99 percent compared to an 81 percent change for the before tax incomes (Table 1). The 99/50 after tax ratio increases by 61 percent between DPI and MCI less tax in Table 3 as compared to 47 percent for pre-tax income. Including taxes has little impact on the gains from including wealth at the 95th and 90th percentiles or even at the median. These results also confirm that after-tax inequality is lower than pre-tax inequality, with the 99-50 ratio for MCI (short-term rates) falling from 16.6 to 14.2 after including taxes. We do not calculate the effects of 'privileged' types of taxable income (capital gains, dividends, and housing sales) on the composition of pre-tax income.

**Trends in Income Inequality for Key Income Definitions**

So far, we have discovered that at any point in time, accounting for income from wealth drastically increases both the level of income and the inequality of income. To see how the trend has evolved over the last 15 years, we calculate similar before tax figures for 1988-89, 1991-92, 1994-95, 1997-98, and 2000-01. We prefer the longer run rates when calculating trends, but the short-term rates are found in the appendices. Results for these earlier years show much the same pattern as we saw above in 2003-2004 with a few changes (earlier years are available from the authors and as Appendix Tables 1a-1e and 2a-2e at the following website: http://www-cpr.maxwell.syr.edu/faculty/smeeding/selectedpapers.htm). The six graphs in Figure 4a summarize the trend in key income definitions and component comparisons, using long run rates, over that period. First, MCI is at the top of every set of lines (except the 10/50 ratio where the two lines are virtually identical). While SCF and MCI follow similar patterns at the top of the distribution, the gap between MCI and SCF income is especially apparent for the 99/50 and 95/50 ratios and for the pattern of mean incomes. Thus, the trend in inequality is stronger with a

more complete (vs. a less complete) income measure. At the bottom, we see that mean and median incomes both rise for each income definition over the period. The 90-50 ratios show little trend, suggesting most gains we see are concentrated at the top of the distribution. The peak in 2000-2001 at the 99th percentile reflects the collapse of the stock market in that period.

Figure 4b shows the same trends for a broader range of income concepts, including "plus finance" and "plus home." Adding imputed flows for financial wealth ("plus finance") to income "less capital" leaves the 99/50 ratio very similar to SCF income. Adding housing wealth ("plus home") produces little change in the 99/50 and 95/50 ratios, but accounts for the bulk of change in the median (Panel F). The bulk of the gap between SCF income and MCI in the 99/50 ratio is a result of one of the final elements of MCI, imputed flows to business wealth. The relevance of business wealth shows up in the means (Panel E) and the 99/50 ratio (Panel A), but not the other trend statistics[19].

In general, the trends presented in Figure 4a and 4b suggest that the effects of adding income from wealth follow the same pattern of rising inequality as seen in the SCF income as well as other measures of income inequality over this period (e.g. Smeeding, 2005; CBO 2007). While inequality is higher in any given year for MCI income than SCF income, the 95/50 and 90/50 ratios follow the same upward trend as the SCF income (Panels B and C.). For the very top of the distribution, however, the inclusion of income from wealth results in a more dramatic rise in measured inequality (Panel A). The 99/50 ratio rises 20 percent between 1988-89 and 2003-04 in the SCF income measure, but it increases 36 percent for MCI. Therefore, while Wolff and Zacharias (2006a; 2006b) show that an augmented measure of wealth results in about the same rise in inequality as traditional measures of money income, our approach suggests that for the

[19] Figures 4a and 4b, in the appendix do the same using short run rates., and with more noise, thy show about the same patterns.

highest income households a more complete measure of income reveals a steeper growth in inequality.[20] This increase is driven by changes at the very top of the MCI distribution.

**Percentile Growth in Incomes**

Figure 5 (Panel A) summarizes the 1989 to 2004 growth rates for SCF income and MCI across the entire distribution [21] The growth in MCI is greater than SCF income for all households above the 40th percentile of the income distribution (Panels A and B). Over most of the top half of the income distribution, the importance of moving to MCI appears to be roughly constant with the gap in growth rates fluctuating between 10 and 20 percentage points. At the top of the distribution, however, the gap in growth rates increases dramatically. For the top three percent of the income distribution growth in MCI is more than 30 percent higher than SCF. For the 99th percentile MCI growth was 37 percentage points faster than SCF income. Hence, the inclusion of income from wealth results in a rising inequality trend, when the measure of inequality contrasts the highest-income households with any other grouping. A similar pattern holds in after-tax incomes as well (Appendix Figure 1)[22].

**Comparative Tends**

There are several sets of estimated income trends amongst the rich to whom we can compare our results. In Figure 6, we compare our MCI shares of total income using long run

[20] A few outliers at the bottom of the distribution are removed from the graph.
[21] This figure is equivalent to Figure 5 in Wolff and Zacharias (2006a).
[22] Another set of trends statistics, showing the income shares of the top 10 percent of households, are presented in Appendix Figure 2. These results for the income (MCI and SCF) share of the top one percent and other sub-groups of the richest households suggest a similar trend, though not the same levels, as Piketty and Saez (2006). Though cyclical – because of the swings in the share of the top one percent – the income share of the top ten percent, for both SCF and MCI, appears little changed over the period. For SCF income, the share of top 10 percent was 42.3 percent in 1989 and 42.5 percent in 2004. In MCI, however, there is a small increase. The share of the top 10 percent rose from 44.8 percent to 47 percent; all of this movement is due to the share of the top 5 percent, which rose from 33.9 percent to 36.2 percent. Comparing business cycle peaks, the MCI share of the top 5 percent rose from 5 percentage points between 1989 and 2001, reaching 39 percent; for the SCF income, the increase was 3.9 percent. Each of these metrics reflect small percentage changes that are potentially meaningful, since they reflect extremely large dollar amounts and take place over a relatively short period of time.

rates to those found in three other studies: the Wolff-Zacharias (WZ, 2006a; 2006b) annuity value measures of income net worth; the CBO (2007) income after taxes and benefits including capital gains series; and those compiled in the 'top income' papers of Piketty and Saez (PS, 2003; 2007).We have plotted the shares, and have calculated the trends and the slopes of each line.

First we note that our top 1 percent shares are generally the highest of all the series (except for the 1992 recession), but are roughly in line with those of PS and WZ. Indeed Reynolds (2007) and Tatom (2007) have both criticized the PS numbers because more of high income is not reported for tax reasons. But our MCI measure avoids this problem, as we include unrealized and therefore untaxed income from wealth, and our shares are at least as high if not higher.

For the top one percent, all lines rise, suggesting an increase in share for either the 1989-2004 or 1989—2001 periods. Indeed when we compare slopes from 89-04, the CBO and MCI slopes are the same while the MCI gives a 2-7 percent higher share of income to the top 1 percent. Our slope for 89-01 is more steep than any but PS. Nevertheless, all series show a rising share at the very top.

What about the other shares? The MCI share of income and WZ shares are highest in Panel B, but the growth trend is much less pronounced for the 95th to the 99$^{th}$ percentile for all series, compared to the top percentile growth rates. Still the MCI shows the highest rate of growth for this 4 percent slice of the population. Between the 90$^{th}$ and 95th percentiles, the PS share of income is clearly the highest in all years, but the slope is almost flat and is actually slightly negative for all series. Hence, our methods show similar patterns to those in other series, with a slightly higher share of MCI accruing to the top one percent and with a slightly higher growth rate for these incomes.

**Labor vs. Capital Income**

A more complete accounting for income from wealth as well as from labor produces large changes in the functional income distribution. At the top of Figure 6 in Panel A, we see the SCF traditional micro-data based pattern of household income components. Earned income is 63-70 percent of gross incomes over the period we study. Indeed most authors (e.g., Cowen, 2007; Tatom, 2007) assume that labor income is always about 65-70 percent of total income. Conventional reported income from interest, rent, dividends and sometimes capital gains is between 10 and 15 percent of SCF income. "Other" (largely public transfer) net income is 9-15 percent of gross income, while income from capital and Self Employment Business Income (SEBI) are both no more than 10 percent. This is the standard picture with almost all hpousehold income micro datasets However, the patterns change quite a bit in Panels B and C where we compare to the MCI distribution MCI.

Recall that SEBI is allocated to labor and capital income as follows: when SEBI exceeds income from wages, thirty percent of SEBI is considered a return to capital and is also subtracted from SCF income to reach the "less capital" component. In cases where SEBI is less than income from wages, we treat all SEBI as income from labor. Following this rule, the bars for SEBI disappear in Panels B and C where we see MCI. Now, because we assess all capital income in MCI, capital income is both higher than in panel A, and is also growing steadily from 1988-89 to 2003-04 using the long run rates in Panel B. The share of income from wealth rises from 30 to 36 percent over this period, with a recession induced dip in 1991-92. Over the same period, the labor share of income falls from 60 to 54 percent, while "other" (net transfer) income does not change very much.

The bottom panel shows the results when we use the short run three year average returns to estimate capital vs. labor income. In cyclical downturns (1991-92 and 2000-01), which affect

asset values negatively, income from labor becomes a much larger share of total income. However, in periods where assets yield higher returns, income from assets can actually exceed income from labor (as in 1997-98), or be very close to labor income shares (as in 2003-04). Unfortunately, we cannot yet capture the 2004-2007 period of rising asset values in the SCF, which we feel would show an even larger overall shift toward asset vs. labor income. These trends, especially using long-run rates, suggest the role of income from wealth is growing stronger in the US, while labor income is falling in importance. Simply put income from wealth rises and income from labor falls once we take a more complete view of Haig-Simons income.

**Percentile Growth in Shares**

Similar to Wolff and Zacharias (2006a; 2006b) we find that our expanded measure of income using the SCF fails to support Piketty and Saez's (2003, 2006) finding of the rising importance of income from labor. Using federal tax return data, Piketty and Saez document a rising labor share of total money income for high-income households. Performance based or incentive based pay has increasingly driven the income share of the top centime (Lemieux, et al., 2007). But these same annual performance pay increases are no doubt also driving accumulated wealth at the tip of the MCI distribution in recent years, but with a one year or longer lag. Using the expanded income definition of MCI, we find that income from wealth represents the largest share of MCI at the top of the distribution and that the wealth share is rising. Figure 8 shows the share composition of MCI over the entire distribution. For the lowest MCI households labor and capital combined represent less than one quarter of total MCI in 2004, but for the highest MCI households capital income alone constitutes more than half of MCI (Panel A). The ttrend comparisons suggest that capital is the largest portion of MCI for the top three percentiles, and the capital share has increased for the top five percentiles (Panel B). The capital share rose from 39 percent of MCI to 52 percent by 2004 for the top one percent of households.

**Results by Demographic Groups**

We include means, medians, and distributional breakdowns by age, family composition, and ethnicity for SCF income and MCI in Figure 9 (Appendix Table 5 has the actual values). In general, the results in Panel A suggest that including income from wealth has, on average—for mean or median, the largest impact on the elderly and on non-Hispanic Whites. However, the impacts are also large amongst other aged households. Indeed, the highest ratio of MCI to SCF income is observed for the 99th and 90th percentile of 35-44 year olds, and actually falls after that age. Hence, the claim that high wealth inequality and high levels of top incomes (Reynolds, 2007; Tatom 2007) are a product of the 'aging' of the population is not supported by our results.

Lemieux (2006), for instance, finds that rising inequality in earned incomes are largely due to population ageing. But, income from wealth has a substantial effect on all age groups, especially among those holding mature defined contribution pension plans (see Poterba, Venti and Wise 2007a, 2007b) as well as via earned income. Aging has a larger effect on mean and median MCI than on the $90^{th}$ or $99^{th}$ percentile units. Panel A, also shows that among the youngest households (head under age 35) mean MCI was 107 percent of mean SCF income, suggesting that as expected, including wealth has relatively little impact on the income of younger households, except perhaps at the very bottom where the 10-50 ratio falls below 100, because that debt exceeds assets for this group. This finding is consistent with the recent Census Bureau (2006) report that the rise in median incomes over the past 5 years has mainly been in unearned incomes accruing to the elderly. Income from wealth also has a greater impact on the incomes of non-Hispanic Whites (Panel C) than on minorities. Among non-Hispanic Whites, mean MCI was 34 percent higher than SCF income, compared to a gain of only 17 percent for non-Whites.

Means and medians suggest the largest impact of the shift to MCI income is among older White households, but the relative inequality measures make it clear that the impact on inequality has broader effects at the top-end of the distribution. The 99/50 ratio, for example, suggests that the move from SCF income to MCI has no impact on the degree of inequality among young households Figure 9 (Panel A), but it actually has a larger impact on households headed by 35 to 54 year olds than those headed by someone 75 or older. Similarly, including income from wealth has a greater impact on measured inequality among non-elderly households with children than it does for elderly (65 and older) households in Panel B. Among elderly households, the 99/50 ratio using MCI is 45 percent higher than it is using SCF income. For non-elderly households with children, however, the MCI income measure is 61 percent higher than with SCF income, suggesting a larger increase in income from wealth for those with children vs the elderly. Overall, the pattern suggested by Figure 9 is that the means of households headed by non- Hispanic whites and the elderly are most impacted by moving from SCF income to MCI, but that income growth measures are equally impacted across a broader range of demographic groups. Among young households and for inequality at the bottom of the income distribution (10/50 ratios), however, moving from SFC gross income to MCI has little impact. The group specific patterns of income growth from MCI are therefore more disperse than we expected, though clearly low income units and minorities do not fare as well as do non-Hispanic whites

**Who are the Rich and the Poor?**

The demographic profile of households by MCI class (Table 4) shows that, relative to other households, high MCI households are older, better educated, more likely to be white and married, more likely to be self-employed or in a partnership, and are disproportionately grouped in managerial and professional occupations. Nearly 94 percent of households in the top one percent were headed by non-Hispanic whites and 89 percent were married, compared to 70

percent and 54 percent, respectively, for the bottom 90 percent of households.[23] Age alone is not a terribly good predictor of high wealth as almost half (49 percent) of the group in the top 1 percent have children under age 18.

The educational and occupational differences between high MCI households and the general population are quite striking. More than 8 of 10 (86 percent) household heads in the top 1 percent of MCI had at least a college degree compared to 31 percent among the bottom 90 percent. Nearly half (48 percent) of working households in the top 1 percent of MCI had at least some post-graduate education (Appendix Table 8). Nearly 92 percent of household heads in the top 1 percent of the MCI distribution were in the managerial and professional occupation class, and 49 percent were self-employed or a partner in a firm, compared to just 33 percent and 9.5 percent respectively for the bottom 90 percent of the distribution. Moreover, more than half of working households in the top 1 percent were self-employed/partner in a managerial and professional occupation (Appendix Table 9.). These factoids seem to fit well with what know about both the highest socio economic status (SES) class and the "entrepreneurial" class. Higher education helps boost MCI; entrepreneurial opportunities and risk taking also play a large role

## IV. Discussion

The story we are telling is one of shifting sources of incomes, especially at the top, from labor to capital income. It is not the same story as the high income papers. High-income families are not always high earners, as Piketty and Saez (2003; 2006) argue; rather it is that these high earners in earlier years consume relatively small fractions of these incomes and thus increasingly build up assets and realize higher unmeasured incomes from these assets. MCI brings out these patterns

[23] These relationships include legally married couples and other couples that are "partners."

Not unlike the Medici period in Italy, this "Richistan" (Frank, 2007) pattern is definitely at work in the early 21st century where flat earnings below the 80th percentile and falling median incomes for the non-elderly have drawn repeated questions about where the nation's productivity gains have gone. (Gordon and Dew-Becker, 2005; Mishel et al, 2005; Lemieux, et al., 2007; Aron-Dine and Shapiro, 2006; Greenhouse and Leonhardt, 2006). The answer is that they went to, and remain in, higher value assets, including higher value corporate assets, proprietor's incomes, net interest and profits (which drive up stock and bond market returns and the value of business equity).

Institutional and economic change has created a greater emphasis on worldwide 'free market' capitalism, high returns to the inventors and creative users of capital (Acemogolou, 2002). These changes have been combined with tax advantages for both capital income and high incomes, and have led to the worsening of the social and political position of labor more generally (Levy and Temin, 2007) . All of these factors have contributed to the shift to higher capital vs. labor income. Ever greater global trade and further technological change should only intensify these changes (Blinder, 2007; Freeman, 2007). While some claim labor incomes will rise more in the future than will capital incomes due to world population aging (Kreuger and Ludwig, 2006), others see high and rising returns to asset holdings for those with productive assets such as pension savings (Poterba, et al., 2007a; 2007b). Indeed while human capital and technology are "racing" for higher income shares (Katz and Goldin, 2006), technology and the entrepreneurs who own and deploy such capital are currently winning the race, and are likely to receive higher rewards in a world of mobile capital and workers (see also Freeman, 2007).

And we are not alone in this situation, as OECD figures reported by Porter ( 2006) and Guscina (2006) suggest that the labor share of total income has fallen in most rich OECD nations over the 1990-2004 period. Indeed the labor share in Germany and Japan fell by even more than

in the United States over this period, while at the same time; the German trend has been increasingly for market incomes to accrue to the highest income households (Bach, Corneo and Steiner, 20007). In addition, concentration of wealth is on the rise in Europe as well as in the United States (Atkinson, 2006).

**Broader Institutional Effects**

These results also help us explain the rising levels of wealth, which fuel the growth of nonprofits of all types (Gates, Annenberg, Soros, and other closely held foundations) and the recent rise in large donations to universities, schools and other noble causes. Indeed a completely new field of expertise in 'non-profit sector' or 'voluntary sector' management has arisen in the United States, where students are trained in fund-raising and then cooperative deployment of these monies for good causes. In many cities and states, private voluntary organizations are supplanting governments as altruistic redistributive institutions. Allard (2007) reports that half of all social services delivered in large US cities are now being provided by non-profit enterprises and not government agencies. It has also spawned a completely new breed of 'fourth sector' firms, which combine for-profit and non-profit aims, and who donate their entire proceeds to support persons or communities in need (Strom, 2007). The rise in wealth and income from wealth can explain how a fund raising dinner and auction for 400 persons, on behalf of the Robin Hood Foundation could raise more than $72 million in a single evening this past spring (NYT, May 2, 2007). And, finally it has changed the nature of higher education administration, both public and private, from deans and provosts who concentrate on more effective intellectual pursuits and stronger scholarship alone, to senior administrators who are by and large fund raisers who cater favor to alumni and other affluent potential donors.

The "non-profit" and "fourth" sectors have grown due to both the depth and breadth of the rising tide of wealth and the income it generates. The SCF data, which we use, does not

include the Forbes 400 that had an overall wealth share of 2.1 percent of the 33.2 percent of all wealth held by the top one percent of US wealth holders (Kennickell, 2006). This phenomenon is therefore not limited to 400 former or current titans of industry. Indeed the top 1 percent of US households whom we study here numbered more than 1.1 million units in 2004. These units had an MCI of $900,000 or more and a net worth of at least $4.7 million (Table1 and Appendix Table 9).

**Fiscal Effects**

These data also help us to solve puzzles about why the CBO (CBO 2006, 2006a; Orszag, 2007) and other federal and state governmental organizations have greatly underestimated and misestimated corporate and individual income tax revenues during the financial wealth booms of the late 90's and now the mid 00's. It seems that their models are calibrated on income from labor and employment, and not income from capital or assets, which are only imperfectly and sometimes unpredictably realized in the personal or corporate sectors. It also explains how greatly the bursting of the late 1990's stock market bubble in 2001 depressed income from capital and tax revenues during that year (bottom panel, Figure 6), as compared to both 1997-98 and 2003-04. It also tells us why rising income from wealth in the corporate and personal sectors has generated much higher than expected tax revenues at the federal level, and a smaller current federal deficit in 2006 and 2007 than had been expected.

**Social Class and Mobility**

To the long list of rock stars, athletes, other superstars, Wall Street and business executives, and physician-businessmen, who occupy the top economic rungs of society, we can also add a much larger number of 'upper and middle-income' persons whose personal wealth continues to grow much faster than their earned incomes. In 2003, the MCI at the 90$^{th}$ percentile of households was $184,000 but their mean assets were almost $730,000. These results have

direct implications for patterns of bequests, for inter-vivos transfers, and for the plethora of "planned giving" schemes, which appear in nonprofit mailings. They also help explain why repeal or changes in the federal estate tax are liable to be more costly than currently estimated. Finally, it calls for more recent and up to date studies of inheritance (Wolff, 2003: Hurd and Smith 1999; 2002) and inter-vivos giving (Smith, Hurd and Zissimopolous, 2006) and, given the large numbers of high MCI households with children, the effect of wealth and income from wealth on 'class based' intergenerational economic mobility.

## V. Summary and Policy Implications

While we are not ignorant of the efficiency effects of taxes on investment income championed by Feldstein (2006) and others, we are now more aware than ever of the full distributional consequences of recent economic and policy changes affecting income from wealth. Most importantly, our method of accounting for income from capital allows us to link rising levels of wealth inequality with changes in our more traditional measures of income distribution. In so doing, it suggests that we are increasingly a nation which derives its income and consumption from accumulated assets, —such as imputed rent; unrealized gains in stocks and bonds, proprietor's incomes, and business equity —not from labor income alone.

The hue and cry for greater national investments in education and human capital are found in almost every serious paper on both economic and social policy alternatives, ranging from greater investment in high quality preschools to additional funding and mentorship to raise college graduation rates. But the shift from labor to capital income suggests that social policies which increase non-human wealth holdings amongst low and middle income families are also desirable. For instance, an 'add-on' Social Security based, employer and employee funded, centrally managed, and mandatory IRA would spread retirement savings to every worker (Sperling, 2005) .Many other policy alternatives to increase wealth holdings for the middle class

and for children should also be considered, such as those which would increase home ownership for lower and middle-income families (Mensah et al., 2007; Haveman, 1987) .These programs will all benefit those households who now rely mainly, or only, on labor incomes. And even in the case of "earned income" the role of performance pay and incentive based earnings should be expanded to all classes of "for profit" sector workers, not just the top 3-5 percent of managers, so they too have a profit or capital-based stake in the performance of the firms which employ them.(Freeman, 2007; Lemieux, et al, 2007)

The implications of our research for political economy ( e.g. tax policy and profit sharing plans); for class structure in a plutocracy; for the role of non-profits and non-governmental organizations in social, political and economic affairs; and for tax laws and regulations affecting capital vs. labor income sources ( such as those reflected in corporate pension rules and estate taxes); are just now beginning to emerge. The message of this paper is a simple one: human capital is important but increasingly the accumulated effects of wealth in the form of non-human capital bear are also important and bear close scrutiny as we progress into the 21st century.

## References


Acemoglu, Daron. 2002. "Technical Change, Inequality, and the Labor Market." *Journal of Economic Literature* 40 (1): 7-72.

Ackerman, Elise. 2006. "Google 'Business Founder' No.1 - 289 Million, Plus Stock Option Gains." *Mercury News*.

Allard, Scott. 2007. "Mismatches and Unmet Needs: Spatial Inequality in the Safety Net." Presented at "Ten Years After: Evaluating the Long-Term Effects of Welfare Reform on Children, Families, Welfare, and Work" conference at the University of Kentucky Center for Poverty Research, April 13.

Aron-Dine, Aviva, and Isaac Shapiro. 2006. "Share of National Income Going to Wages and Salaries at Record Low in 2006: Share of Income Going to Corporate Profits at Record High." Washington, DC: Center on Budget and Priorities. Revised March 29, 2007. http://www.cbpp.org/8-31-06inc.pdf.

Atkinson, Anthony B. 2006. "Concentration among the Rich." Research Paper No. 2006/151. Helsinki, Finland: United Nations University-World Institute for Development Economics Research. December.

Auten, Gerald, and Robert Carroll. 1999. "The Effect of Income Taxes on Household Income." *Review of Economics and Statistics* 81 (4) (November): 681-693.

Autor, David H., Lawrence F. Katz, and Melissa S. Kearney. 2006. "The Polarization of the U.S. Labor Market." *American Economic Review* 96 (2): 189-194. ISI:000237855200037.

Bach, Stefan, Giacomo Corneo, and Viktor Steiner. 2007. "From Bottom to Top: The Entire Distribution of Market Income in Germany, 1992-2001." IZA Discussion Papers, 2723. Institute for the Study of Labor. April. http://ideas.repec.org/p/iza/izadps/dp2723.html.

Baker, Malcolm, Stefan Nagel, and Jeffrey Wurgler. 2006. "The Effect of Dividends on Comsumption." NBER Working Paper No. 12288. Cambridge, MA: National Bureau of Economic Research. June.

Blinder, Alan S. 2007. "How Many US Jobs Might be Offshorable?" CEPS Working Paper: No. 142. Princeton, NJ: Center for Economic Policy Studies. March. http://www.princeton.edu/~blinder/papers/07ceps142.pdf.

Bureau of Economic Analysis. 2006. "Gross Domestic Product: Second Quarter 2006 (FINAL) Corporate Profits: Second Quarter 2006 (FINAL)." Accessed May 29, 2007. Available from http://www.bea.gov/newsreleases/national/gdp/2006/gdp206f.htm.

Burtless, Gary. 2007. "Comments on 'Has US Income Inequality *Really* Increased'." Presented at Cato Institute.

Canberra Group. 2001. *Expert Group on Household Income Statistics: Final Report and Recommendations.* Ottawa, Canada: Statistics Canada.

Carroll, Christopher D. 2000. "Why Do the Rich Save So Much?" In *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, edited by Joel B. Slemrod. Cambridge, MA: Harvard University Press, 465-484.

Congressional Budget Office. 2006a. "How CBO Forecasts Income." Congressional Budget Office Background Paper. Washington, DC: CBO. August.

Congressional Budget Office. 2006b. "Monthly Budget Review: Fiscal Year 2006." Washington, DC: CBO. October 6.

Congressional Budget Office. 2006c. "Historical Effective Federal Tax Rates: 1979 to 2004." Washington, DC: CBO. December.

Congressional Budget Office. 2006d. "The Treatment of Federal Receipts and Expenditures in the National Income and Product Accounts." Washington, DC: CBO. September.

Cowen, Tyler. 2007. "Why Is Income Inequality in America So Pronounced? Consider Education." *New York Times*, May 17.

Cox, W. Michael, and Richard Alm. 1999. *Myths of Rich &Poor: Why We're Better Off Than We Think.* 1st edition. New York: Basic Books.

Feenberg, Daniel, and Elisabeth Coutts. 2007. "An Introduction to the TAXSIM Model." *Journal of Policy Analysis and Management* 12 (1): 189-194.

Feldstein, Martin. 2006. "The Effect of Taxes on Efficiency and Growth." NBER Working Paper No. 12201. Cambridge, MA: National Bureau of Economic Research. May. http://www.nber.org/papers/w12201.

Frank, Robert. 2007. *Richistan: A Journey through the American Wealth Boom and the Lives of the New Rich.* NY: Crown Publishers.

Freeman, Richard B. 2007. *America Works: Critical Thoughts on the Exceptional U.S. Labor Market.* New York: Russell Sage Foundation. http://www.russellsage.org/publications/070104.541404.

Garfinkel, Irwin, Lee Rainwater, and Timothy M. Smeeding. 2006. "A Reexamination of Welfare State and Inequality in Rich Nations: How In-Kind Transfers and Indirect Taxes Change the Story." *Journal of Policy Analysis and Management* 25 (4): 897-919. http://www3.interscience.wiley.com/cgi-bin/jhome/34787?CRETRY=1&SRETRY=0.

Goldfarb, Robert S., and Thomas C. Leonard. 2005. "Inequality of What among Whom? Rival Conceptions of Distribution in the 20th Century." In *Research in the History of Economic Thought and Methodology*, Volume 23-A, edited by Warren J. Samuels, Jeff E. Biddle, and Ross B. Emmett. Oxford, UK: Elsevier, 75-118.

Goldin, Claudia, and Lawrence F. Katz. 2007. "The Race between Education and Technology: The Evolution of U.S. Educational Wage Differentials, 1890 to 2005." NBER Working Paper No. 12984. Cambridge, MA: National Bureau of Economic Research. March. http://papers.nber.org/papers/w12984.

Goodnough, Abby. 2007. "Housing Slump Pinches States in Pocketbook." *New York Times*, April 8.

Goolsbee, Austan. 2007. "Why Do the Richest People Rarely Intend to Give It All Away?" *New York Times*, March 1.

Gordon, Robert J., and Ian Dew-Becker. 2005. "Where did the Productivity Growth Go? Inflation Dynamics and the Distribution of Income." *Brookings Papers on Economic Activity* (2): 67-127. ISI:000236150100003.

Greenhouse, Steven, and David Leonhardt. 2006. "Real Wages Fail to Match a Rise in Productivity." *New York Times*, August 28, 1.

Gruber, Jon, and Emmanuel Saez. 2002. "The Elasticity of Taxable Income: Evidence and Implications." *Journal of Public Economics* 84 (1) (April): 1-32.

Guscina, Anastasia. 2006. "Effects of Globalization on Labor's Share in National Income." IMF Working Paper 06/294. Washington, DC: International Monetary Fund. December 1. http://www.imf.org/external/pubs/ft/wp/2006/wp06294.pdf.

Haveman, Robert. 1988. *Starting Even: An Equal Opportunity Program to Combat the Nation's New Poverty.* NY: Simon and Schuster.

Hurd, Michael, and James Smith. 1999. "Anticipated and Actual Bequests." NBER Working Paper No. 7380. Cambridge, MA: National Bureau of Economic Research. October. http://papers.nber.org/papers/w7380.

Hurd, Michael, and James Smith. 2002. "Expected Bequests and Their Distribution." NBER Working Paper No. 9142. Cambridge, MA: National Bureau of Economic Research. September. http://papers.nber.org/papers/w9142.

Institute on Taxation and Economic Policy. 2003. *Who Pays?: A Distributional Analysis of the Tax Systems in All 50 States.* 2nd. Washington D.C.: Institute on Taxation & Economic Policy.

Johnson, Nicholas, and Daniel Tenny. 2002. "The Rising Regressivity of State Taxes." Washington, DC: Center on Budget and Policy Priorities. January 15. http://www.cbpp.org/1-15-02sfp.pdf.

Kaplan, Steven N., and Joshua D. Rauh. 2006. "Wall Street and Main Street: What Contributes to the Rise in the Highest Incomes?" Chicago: Center for Research in Security Prices, Graduate School of Business, University of Chicago. September, 16. http://gsbwww.uchicago.edu/fac/finance/papers/.

Katz, Lawrence. 2006. "Narrowing, Widening, Polarizing: The Evolution of the U.S. Wage Structure." Presented at Society of Labor Economists Eleventh Annual Meeting, Cambridge, MA, May 5. http://client.norc.org/jole/SOLEweb/2006BigProgram.html.

Kennickell, Arthur B. 2006. "Currents and Undercurrents: Changes in the Distribution of Wealth, 1989-2004." Survey of Consumer Finances Working Paper. Washington, DC: Federal Reserve Board. January 30.

Krueger, Dirk, and Alexander Ludwig. 2006. "On the Consequences of Demographic Change for Rates of Returns to Capital, and the Distribution of Wealth and Welfare." NBER Working Paper No. 12453. Cambridge, MA: National Bureau of Economic Research. August. http://www.nber.org/papers/w12453.

Lemieux, Thomas. 2006. "Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?" *American Economic Review* 96 (3) (June): 461-498.

Lemieux, Thomas, W. Bentley MacLeod, and Daniel Parent. 2007. "Performance Pay and Wage Inequality." NBER Working Paper no. 13128. Cambridge, MA: National Bureau of Economic Research. May. http://www.nber.org/papers/w13128.

Levy, Frank, and Peter Temin. 2007. "Inequality and Institutions in 20th Century America." NBER Working Paper No. 13106. Cambridge, MA: National Bureau of Economic Research. May. http://www.nber.org/papers/w13106.

Mensah, Lisa, Pamela Perun, Elena Chavez, and Joseph Valenti. 2007. *Savings for Life: The Pathway to Financial Security for All Americans.* Aspen, CO: Aspen Institute, Initiative on Financial Security. http://www.asiaing.com/savings-for-life-the-pathway-to-financial-security-for-all-americans.html.

Mishel, Lawrence, Jared Bernstein, and Sylvia Allegretto. 2005. *The State of Working America, 2004/2005.* Ithaca, NY: Cornell University Press.

Orszag, Peter R. 2007. "Letter to the Honorable Kent Conrad on Federal Tax Revenues from 2003 to 2006." Washington, DC: Congressional Budget Office. May 18. http://www.cbo.gov/ftpdocs/81xx/doc8116/05-18-TaxRevenues.pdf.

Piketty, Thomas, and Emmanuel Saez. 2003. "Income Inequality in the United States, 1913-1998." *Quarterly Journal of Economics* 118 (1) (February): 1-39.

Piketty, Thomas, and Emmanuel Saez. 2006. "The Evolution of Top Incomes: A Historical and International Perspective." NBER Working Paper No.11955. Cambridge, MA: National Bureau of Economic Research. January. http://papers.nber.org/papers/w11955.

Porter, Eduardo. 2006. "After Years of Growth, What About Workers' Share?" *New York Times*, October 15.

Poterba, James, Steven Venti, and David A. Wise. 2007. "New Estimates of the Future Path of 401(k) Assets." NBER Working Paper No. 13083. Cambridge, MA: National Bureau of Economic Research. May. http://www.nber.org/papers/w13083.

Poterba, James, Steven F. Venti, and David A. Wise. 2007. "Rise of 401(k) Plans, Lifetime Earnings, and Wealth at Retirement." NBER Working Paper No. 13091. Cambridge, MA: National Bureau of Economic Research. May. http://www.nber.org/papers/w13091.

Pryor, Fredric. 2007Forthcoming. "The Anatomy of Increasing Inequality of US Family Incomes." *Journal of Socio-Economics*

Reynolds, Alan. 2007. "Has U.S. Income Inequality Really Increased?" Policy Analysis No. 586. Washington, DC: Cato Institute. January 8.

Schwabish, Jonathan A. 2006. "Earnings Inequality and High Earners: Changes During and After the Stock Market Boom of the 1990s." Working Paper No. 2006-06. Washington D.C.: Congressional Budget office. April.

Sierminska, Eva, and Yelena Takhtamanova. 2006. "Wealth Effects on Consumption: Cross Country and Demographic Group Comparisons." Presented at 29th General Conference of the IARIW, Joensuu, Finland.

Smeeding, Timothy M. 2005. "Public Policy, Economic Inequality, and Poverty: The United States in Comparative Perspective." *Social Science Quarterly* 86 (5): 955-983.

Sperling, Gene. 2005. "A Progressive Framework for Social Security Reform." Washington, DC: Center for American Progress. January 10.

Strom, Stephanie. 2007. "Make Money, Save the World." *New York Times*, May 6.

Tatom, John A. 2007. "Is Inequality Growing as American Workers Fall Behind?" Working Paper No. 2007-WP-07. Indianapolis: Networks Financial Institute, Indiana State University. February. http://www.networksfinancialinstitute.org/pdfs/profiles/2007-WP-07_Tatom.pdf.

Taussig, Michael K. 1973. "Alternative Measures of the Distribution of Economic Welfare." Research Report Series: No. 116. Princeton, NJ: Industrial Relations Section, Princeton University.

U.S. Census Bureau. 2006. "Income, Poverty, and Health Insurance Coverage in the United States, 2005." Current Population Reports. P60-231. Washington D.C.: U.S. Census Bureau. http://www.census.gov/prod/2006pubs/p60-231.

Walker, Richard. 2005. "Superstars and Renaissance Men: Specialization, Market Size and the Income Distribution." CEP Discussion Paper: No. 707. London: Centre for Economic Performance, London School of Economics and Political Science. November.

Weisbrod, Burton A., and W. Lee Hansen. 1968. "An Income-Net Worth Approach to Measuring Economic Welfare." *American Economic Review* 58 (5) (December): 1315-1329.

Wolf, Edward N., and Ajit Zacharias. 2006b. "Wealth and Economic Inequality: Who's at the Top of the Economic Ladder?" LIMEW, The Distribution of Income and Wealth.

Annandale-on-Hudson, NY: Levy Economics Institute, Bard College. December. http://www.levy.org/default.asp?view=publications_view&pubID=10fee51efa6.

Wolff, Edward. 2003. "The Impact of Gifts and Bequests on the Distribution of Wealth." In *Death and Dollars: The Role of Gifts and Bequests in America*, edited by Alicia Haydock Munnell and Annika E. Sunden. Washington, DC: Brookings Institution Press, 345-375.

Wolff, Edward N., and Ajit Zacharias. 2006a. "Household Wealth and the Measurement of Economic Well-Being in the United States." Levy Economics Institute Working Paper No. 447. Annandale-on-Hudson, NY: Levy Economics Institute, Bard College. May. http://www.levy.org/default.asp?view=publications_view&pubID=10b5deb89de.

Wolff, Edward N., and Ajit Zacharias. 2007. "Class Structure and Economic Inequality." Levy Economics Institute Working Paper No. 487. Annandale-on-Hudson, NY: Levy Economics Institute, Bard College. January.

**Table 1. SCF (2003-04) - Full Income Definition Summary Statistics - Original Rankings and Short-run Rates of Return**

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| mean | 70,626 | 63,486 | 70,595 | 76,260 | 87,704 | 93,742 | 102,946 | 102,765 | 32,139 | 46% |
| median (P50) | 43,129 | 41,075 | 43,129 | 44,758 | 51,428 | 53,292 | 54,442 | 53,266 | 10,137 | 24% |
| P90 | 129,386 | 122,825 | 131,415 | 146,271 | 166,000 | 175,682 | 184,980 | 184,318 | 54,932 | 42% |
| P95 | 184,838 | 165,327 | 184,808 | 209,626 | 240,526 | 257,790 | 283,210 | 284,006 | 99,168 | 54% |
| P10 | 11,296 | 10,269 | 10,296 | 10,726 | 12,743 | 13,349 | 13,364 | 13,064 | 1,769 | 16% |
| P99 | 487,766 | 381,458 | 482,423 | 533,548 | 609,239 | 752,730 | 881,475 | 884,670 | 396,904 | 81% |
| 90/10 | 11.5 | 12.0 | 12.8 | 13.6 | 13.0 | 13.2 | 13.8 | 14.1 | 2.7 | 23% |
| 90/50 | 3.0 | 3.0 | 3.0 | 3.3 | 3.2 | 3.3 | 3.4 | 3.5 | 0.5 | 15% |
| 10/50 | 0.26 | 0.25 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.25 | -0.02 | -6% |
| 95/50 | 4.3 | 4.0 | 4.3 | 4.7 | 4.7 | 4.8 | 5.2 | 5.3 | 1.0 | 24% |
| 99/50 | 11.3 | 9.3 | 11.2 | 11.9 | 11.8 | 14.1 | 16.2 | 16.6 | 5.3 | 47% |
| 99/90 | 3.8 | 3.1 | 3.7 | 3.6 | 3.7 | 4.3 | 4.8 | 4.8 | 1.0 | 27% |
| gini | 0.538 | 0.512 | 0.54 | 0.553 | 0.548 | 0.562 | 0.589 | 0.593 | 0.05 | 10% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Table 2. SCF (2003-04) - Full Income Definition Summary Statistics - Original Rankgins and Long-run Rates of Return**

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| mean | 70,626 | 63,486 | 69,110 | 73,329 | 79,995 | 85,168 | 92,056 | 92,265 | 21,639 | 31% |
| median (P50) | 43,129 | 41,075 | 43,129 | 44,156 | 48,470 | 49,873 | 50,874 | 50,066 | 6,937 | 16% |
| P90 | 129,386 | 122,825 | 129,386 | 141,635 | 151,711 | 161,343 | 166,877 | 166,556 | 37,170 | 29% |
| P95 | 184,838 | 165,327 | 180,730 | 200,439 | 215,081 | 230,858 | 248,583 | 250,661 | 65,823 | 36% |
| P10 | 11,296 | 10,269 | 10,269 | 10,603 | 12,323 | 12,363 | 12,448 | 12,355 | 1,059 | 9% |
| P99 | 487,766 | 381,458 | 465,967 | 509,358 | 541,812 | 627,851 | 767,321 | 779,124 | 291,358 | 60% |
| 90/10 | 11.5 | 12.0 | 12.6 | 13.4 | 12.3 | 13.1 | 13.4 | 13.5 | 2.0 | 18% |
| 90/50 | 3.0 | 3.0 | 3.0 | 3.2 | 3.1 | 3.2 | 3.3 | 3.3 | 0.3 | 11% |
| 10/50 | 0.26 | 0.25 | 0.24 | 0.24 | 0.25 | 0.25 | 0.24 | 0.25 | -0.02 | -6% |
| 95/50 | 4.3 | 4.0 | 4.2 | 4.5 | 4.4 | 4.6 | 4.9 | 5.0 | 0.7 | 17% |
| 99/50 | 11.3 | 9.3 | 10.8 | 11.5 | 11.2 | 12.6 | 15.1 | 15.6 | 4.3 | 38% |
| 99/90 | 3.8 | 3.1 | 3.6 | 3.6 | 3.6 | 3.9 | 4.6 | 4.7 | 0.9 | 24% |
| gini | 0.538 | 0.512 | 0.534 | 0.544 | 0.539 | 0.550 | 0.574 | 0.580 | 0.0 | 8% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

## Table 3. After-Tax Concepts (2003-04)

### Panel A. Short-run Rates of Return

| | after-tax concepts | | change | |
|---|---|---|---|---|
| | dpi* | MCI lesstax | DPI to MCI lesstax | as % of DPI |
| **mean** | 60,948 | 88,847 | 27,899 | 46% |
| **median (P50)** | 40,619 | 50,327 | 9,708 | 24% |
| **P90** | 111,628 | 157,884 | 46,256 | 41% |
| **P95** | 151,480 | 234,853 | 83,373 | 55% |
| **P10** | 11,296 | 13,147 | 1,851 | 16% |
| **P99** | 359,129 | 714,284 | 355,155 | 99% |
| **90/10** | 9.9 | 12.0 | 2.1 | 22% |
| **90/50** | 2.7 | 3.1 | 0.4 | 14% |
| **10/50** | 0.28 | 0.26 | 0.0 | -6% |
| **95/50** | 3.7 | 4.7 | 0.9 | 25% |
| **99/50** | 8.8 | 14.2 | 5.4 | 61% |
| **99/90** | 3.2 | 4.5 | 1.3 | 41% |
| **gini** | 0.498 | 0.561 | 0.063 | 13% |

### Panel B. Long-run Rates of Return

| | after-tax concepts | | change | |
|---|---|---|---|---|
| | dpi* | MCI lesstax | DPI to MCI lesstax | as % of DPI |
| **mean** | 60,948 | 80,405 | 19,457 | 32% |
| **median (P50)** | 40,619 | 47,283 | 6,664 | 16% |
| **P90** | 111,628 | 142,665 | 31,037 | 28% |
| **P95** | 151,480 | 211,187 | 59,707 | 39% |
| **P10** | 11,296 | 12,499 | 1,203 | 11% |
| **P99** | 359,129 | 622,205 | 263,076 | 73% |
| **90/10** | 9.9 | 11.4 | 1.5 | 16% |
| **90/50** | 2.7 | 3.0 | 0.3 | 10% |
| **10/50** | 0.28 | 0.26 | 0.0 | -5% |
| **95/50** | 3.7 | 4.5 | 0.7 | 20% |
| **99/50** | 8.8 | 13.2 | 4.3 | 49% |
| **99/90** | 3.2 | 4.4 | 1.1 | 36% |
| **gini** | 0.498 | 0.547 | 0.049 | 10% |

Notes:

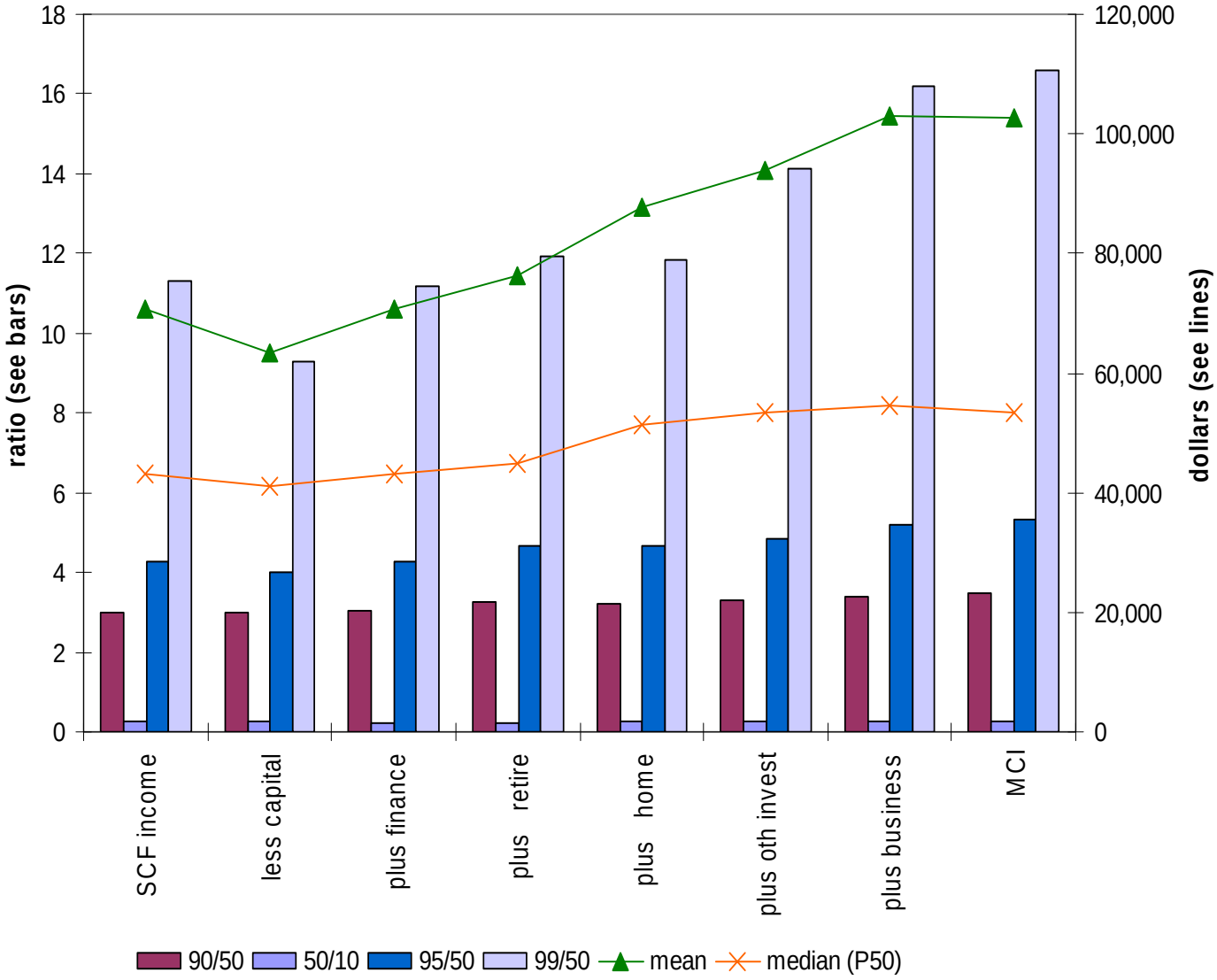
| | |
|---|---|
| dpi | income less federal taxes - calculated with TAXSIM |
| MCI lesstax | MCI less federal taxes - calculated with TAXSIM |

*since dpi does not include any imputed flows to wealth, results are the same for short and long term rates of return

## Table 4. Demographic Profile of Households by MCI Levels - 2004 SCF

| (characteristics of household head) | Top 10% | Top 5% | Top 1% | All | Bottom 90% |
|---|---|---|---|---|---|
| Average age | 53.2 | 54.8 | 55.6 | 49.6 | 49.1 |
| **Education Status** | | | | | |
| Average years of education | 15.8 | 16.0 | 16.0 | 13.3 | 13.0 |
| Share with at least college degree | 80.5% | 86.6% | 86.0% | 36.6% | 31.2% |
| **Household Status** | | | | | |
| Share of households headed by married couple or partners | 89.7% | 91.4% | 89.0% | 58.0% | 54.0% |
| Share with any kids | 48.0% | 46.0% | 49.0% | 43.8% | 43.2% |
| Average # kids (of those with kids) | 2.04 | 2.10 | 1.96 | 1.9 | 1.8 |
| **Race** | | | | | |
| Share non-Hispanic White | 90.5% | 91.1% | 93.9% | 72.2% | 70.0% |
| Share Black | 1.8% | 1.2% | 1.2% | 13.6% | 15.0% |
| Share Hispanic | 2.3% | 1.9% | 1.2% | 9.2% | 10.0% |
| Share "other" | 5.4% | 5.7% | 3.6% | 5.1% | 5.0% |
| **Working Status** | | | | | |
| Employed by someone else | 54.2% | 44.8% | 33.5% | 60.1% | 60.8% |
| Self-employed or Partner | 30.4% | 37.3% | 49.1% | 11.8% | 9.5% |
| Retired/Disabled/Student | 13.6% | 15.9% | 16.1% | 23.7% | 25.0% |
| Otherwise not in labor force | 1.8% | 2.0% | 1.3% | 4.4% | 4.7% |
| **Industry** | | | | | |
| Agriculture | 0.6% | 0.6% | 0.9% | 2.6% | 2.9% |
| Mining & Construction | 5.3% | 5.3% | 7.0% | 11.7% | 12.7% |
| Manufacturing & publishing | 15.1% | 10.9% | 7.4% | 15.1% | 15.1% |
| Trade, restaurants & bars | 10.5% | 14.0% | 12.1% | 15.5% | 16.2% |
| Data, financial, business, repair & security svcs. | 18.9% | 20.3% | 28.3% | 10.9% | 9.7% |
| Utility & transport, professional, scientific, technical, travel, cleaning, administrative, health, education, & personal svcs. | 43.5% | 45.1% | 43.0% | 37.8% | 36.9% |
| Public admin. & armed svcs. | 6.0% | 3.8% | 1.4% | 6.4% | 6.5% |
| **Occupations** | | | | | |
| Executives, managers, scientists, architects, engineers, lawyers, teachers, counselors & social workers, health care practioners, techs. & support, entertainment, sports & media | 80.5% | 86.6% | 91.7% | 39.3% | 33.2% |
| Technicians, sales, office & computer operators | 10.5% | 11.4% | 7.9% | 18.2% | 19.3% |
| Protective svcs., food prep, cleaning & bldg svcs., personal care, armed svcs. | 2.8% | 0.7% | 0.1% | 12.5% | 14.0% |
| Construction & skilled labor & crafts | 3.4% | 0.8% | 0.0% | 17.5% | 19.6% |
| Unskilled labor | 2.4% | 0.2% | 0.0% | 11.2% | 12.5% |
| Farm, fishing, forestry, animal training & care | 0.4% | 0.3% | 0.3% | 1.3% | 1.4% |

## Figure 1. Full-income 2003-04 SCF - Short-run returns



## Figure 2. Full-income 2003-04 SCF - Long-run returns

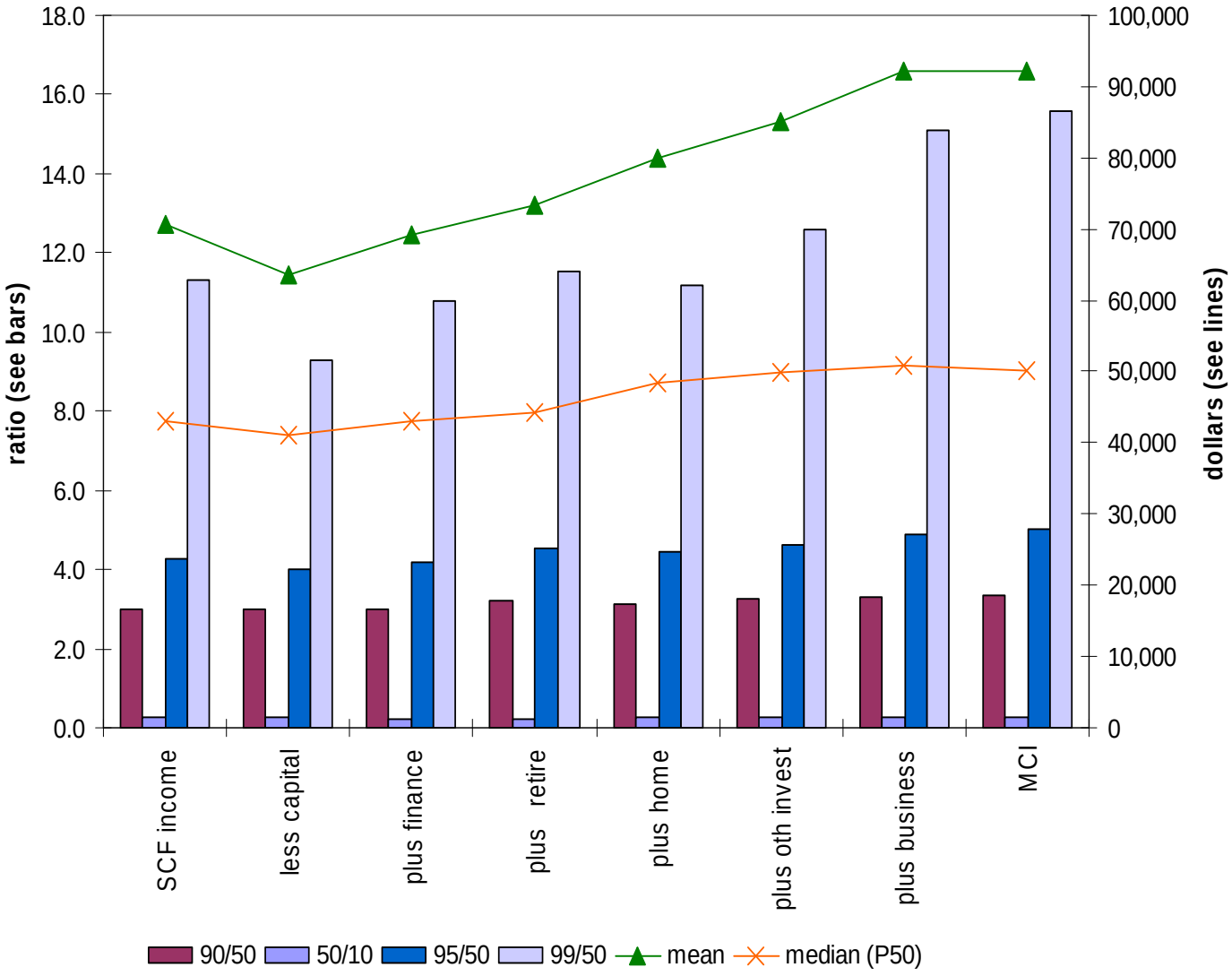


**Figure 3a. After-tax full-income concepts 2003-04 SCF - short-run returns**

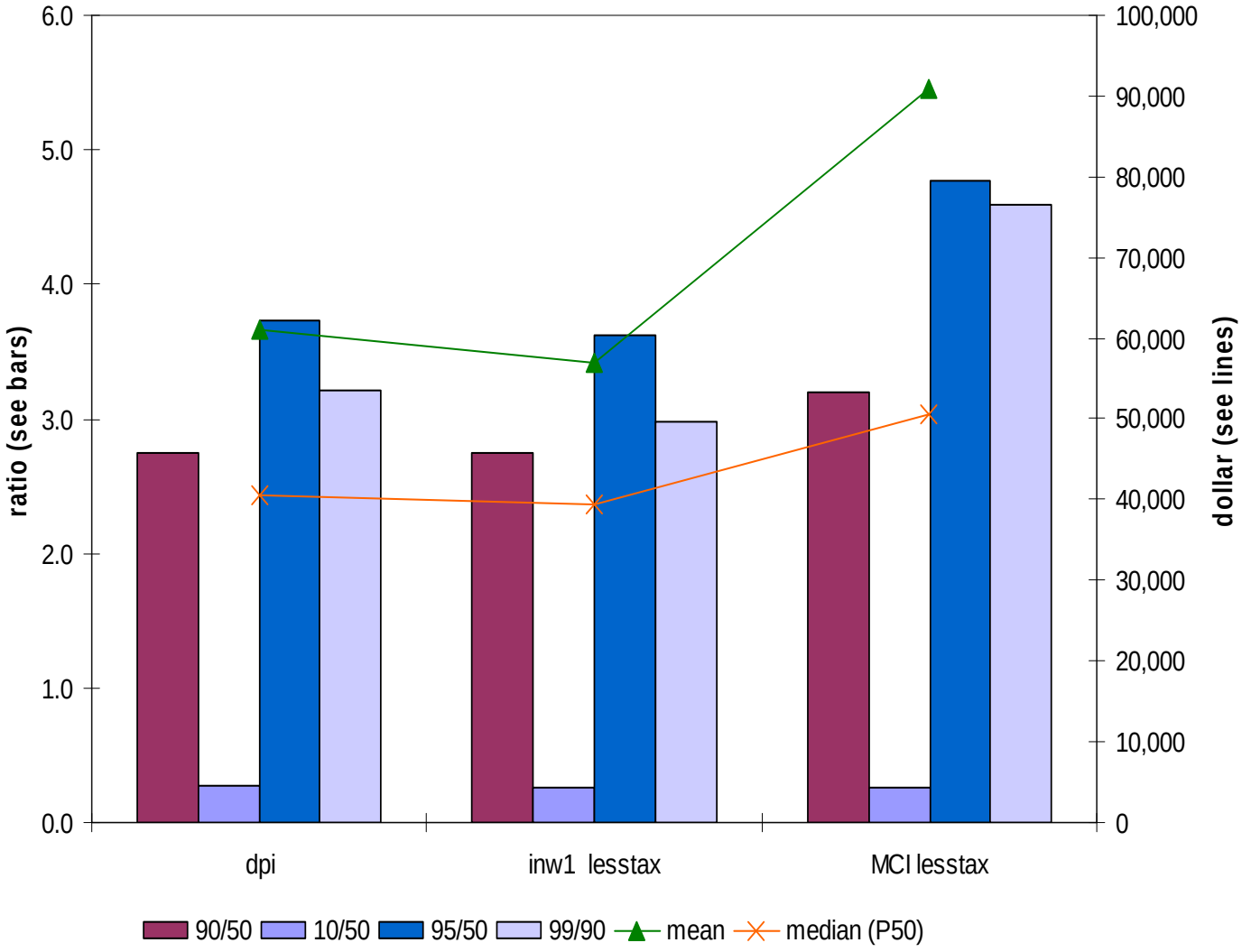
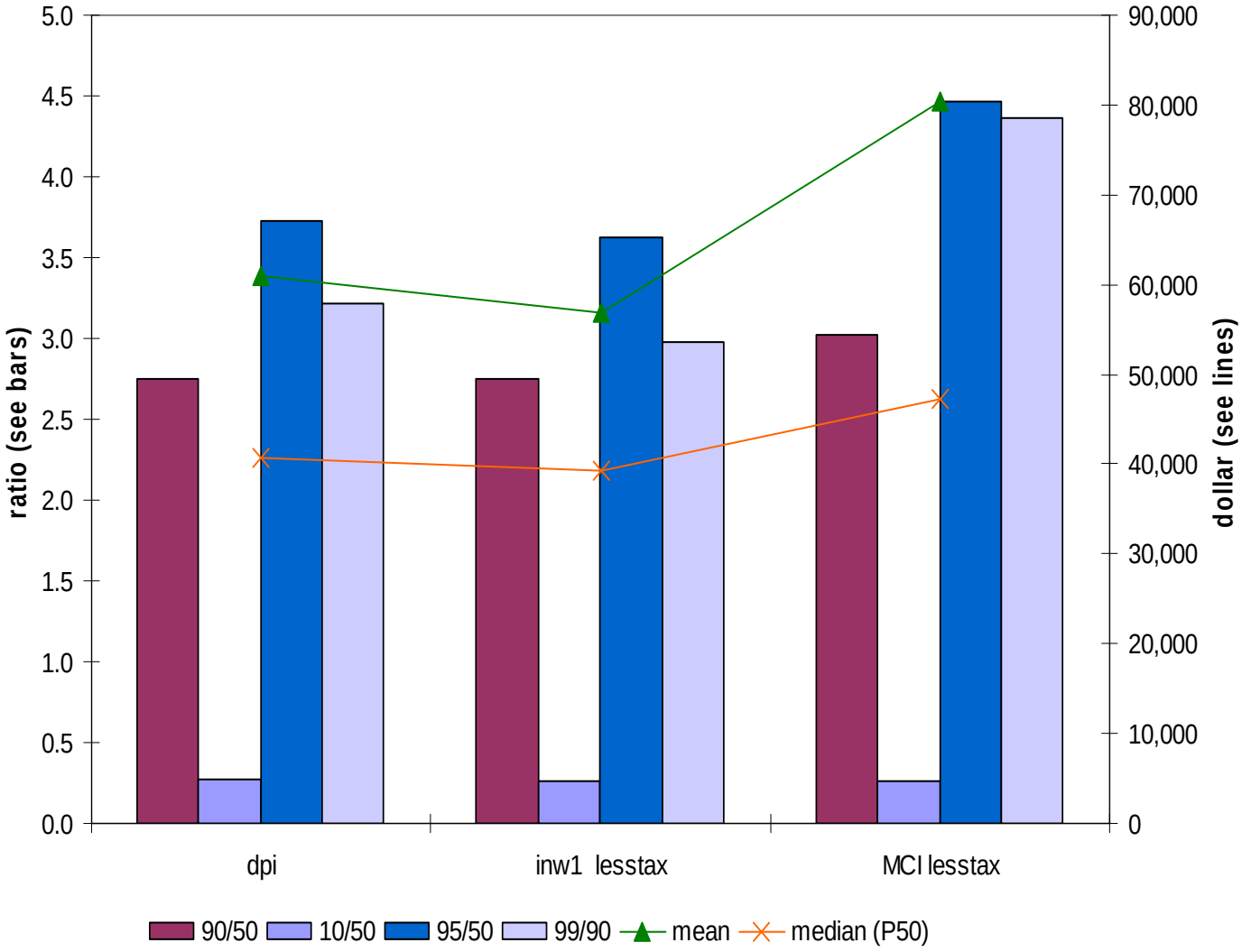
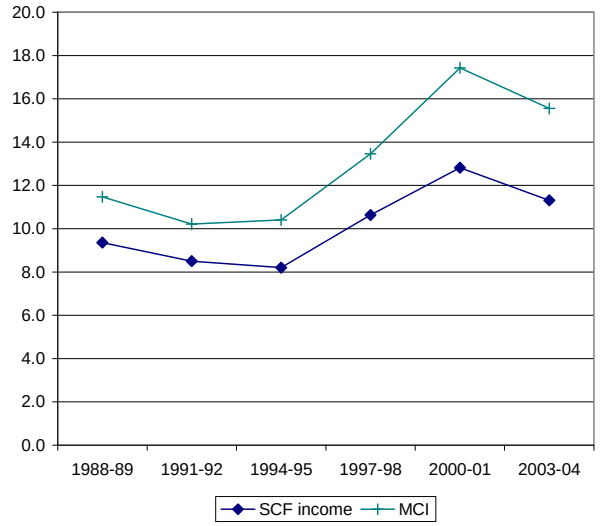


**Figure 3b. After-tax full-income concepts 2003-04 SCF - long-run returns**

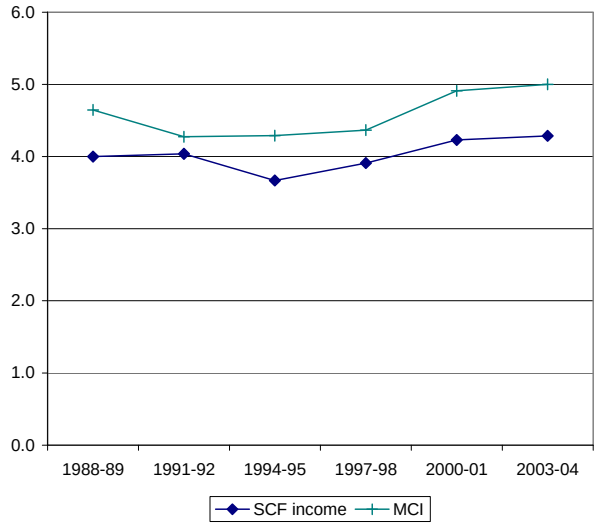


## Figure 4a. Trend Statistics for Key Income Concepts (long run rates)

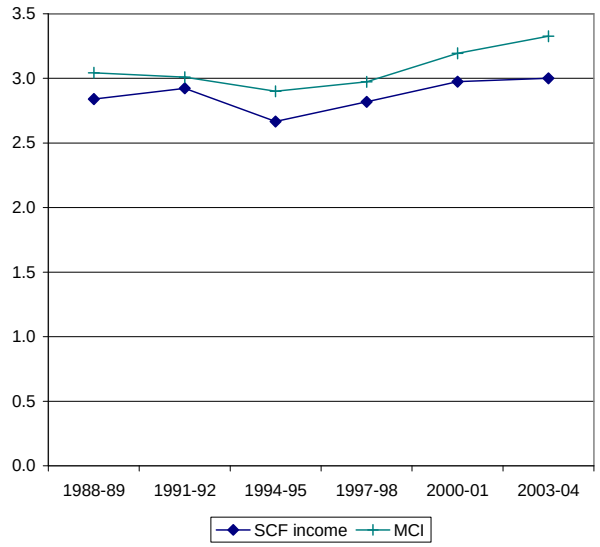
**Panel A. 99/50 ratios**



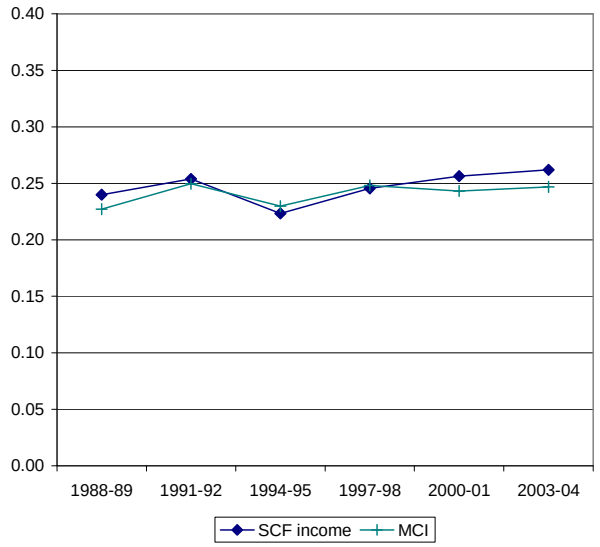

**Panel B. 95/50 ratios**



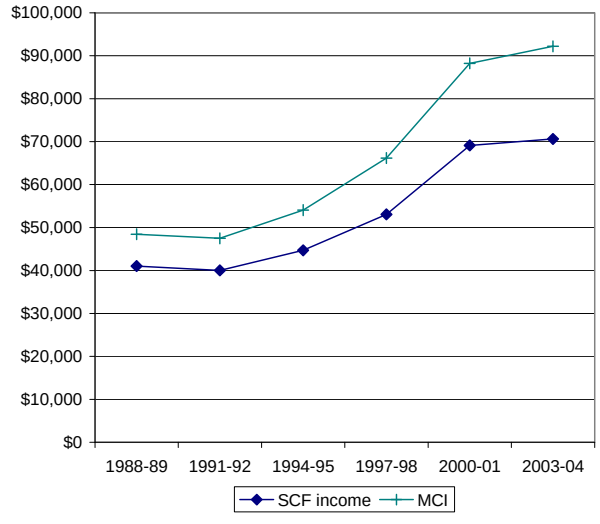

**Panel C. 90/50 ratios**



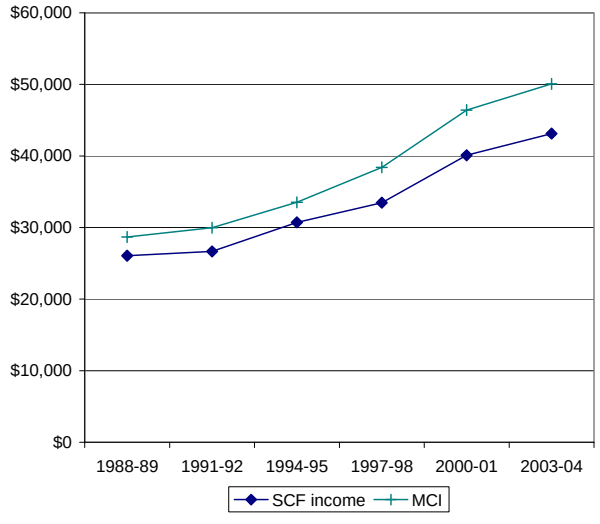

**Panel D. 10/50 ratios**




**Panel E. Means**

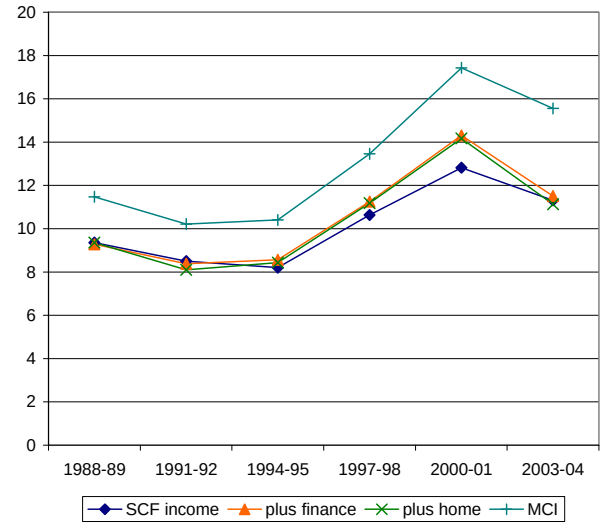



**Panel F. Medians**

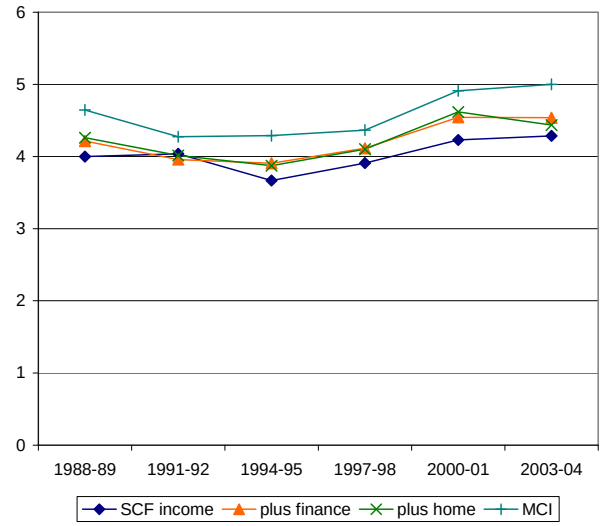


## Figure 4b. Trend Statistics for Key Income Concepts (long run rates)

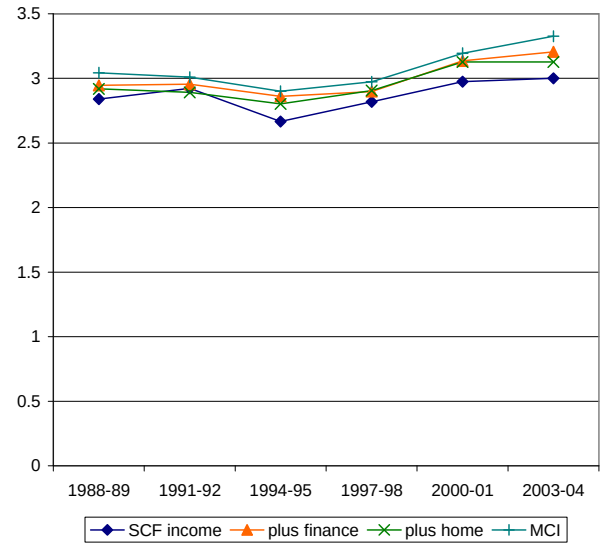
**Panel A. 99/50 ratios**



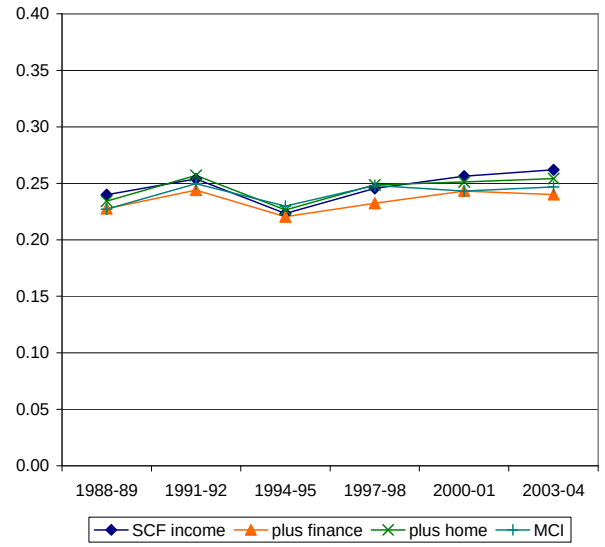

**Panel B. 95/50 ratios**



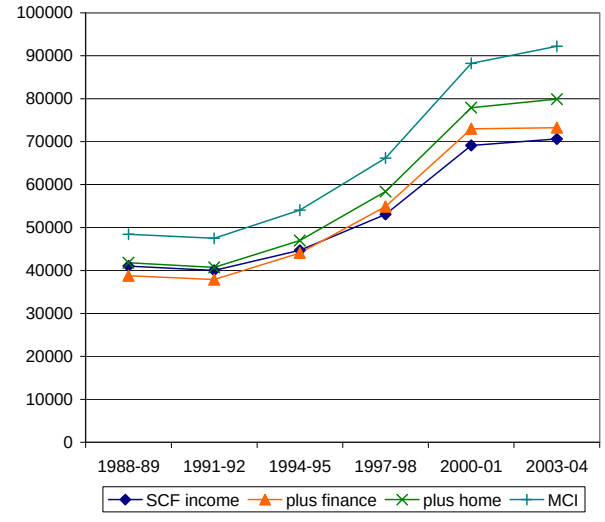

**Panel C. 90/50 ratios**




**Panel D. 10/50 ratios**




**Panel E. Means**




**Panel F. Medians**

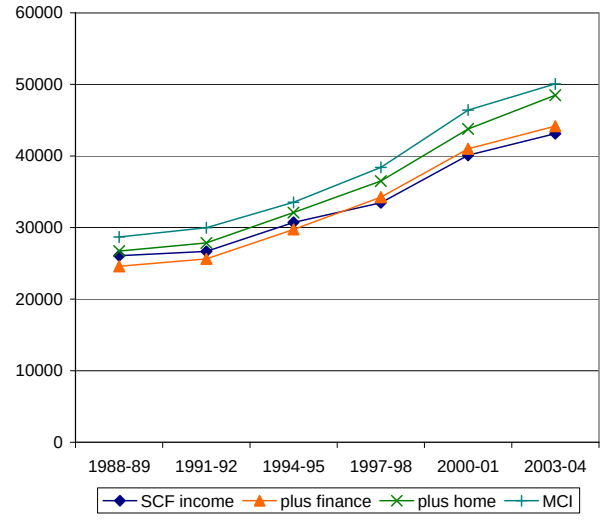
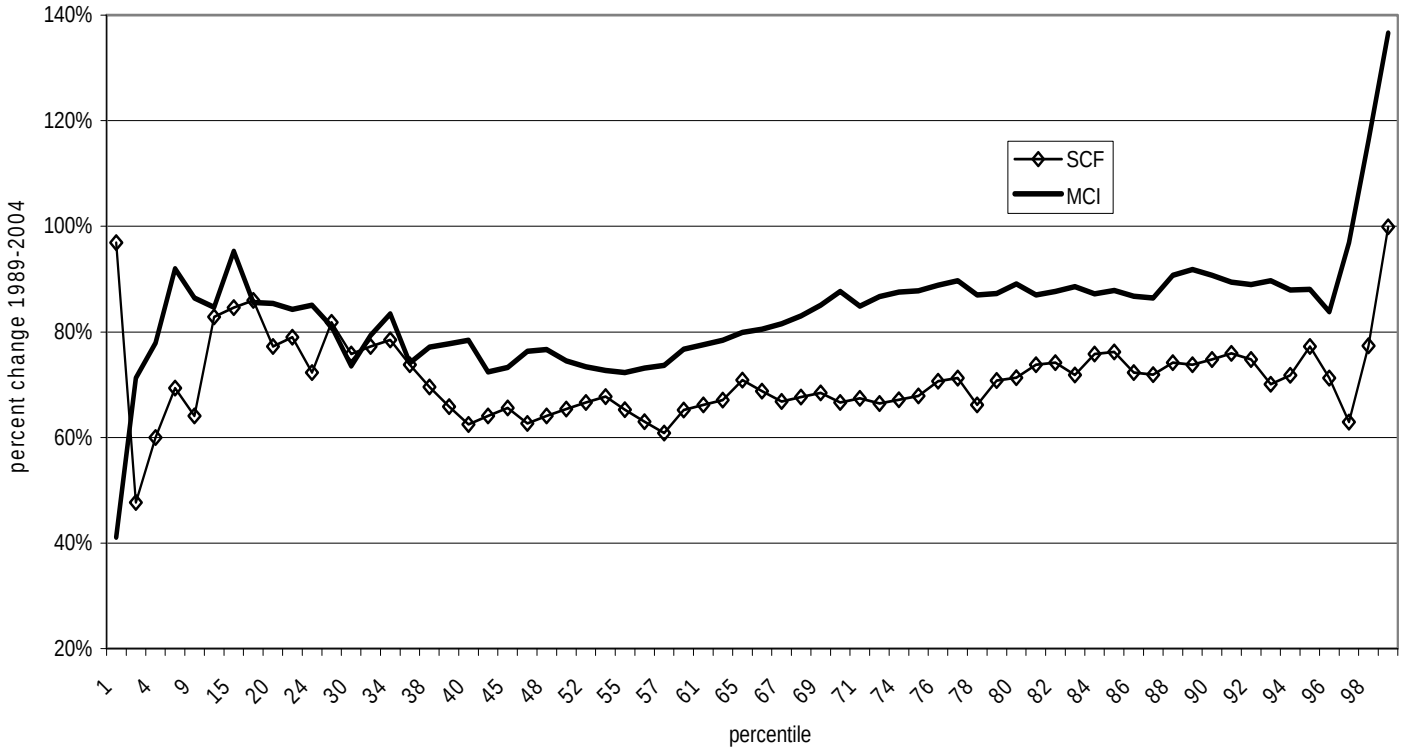


**Figure 5. MCI and SCF Growth Compared**

**Panel A. Growth between 1989 and 2004 by percentile of SCF and MCI distribution (long-run rates)**




**Panel B. Difference in MCI and SCF Growth Rates by percentile**

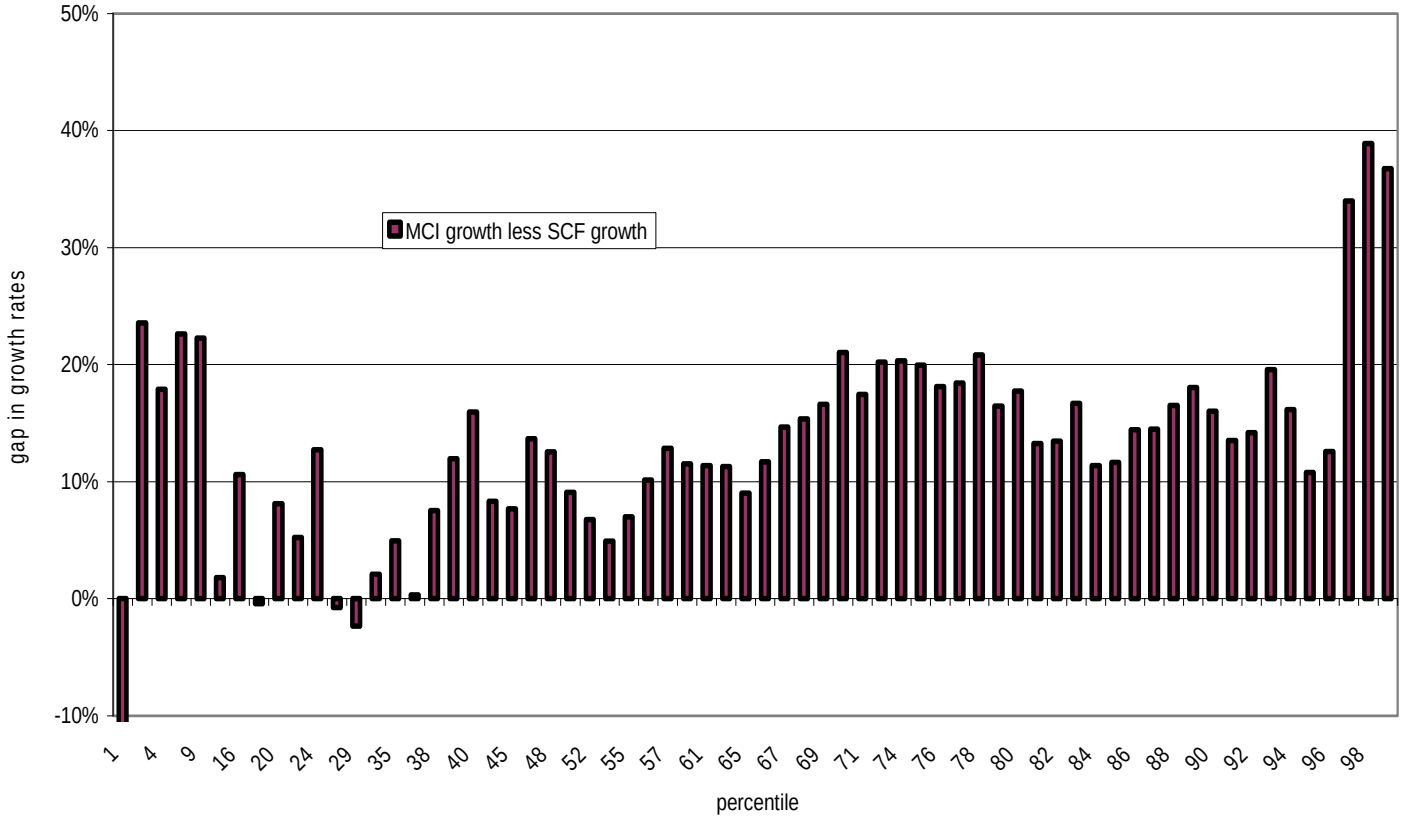
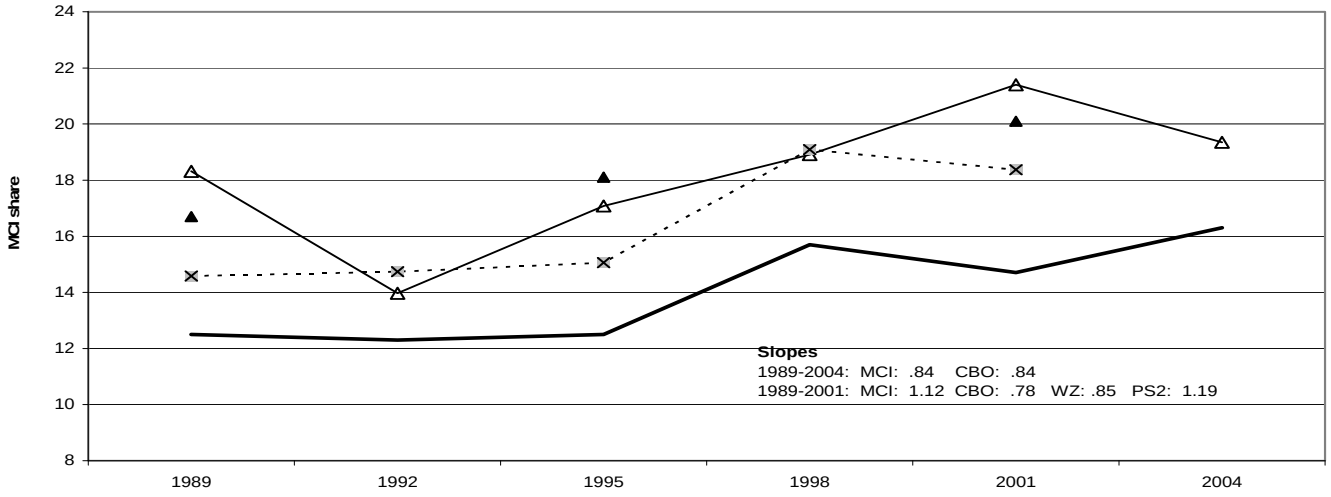
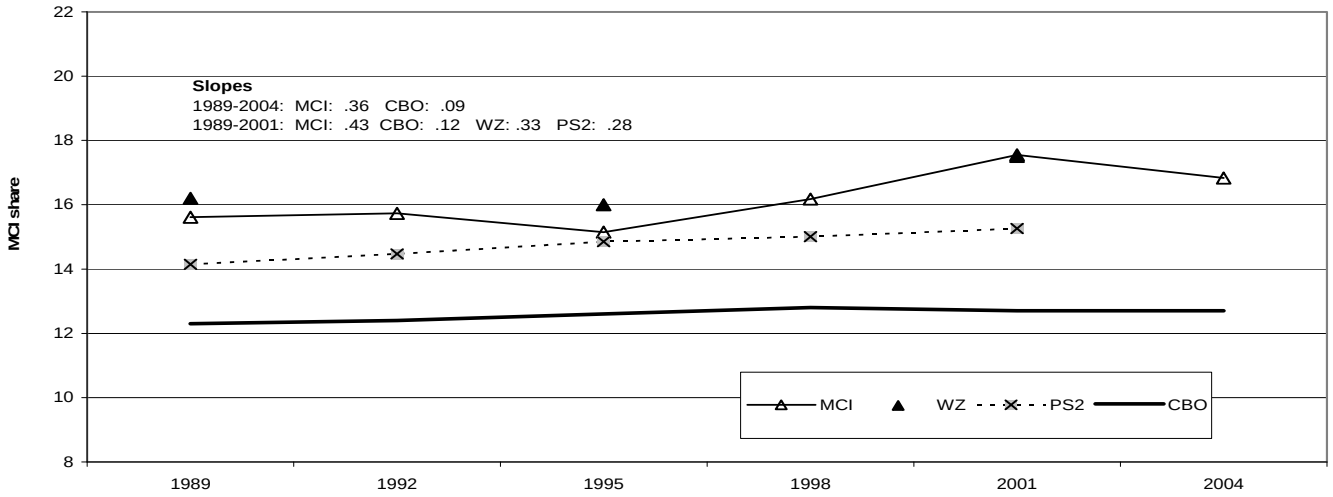


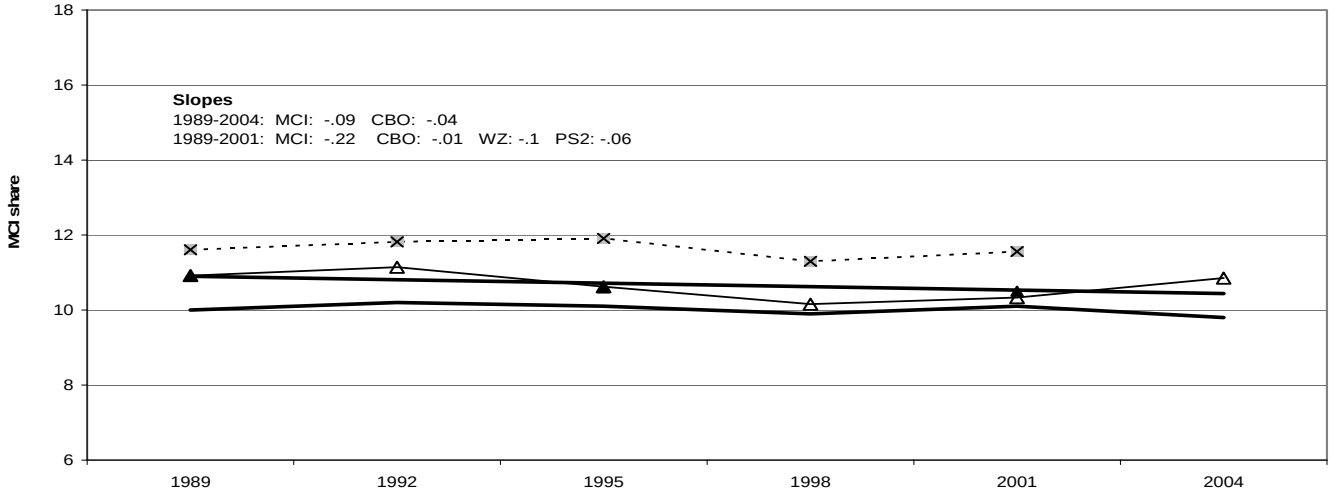
**Figure 6. Comparing Income Shares of Top Fractiles (1989-2004)**
(with slopes)
**Panel A. Top one percent**




**Panel B. 95 to 99 ptile**



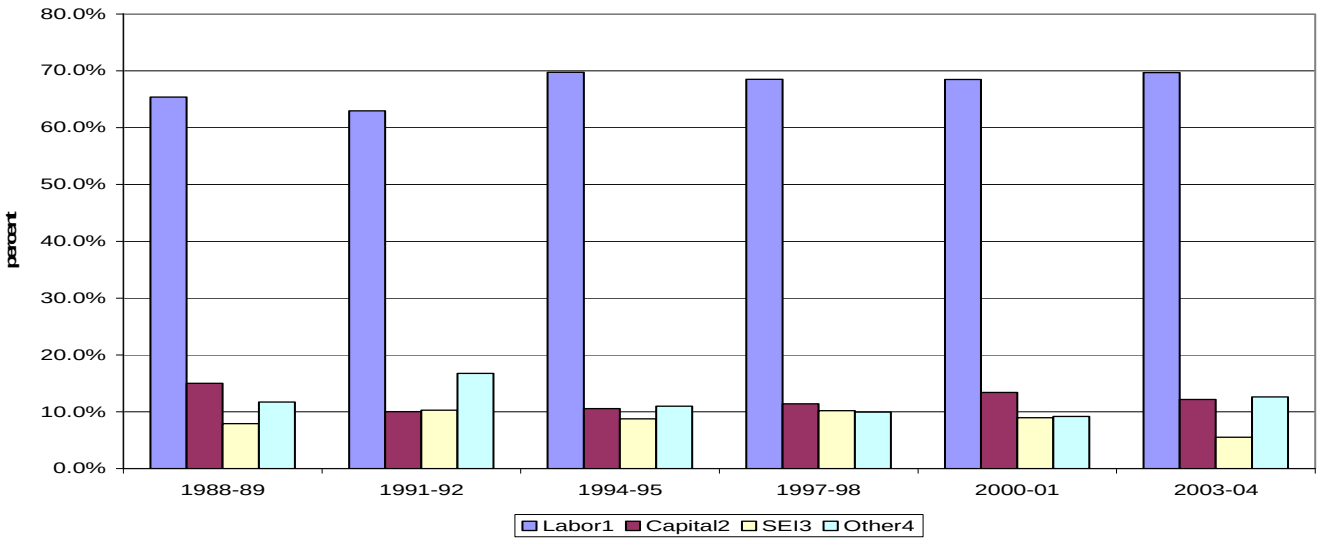

**Panel C. 90 to 95 ptile**



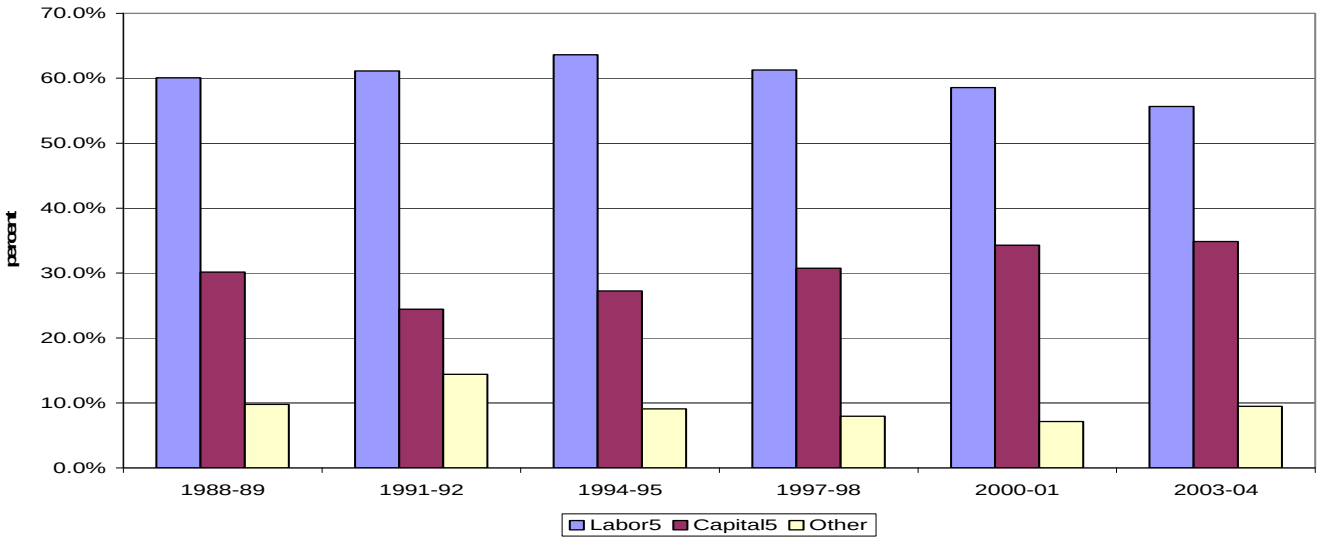

**NOTES:**
1. MCI is based on long-run rates of return.
2. CBO uses a measure of "comprehensive income" that includes realized capital gains.
3. WZ is "wealth-adjusted" income from Wolff and Zacharias, May 2006.
4. PS2 is from Piketty and Saez, 2003. It includes capital gains.

**Figure 7. Labor and Capital Shares - SCF and MCI Gross Income**

**Panel A. SCF Gross Income**




**Panel B. MCI (Long-run Rates)**




**Panel C. MCI (Short-run Rates)**

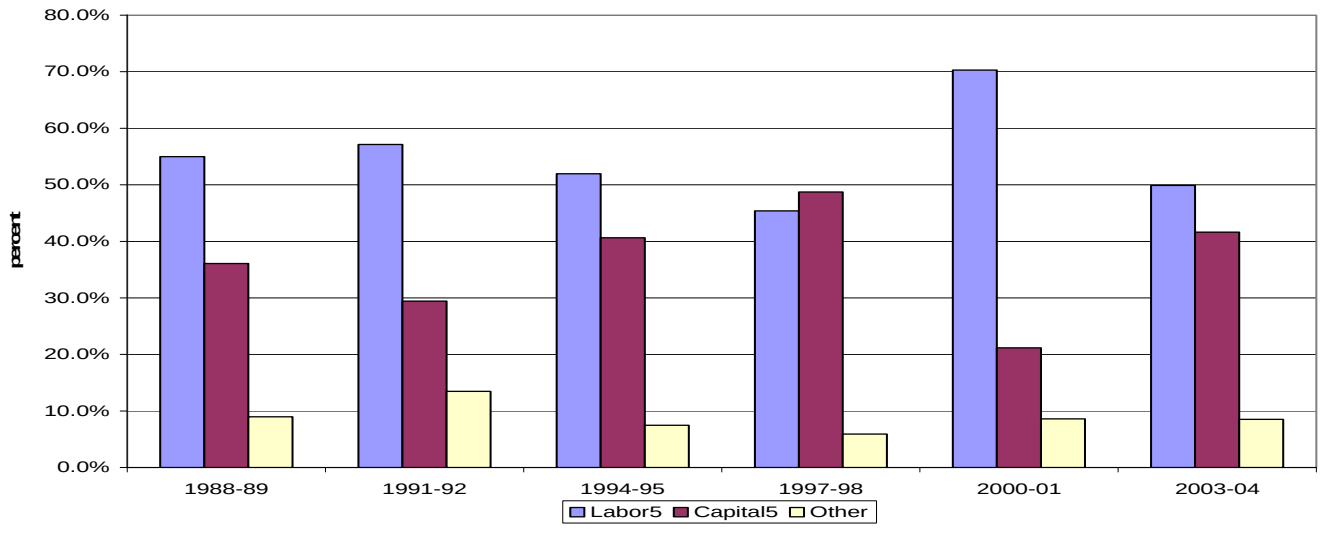
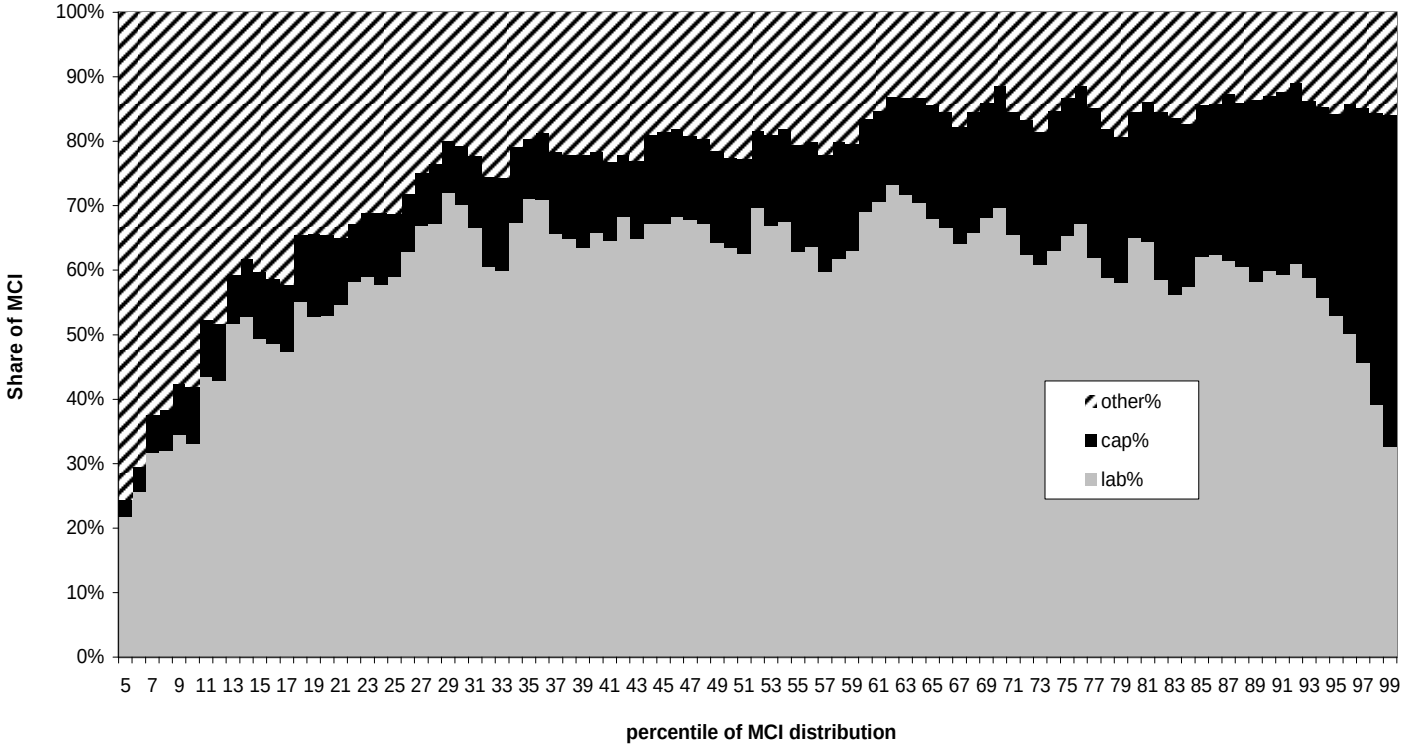


**Figure 8. Labor and Capital Shares of MCI by percentiles of MCI distribution**

Smoothed 3 percentile averages using long-run rates

**Panel A. Labor, Capital, and Other Share of MCI by percentile - 2004**




**Panel B. Labor and Capital Shares of MCI by percentile - 1989 and 2004**

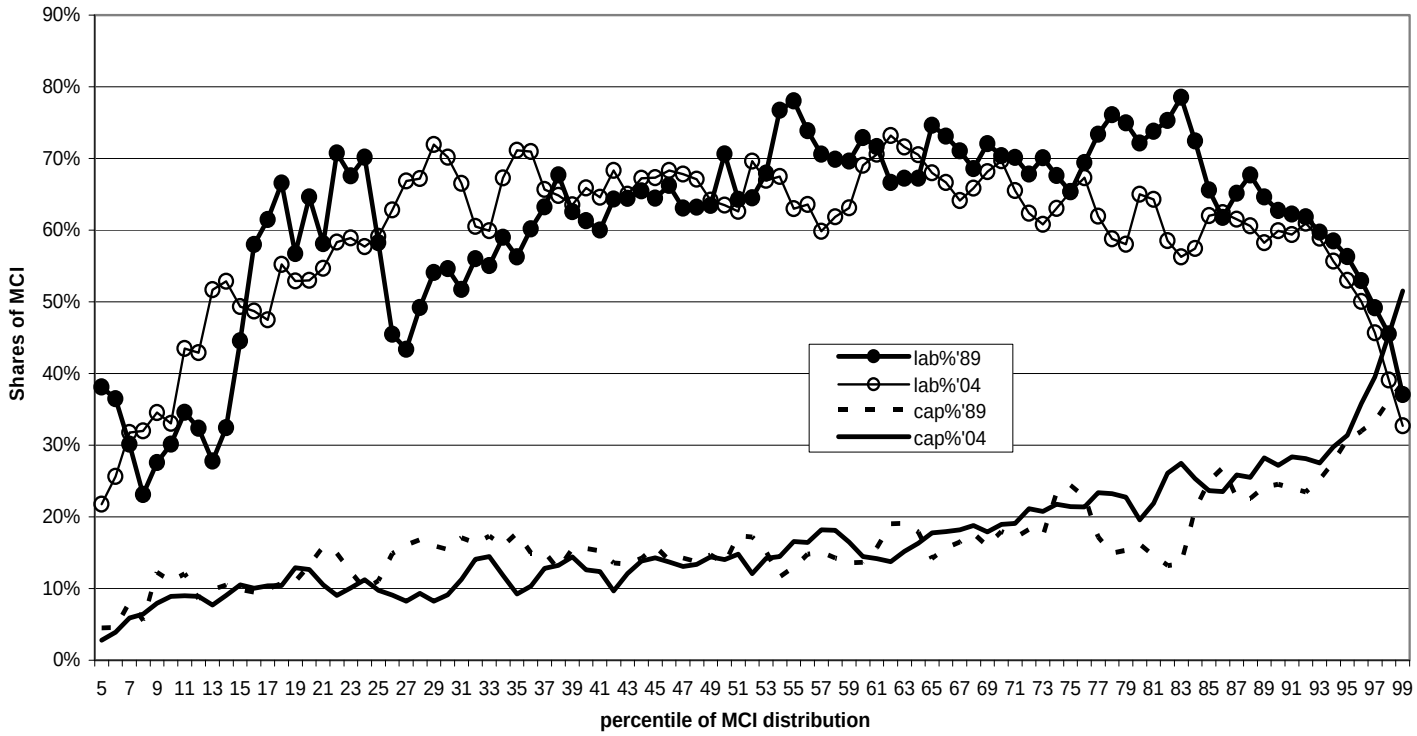
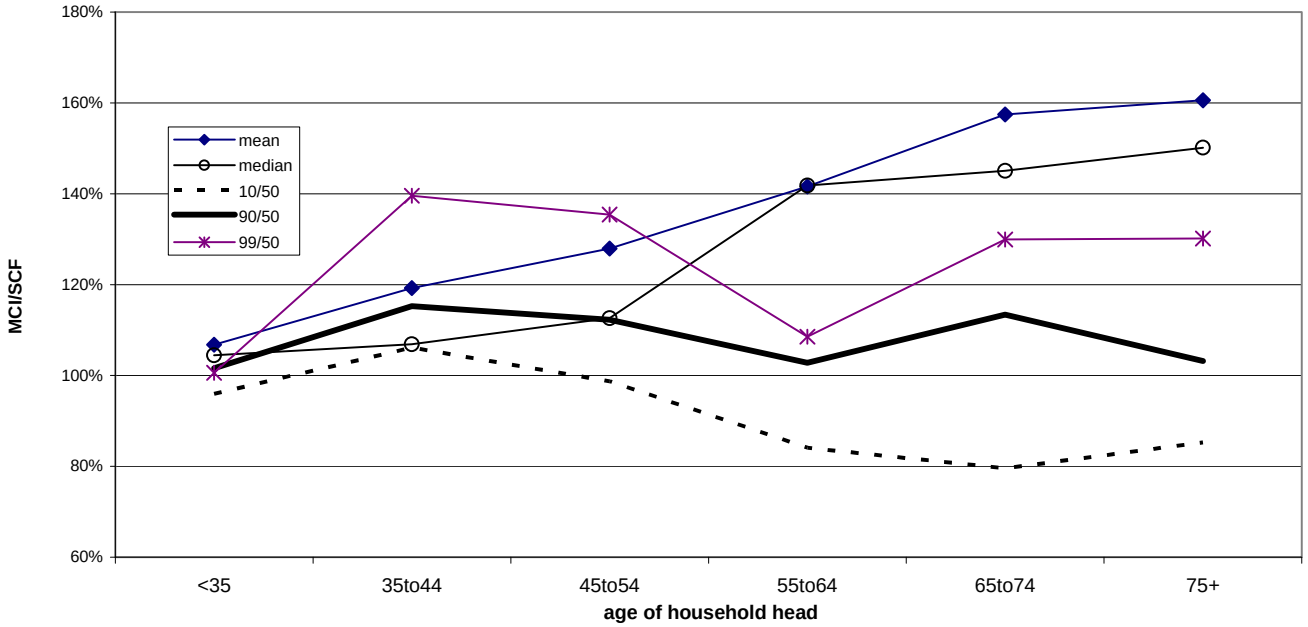
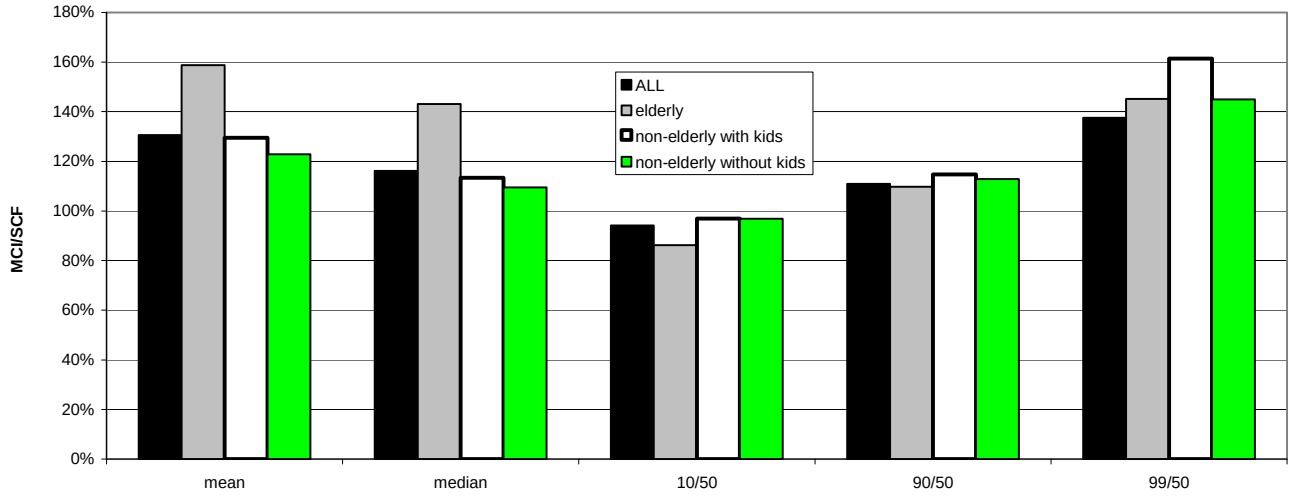


**Figure 9. MCI relative to SCF income by demographic group - 2003-04 SCF**

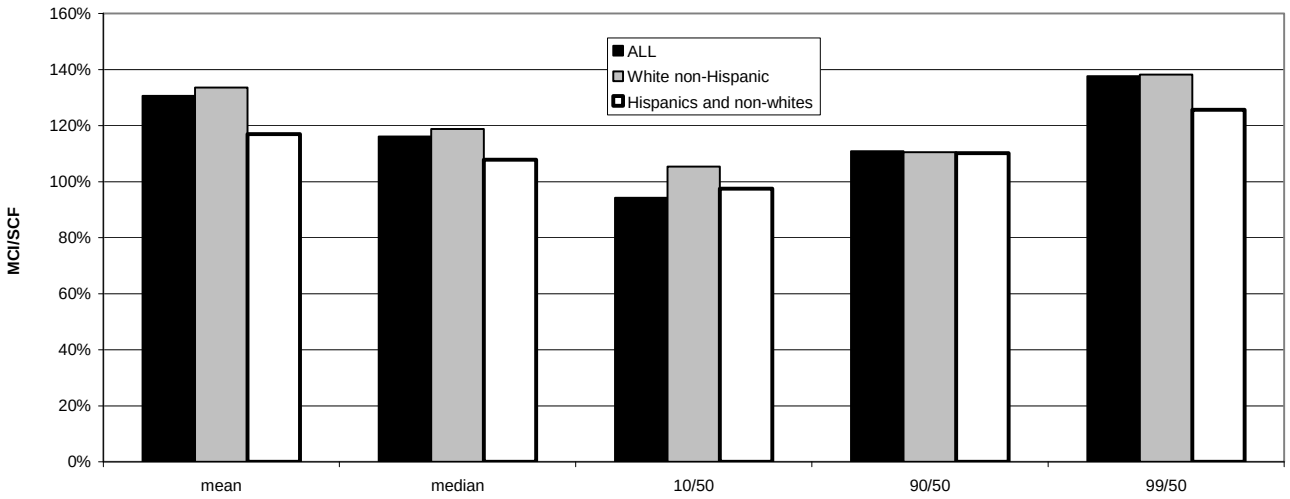
**Panel A. MCI as share of SCF income by age group**




**Panel B. MCI as share of SCF income by age/child status**




**Panel C. MCI as share of SCF income by race/ethnicity**



**Appendix Table 1. Rates of Return Applied to Different Types of Full-Income**

| Type of Income | def | return categories | Long-Run rates | 1977-05 | 1988-90 | 1991-93 | 1994-96 | 1997-99 | 2000-02 | 2003-05 | notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SCF income** | Fed gross income | | | | | | | | | | |
| **less capital** | SCF income less income from wealth (rent, interest, dividends, trusts&annuities) | | | | | | | | | | |
| **plus finance** | + imputed flows to stocks and bonds + imputed flows to annuities and trusts | SI<br>SIBI*<br>BI<br>CPI | .07<br>.06<br>.05<br>.03 | .094<br>.086<br>.078<br>.042 | .113<br>.099<br>.086<br>.049 | .124<br>.096<br>.069<br>.029 | .187<br>.127<br>.067<br>.028 | .21<br>.134<br>.057<br>.02 | -.089<br>-.018<br>.052<br>.024 | .094<br>.068<br>.042<br>.028 | * Average of SI and BI is for "combination" mutual funds, CPI is for tax-free bonds |
| **plus retire** | + imputed flows to quasi-liquid retirement accounts | SI | .07 | .094 | .113 | .124 | .187 | .21 | -.089 | .094 | |
| **plus home** | + imputed flow to primary residence | HI | .06 | .061 | .049 | .017 | .027 | .045 | .072 | .103 | |
| **plus oth invest** | + imputed flow to other residences and investment real-estate<br>+ imputed flow to transaction accounts<br>+ imputed flow to CDs and whole life insurance | SI<br>CPI + 1<br>BI<br>BICPI* | .07<br>.04<br>.05<br>.04 | .094<br>.052<br>.078<br>.06 | .113<br>.059<br>.086<br>.068 | .124<br>.039<br>.069<br>.049 | .187<br>.038<br>.067<br>.047 | .21<br>.03<br>.057<br>.039 | -.089<br>.034<br>.052<br>.038 | .094<br>.038<br>.042<br>.035 | *Whole life insurance is given BI rate, CDs are given average of BI and CPI |
| **plus business** | + imputed flow to other assets and businesses + imputed flow to vehicle wealth | SI | .07 | .094 | .113 | .124 | .187 | .21 | -.089 | .094 | |
| **MCI** | - imputed interest flow for remaining debts (after replacing finc5 with SCF income when finc5<SCFincome) | CPI + 6 | .09 | .102 | .109 | .089 | .088 | .08 | .084 | .088 | |

**Appendix Table 2. Short Run (three-year average) and Long Run (1988-2004) Rates of Return**

| | Housing index (HI) | Stock Indices (SI) | Bond indices (BI) | Inflation (CPI) |
|---|---|---|---|---|
| **A. "Short Run"** | | | | |
| **1989** | 4.9% | 11.3% | 8.6% | 4.9% |
| **1992** | 1.7% | 12.4% | 6.9% | 2.9% |
| **1995** | 2.7% | 18.7% | 6.7% | 2.8% |
| **1998** | 4.5% | 21.0% | 5.7% | 2.0% |
| **2001** | 7.2% | -8.9% | 5.2% | 2.4% |
| **2004** | 10.3% | 9.4% | 4.2% | 2.8% |
| **B. "Long-run"*** | 6.0% | 7.0% | 5.0% | 3.0% |

*Rates used for 1988-89 to 2003-04

**Appendix Table 3. Basic Trends from SCF - Comparisons over time - Long run rates**

**Panel A. MCI[1]**

| | 1988-89 | 1991-92 | 1994-95 | 1997-98 | 2000-01 | 2003-04 |
|---|---|---|---|---|---|---|
| **99/10 ratio** | 50.5 | 40.9 | 45.3 | 54.2 | 71.7 | 63.0 |
| **99/50 ratio** | 11.5 | 10.2 | 10.4 | 13.5 | 17.4 | 15.6 |
| **10/50 ratio** | 0.23 | 0.25 | 0.23 | 0.25 | 0.24 | 0.25 |
| **gini** | 0.560 | 0.526 | 0.540 | 0.561 | 0.595 | 0.579 |

**Panel B. % change bet SCF net some capital income to MCI[2]**

| | 1988-89 | 1991-92 | 1994-95 | 1997-98 | 2000-01 | 2003-04 |
|---|---|---|---|---|---|---|
| **mean** | 33.9% | 35.8% | 35.5% | 38.0% | 40.0% | 45.2% |
| **median** | 20.0% | 21.9% | 17.2% | 19.6% | 22.4% | 21.9% |
| **99th ptile** | 65.2% | 58.1% | 68.9% | 77.0% | 90.4% | 104.2% |
| **99/10 ratio** | 32.7% | 29.9% | 37.1% | 41.2% | 63.6% | 69.7% |
| **99/50 ratio** | 37.6% | 29.7% | 44.1% | 48.0% | 55.6% | 67.5% |
| **10/50 ratio** | 3.6% | -0.2% | 4.9% | 4.6% | -5.1% | -1.3% |

For details on the definitions and rates used in developing Full Income see calculations of other years.

Notes: Values at (website address here)

[1] MCI (more complete income) subtracts capital income (except realized capital gains) from Gross Income and adds back flows to assets and debt.

[2] SCF net some capital income takes Gross Income and subtracts interest, rent, dividends, and annuity and trust income, but retains realized capital gains.

**Appendix Table 4. SCF Gross Income and MCI Shares of Labor and Capital (1989-2004)**

**Panel A. SCF Gross Income**

| | 1988-89 | 1991-92 | 1994-95 | 1997-98 | 2000-01 | 2003-04 |
|---|---|---|---|---|---|---|
| **Labor[1]** | 65.4% | 62.9% | 69.7% | 68.5% | 68.5% | 69.7% |
| **Capital[2]** | 15.0% | 10.0% | 10.5% | 11.4% | 13.4% | 12.2% |
| **SEI[3]** | 7.9% | 10.3% | 8.7% | 10.2% | 9.0% | 5.5% |
| **Other[4]** | 11.7% | 16.7% | 11.0% | 9.9% | 9.2% | 12.6% |

**Panel B. MCI (Long-run Rates)**

| | 1988-89 | 1991-92 | 1994-95 | 1997-98 | 2000-01 | 2003-04 |
|---|---|---|---|---|---|---|
| **Labor[5]** | 60.0% | 61.1% | 63.6% | 61.3% | 58.6% | 55.7% |
| **Capital[5]** | 30.2% | 24.4% | 27.3% | 30.7% | 34.3% | 34.9% |
| **Other** | 9.8% | 14.4% | 9.1% | 8.0% | 7.1% | 9.5% |

**Panel C. MCI (Short-run Rates)**

| | 1988-89 | 1991-92 | 1994-95 | 1997-98 | 2000-01 | 2003-04 |
|---|---|---|---|---|---|---|
| **Labor[5]** | 55.0% | 57.1% | 51.9% | 45.4% | 70.3% | 49.9% |
| **Capital[5]** | 36.1% | 29.4% | 40.6% | 48.7% | 21.1% | 41.6% |
| **Other** | 9.0% | 13.5% | 7.4% | 5.9% | 8.6% | 8.5% |

**General Notes:**
SCF gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income.

**Specific Notes:**
[1] Labor income includes wages and salary.
[2] Capital income includes interest, rent, dividends, annuity and trust income, and realized capital gains.
[3] SEI includes positive values of self-employment and business income.
[4] Other includes foodstamps and other goverenment support programs, Social Security income, withdrawals from retirement accounts, alimony and other support payments, and other miscellaneous sources.
[5] In Full Income SEI income is allocated to labor income if SEI is less than wage and salary income. If SEI is greater than wages and salary, 30 percent of SEI is allocated to capital income.

**Appendix Table 5. Income by demographic groupings (long-run rates) 2003-04 SCF**
(characteristics of household head)

| | Panel A. Means | | | Panel B. Medians | | | Panel C. 10/50 ratio | | | Panel D. 90/50 | | | Panel E. 99/50 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Income by age group** | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF |
| <35 | 45,125 | 48,180 | 107% | 32,860 | 34,327 | 104% | 0.28 | 0.27 | 96% | 2.8 | 2.9 | 102% | 5.9 | 6.0 | 101% |
| 35to44 | 73,856 | 88,057 | 119% | 50,317 | 53,787 | 107% | 0.31 | 0.32 | 106% | 2.7 | 3.1 | 115% | 7.4 | 10.4 | 140% |
| 45to54 | 94,261 | 120,601 | 128% | 61,613 | 69,385 | 113% | 0.23 | 0.23 | 99% | 2.7 | 3.0 | 112% | 10.8 | 14.7 | 135% |
| 55to64 | 99,705 | 141,197 | 142% | 54,424 | 77,177 | 142% | 0.21 | 0.17 | 84% | 3.2 | 3.2 | 103% | 14.7 | 16.0 | 109% |
| 65to74 | 59,621 | 93,900 | 157% | 33,373 | 48,416 | 145% | 0.34 | 0.27 | 80% | 2.8 | 3.1 | 113% | 14.6 | 19.0 | 130% |
| 75+ | 40,805 | 65,533 | 161% | 23,618 | 35,462 | 150% | 0.37 | 0.32 | 85% | 3.1 | 3.2 | 103% | 13.2 | 17.1 | 130% |
| **by elderly/child status** | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF |
| elderly | 50,109 | 79,559 | 159% | 28,753 | 41,148 | 143% | 0.33 | 0.28 | 86% | 3.0 | 3.3 | 110% | 11.7 | 17.0 | 145% |
| non-elderly with kids | 68,877 | 89,189 | 129% | 42,102 | 47,728 | 113% | 0.22 | 0.22 | 97% | 3.0 | 3.5 | 115% | 9.9 | 15.9 | 161% |
| non-elderly without kids | 82,685 | 101,528 | 123% | 52,371 | 57,357 | 110% | 0.29 | 0.28 | 97% | 2.8 | 3.1 | 113% | 10.1 | 14.6 | 145% |
| **by race/ethnicity** | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF | SCF Income | MCI | MCI as % of SCF |
| White non-Hispanic | 80,514 | 107,547 | 134% | 49,290 | 58,526 | 119% | 0.25 | 0.26 | 105% | 2.9 | 3.2 | 110% | 10.9 | 15.1 | 138% |
| Hispanics and non-whites | 44,928 | 52,548 | 117% | 29,779 | 32,110 | 108% | 0.26 | 0.25 | 98% | 3.1 | 3.4 | 110% | 7.0 | 8.8 | 126% |

## Appendix Table 6. Distribution of Occupation by Educational Attainment for High MCI Classes

### Panel A. Top 1% of MCI

| Occupations | less than HS | HS only | Some college | College degree | Some post-college |
|---|---|---|---|---|---|
| Executives, managers, scientists, architects, engineers, lawyers, teachers, counselors & social workers, health care practioners, techs. & support, entertainment, sports & media | 1.7% | 1.8% | 5.1% | 37.1% | 45.9% |
| Technicians, sales, office & computer operators | 0.3% | 0.6% | 1.1% | 4.1% | 1.8% |
| All others | | | 0.3% | 0.2% | |

### Panel B. Top 10% of MCI

| | | | | | |
|---|---|---|---|---|---|
| Executives, managers, scientists, architects, engineers, lawyers, teachers, counselors & social workers, health care practioners, techs. & support, entertainment, sports & media | 0.8% | 2.1% | 6.7% | 27.4% | 43.9% |
| Technicians, sales, office & computer operators | 0.1% | 1.4% | 2.0% | 5.4% | 1.8% |
| All others | | 3.0% | 2.2% | 1.7% | 1.3% |

## Appendix Table 7. Occupation by employment status by MCI class - 2004 SCF

**Panel A. Top 1% of MCI**

| | Employed by someone else | Self-employed/Partner | All |
|---|---|---|---|
| Executives, managers, scientists, architects, engineers, lawyers, teachers, counselors & social workers, health care practioners, techs. & support, entertainment, sports & media | 37.1% | 54.6% | 91.7% |
| Technicians, sales, office & computer operators | 3.5% | 4.4% | 7.9% |
| Protective svcs., food prep, cleaning & bldg svcs., personal care, armed svcs. | 0.0% | 0.1% | 0.1% |
| Construction & skilled labor & crafts | 0.0% | 0.0% | 0.0% |
| Unskilled labor | 0.0% | 0.0% | 0.0% |
| Farm, fishing, forestry, animal training & care | 0.0% | 0.3% | 0.3% |
| Total | 40.6% | 59.4% | 100.0% |

**Panel B. Top 10% of MCI**

| | | | |
|---|---|---|---|
| Executives, managers, scientists, architects, engineers, lawyers, teachers, counselors & social workers, health care practioners, techs. & support, entertainment, sports & media | 50.3% | 30.2% | 80.5% |
| Technicians, sales, office & computer operators | 6.2% | 4.2% | 10.5% |
| Protective svcs., food prep, cleaning & bldg svcs., personal care, armed svcs. | 2.7% | 0.1% | 2.8% |
| Construction & skilled labor & crafts | 2.5% | 0.9% | 3.4% |
| Unskilled labor | 2.3% | 0.1% | 2.4% |
| Farm, fishing, forestry, animal training & care | 0.0% | 0.3% | 0.4% |
| Total | 64.0% | 36.0% | 100.0% |

**Panel C. Bottom 90% of MCI**

| | | | |
|---|---|---|---|
| Executives, managers, scientists, architects, engineers, lawyers, teachers, counselors & social workers, health care practioners, techs. & support, entertainment, sports & media | 27.3% | 5.9% | 33.2% |
| Technicians, sales, office & computer operators | 17.2% | 2.1% | 19.3% |
| Protective svcs., food prep, cleaning & bldg svcs., personal care, armed svcs. | 12.5% | 1.4% | 14.0% |
| Construction & skilled labor & crafts | 16.8% | 2.8% | 19.6% |
| Unskilled labor | 11.7% | 0.7% | 12.5% |
| Farm, fishing, forestry, animal training & care | 0.9% | 0.6% | 1.4% |
| Total | 86.4% | 13.6% | 100.0% |

**Appendix Table 8. Household pension class by MCI quintiles - 2003-04 SCF**

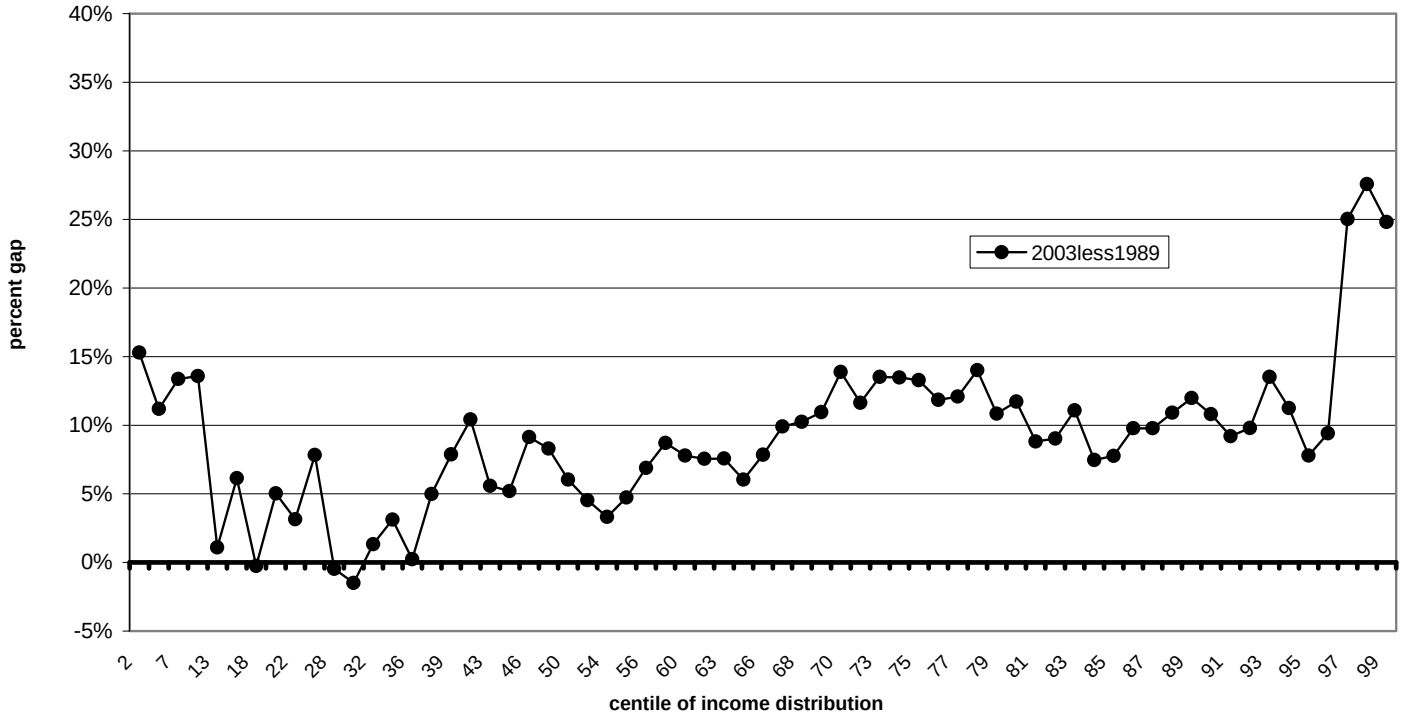
| share with pension class | MCI quintile | | | | | |
|---|---|---|---|---|---|---|
| | bottom | second | middle | fourth | top | All |
| no pension | 95.3 | 72.9 | 55.0 | 39.6 | 35.9 | 59.7 |
| DB only | 2.0 | 7.9 | 13.3 | 13.6 | 11.5 | 9.7 |
| DC only | 1.8 | 15.4 | 22.7 | 27.6 | 28.3 | 19.2 |
| both/hybrid | 1.0 | 3.9 | 9.0 | 19.2 | 24.3 | 11.5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

## Appendix Table 9. Values of networth by alternative rankings - 2004

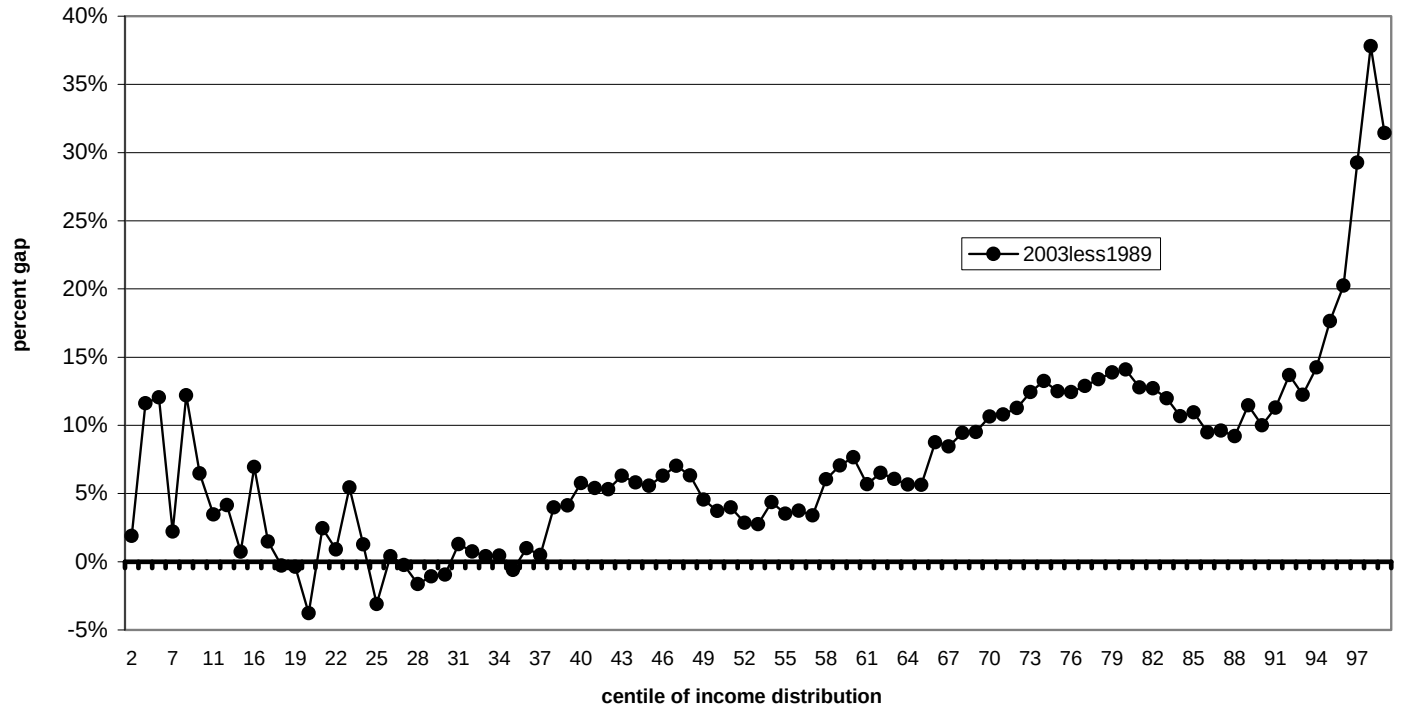
| | by networth | by SCF income | by MCI | Addendum: MCI by percentile (short-run rates) |
|---|---|---|---|---|
| p10 | 200 | 57,599 | 21,708 | 13,064 |
| p50 | 93,001 | 181,007 | 152,178 | 53,266 |
| p90 | 831,500 | 659,472 | 729,170 | 184,318 |
| p95 | 1,429,500 | 1,033,507 | 1,315,159 | 284,006 |
| p99 | 6,256,500 | 4,306,203 | 4,735,435 | 884,670 |

**Appendix Figure 1. Difference between 1989 and 2003 in Income gains from moving to MCI - by percentile**

**Panel A. Pre-tax income**




**Panel B. After-tax income**

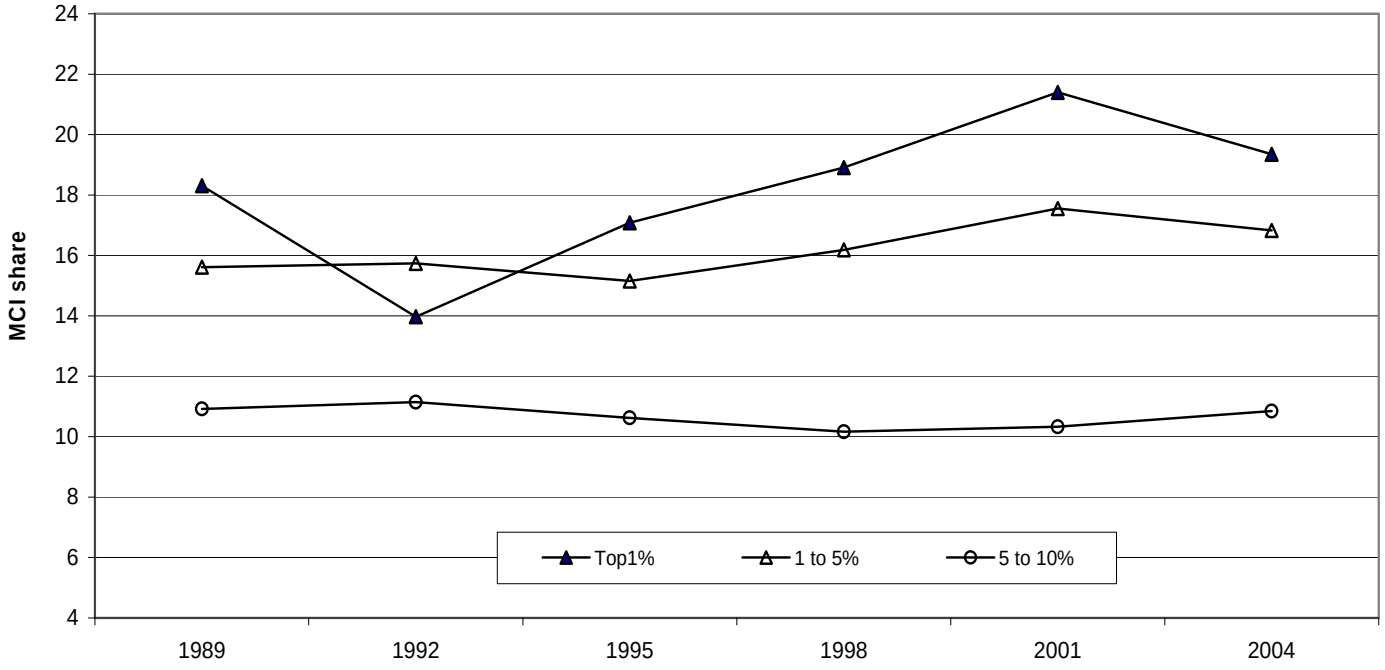



Notes:
MCI data for each year is based on long-run rates.

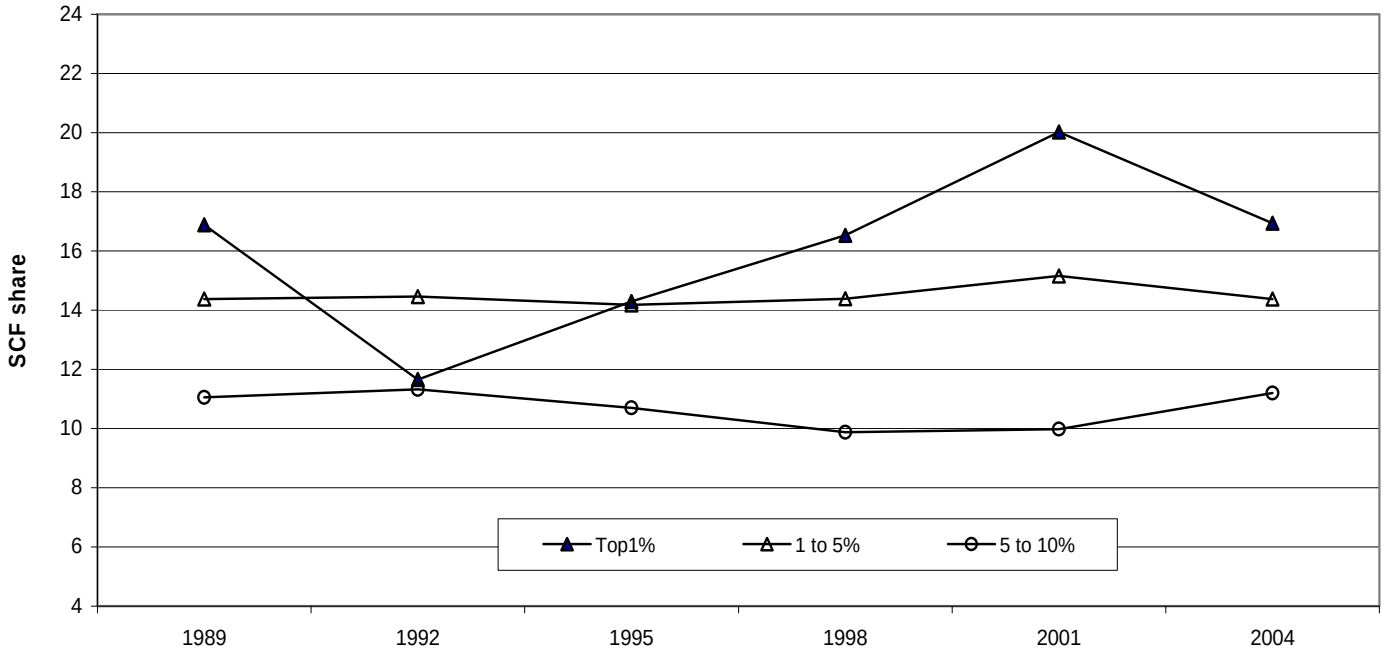
Each data point summarizes two differences. For the first difference, for each year, the percent difference between the two income concepts is calculated at each centile of the income distribution. Second the difference from 1989 is subtracted from the difference from 2003. An upward trend in the graph then represents an increasing inequality trend in the MCI relative to the SCF income.

**Appendix Figure 2. Decomposing top decile income share (1989-2004) long-run rates**

**Panel A. MCI**

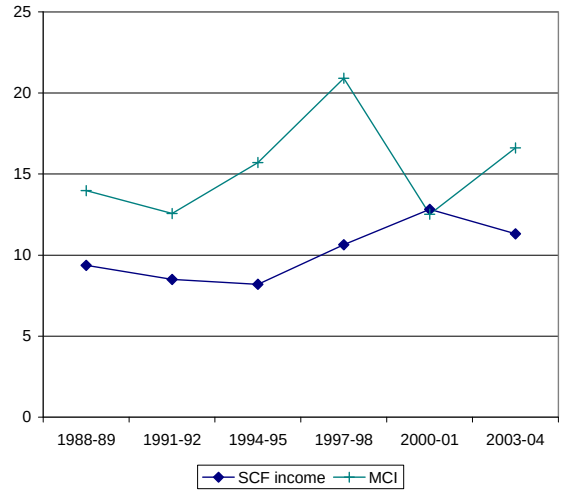



**Panel B. SCF Income**

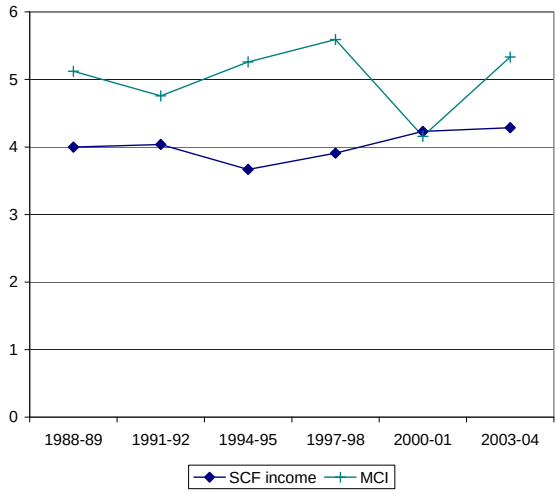


## Appendix Figure 3a. Trend Statistics for Key Income Concepts (short run rates)

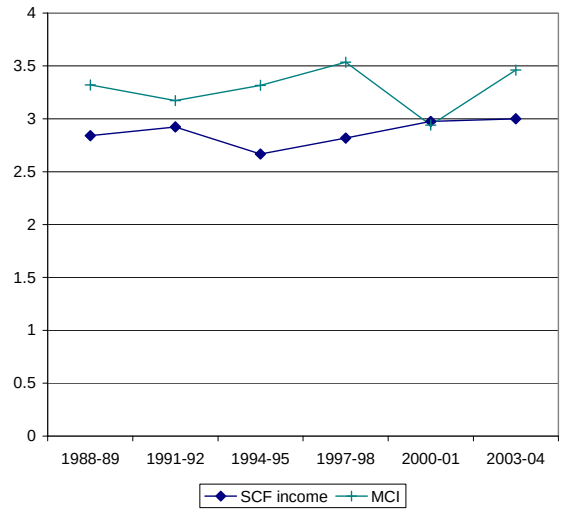
**Panel A. 99/50 ratios**



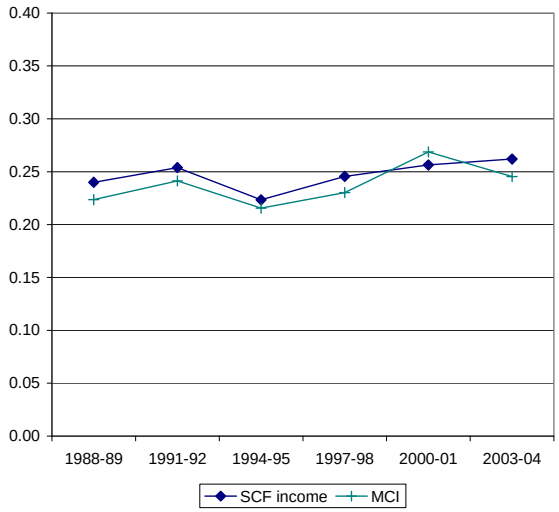

**Panel B. 95/50 ratios**



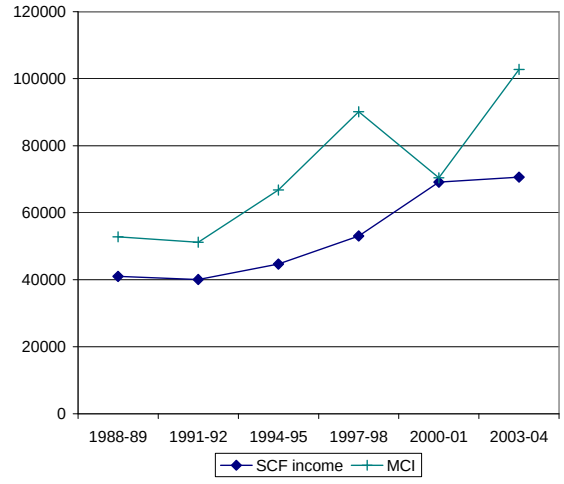

**Panel C. 90/50 ratios**



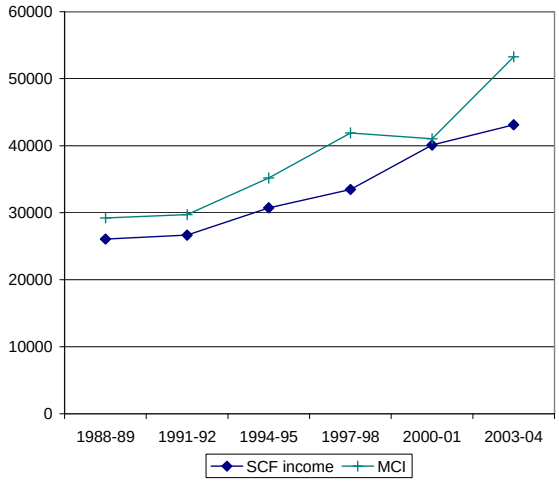

**Panel D. 10/50 ratios**




**Panel E. Means**

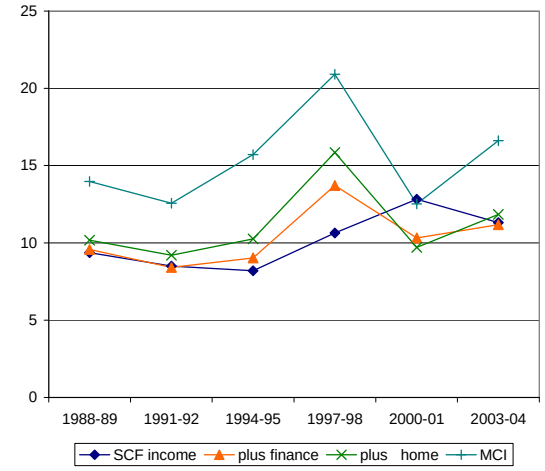



**Panel F. Medians**

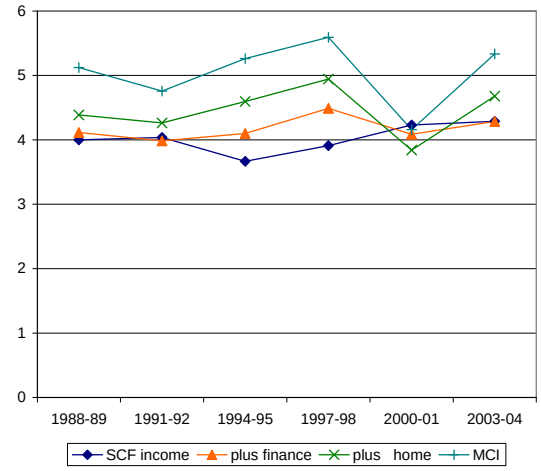


## Appendix Figure 3b. Trend Statistics for Key Income Concepts (short run rates)

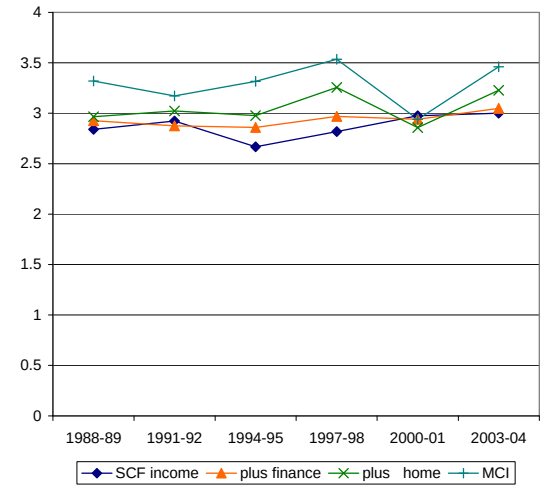
**Panel A. 99/50 ratios**



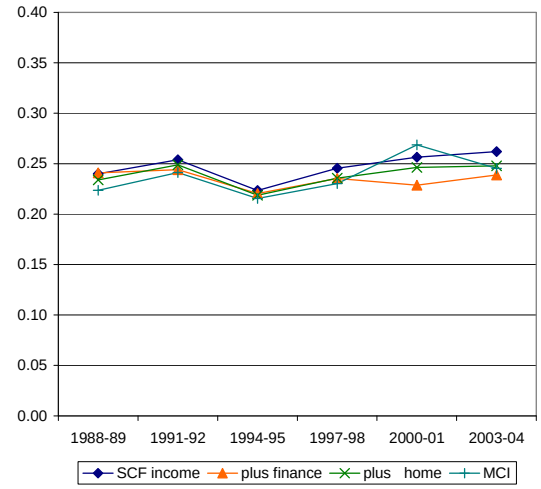

**Panel B. 95/50 ratios**



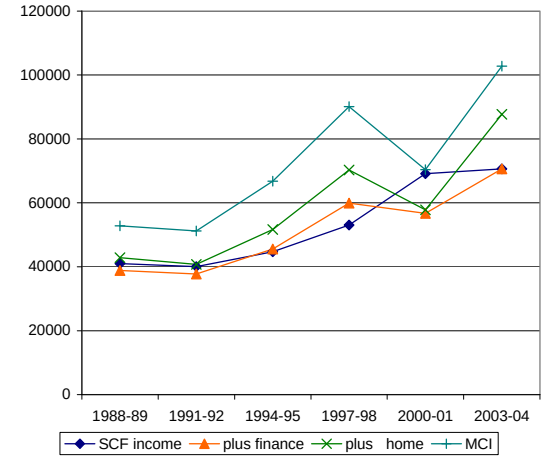

**Panel C. 90/50 ratios**



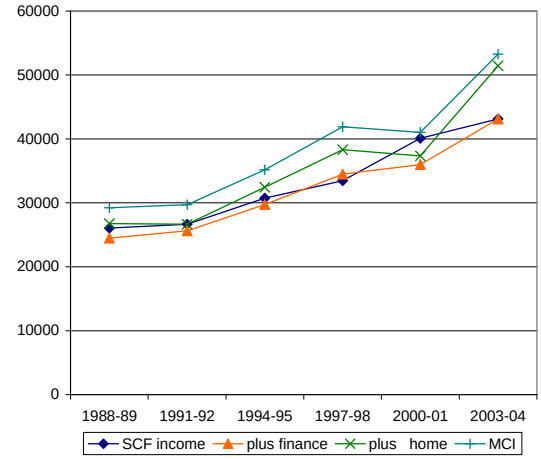

**Panel D. 10/50 ratios**




**Panel E. Means**




**Panel F. Medians**



**Appendix Table 1a. SCF (2000-01)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Long-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 69,122 | 63,007 | 69,255 | 73,012 | 77,912 | 82,291 | 88,171 | 88,214 | 19,092 | 28% |
| **median (P50)** | 40,089 | 37,933 | 39,316 | 40,998 | 43,761 | 46,109 | 46,860 | 46,420 | 6,331 | 16% |
| **P90** | 119,238 | 112,042 | 119,109 | 128,561 | 136,817 | 142,447 | 148,449 | 148,279 | 29,042 | 24% |
| **P95** | 169,605 | 154,187 | 171,512 | 186,294 | 202,082 | 219,429 | 227,216 | 227,913 | 58,308 | 34% |
| **P10** | 10,279 | 9,698 | 9,868 | 9,971 | 10,991 | 11,307 | 11,335 | 11,287 | 1,008 | 10% |
| **P99** | 513,955 | 424,920 | 542,430 | 586,700 | 620,030 | 668,973 | 790,262 | 809,032 | 295,077 | 57% |
| **90/10** | 11.6 | 11.6 | 12.1 | 12.9 | 12.4 | 12.6 | 13.1 | 13.1 | 1.5 | 13% |
| **90/50** | 3.0 | 3.0 | 3.0 | 3.1 | 3.1 | 3.1 | 3.2 | 3.2 | 0.2 | 7% |
| **10/50** | 0.26 | 0.26 | 0.25 | 0.24 | 0.25 | 0.25 | 0.24 | 0.24 | -0.01 | -5% |
| **95/50** | 4.2 | 4.1 | 4.4 | 4.5 | 4.6 | 4.8 | 4.8 | 4.9 | 0.7 | 16% |
| **99/50** | 12.8 | 11.2 | 13.8 | 14.3 | 14.2 | 14.5 | 16.9 | 17.4 | 4.6 | 36% |
| **99/90** | 4.3 | 3.8 | 4.6 | 4.6 | 4.5 | 4.7 | 5.3 | 5.5 | 1.1 | 27% |
| **gini** | 0.561 | 0.547 | 0.566 | 0.573 | 0.566 | 0.572 | 0.591 | 0.595 | 0.034 | 6% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 1b. SCF (1997-98)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Long-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 53,072 | 47,955 | 52,285 | 54,870 | 58,374 | 61,622 | 65,994 | 66,178 | 13,106 | 25% |
| **median (P50)** | 33,465 | 32,134 | 33,219 | 34,240 | 36,497 | 38,155 | 38,753 | 38,418 | 4,953 | 15% |
| **P90** | 94,309 | 89,423 | 93,936 | 99,228 | 106,038 | 111,340 | 114,353 | 114,257 | 19,948 | 21% |
| **P95** | 130,816 | 119,661 | 130,362 | 140,904 | 149,726 | 159,058 | 168,653 | 167,782 | 36,966 | 28% |
| **P10** | 8,214 | 7,606 | 7,808 | 7,956 | 9,073 | 9,404 | 9,533 | 9,532 | 1,318 | 16% |
| **P99** | 355,942 | 292,107 | 359,639 | 385,267 | 408,065 | 443,099 | 512,017 | 516,996 | 161,055 | 45% |
| **90/10** | 11.5 | 11.8 | 12.0 | 12.5 | 11.7 | 11.8 | 12.0 | 12.0 | 0.5 | 4% |
| **90/50** | 2.8 | 2.8 | 2.8 | 2.9 | 2.9 | 2.9 | 3.0 | 3.0 | 0.2 | 6% |
| **10/50** | 0.25 | 0.24 | 0.24 | 0.23 | 0.25 | 0.25 | 0.25 | 0.25 | 0.00 | 1% |
| **95/50** | 3.9 | 3.7 | 3.9 | 4.1 | 4.1 | 4.2 | 4.4 | 4.4 | 0.5 | 12% |
| **99/50** | 10.6 | 9.1 | 10.8 | 11.3 | 11.2 | 11.6 | 13.2 | 13.5 | 2.8 | 27% |
| **99/90** | 3.8 | 3.3 | 3.8 | 3.9 | 3.8 | 4.0 | 4.5 | 4.5 | 0.8 | 20% |
| **gini** | 0.524 | 0.507 | 0.529 | 0.536 | 0.529 | 0.536 | 0.557 | 0.561 | 0.037 | 7% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 1c. SCF (1994-95)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Long-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 44,676 | 39,879 | 42,287 | 44,089 | 46,969 | 49,548 | 53,102 | 54,056 | 9,380 | 21% |
| **median (P50)** | 30,729 | 28,602 | 28,680 | 29,730 | 32,099 | 33,377 | 33,834 | 33,525 | 2,797 | 9% |
| **P90** | 81,943 | 78,465 | 81,896 | 85,051 | 89,952 | 94,050 | 97,529 | 97,249 | 15,306 | 19% |
| **P95** | 112,672 | 103,453 | 108,575 | 116,135 | 124,325 | 132,748 | 141,908 | 143,816 | 31,144 | 28% |
| **P10** | 6,863 | 6,248 | 6,453 | 6,555 | 7,272 | 7,447 | 7,683 | 7,701 | 838 | 12% |
| **P99** | 251,975 | 206,457 | 229,444 | 254,504 | 270,640 | 292,848 | 337,456 | 348,740 | 96,764 | 38% |
| **90/10** | 11.9 | 12.6 | 12.7 | 13.0 | 12.4 | 12.6 | 12.7 | 12.6 | 0.7 | 6% |
| **90/50** | 2.7 | 2.7 | 2.9 | 2.9 | 2.8 | 2.8 | 2.9 | 2.9 | 0.2 | 9% |
| **10/50** | 0.22 | 0.22 | 0.23 | 0.22 | 0.23 | 0.22 | 0.23 | 0.23 | 0.01 | 3% |
| **95/50** | 3.7 | 3.6 | 3.8 | 3.9 | 3.9 | 4.0 | 4.2 | 4.3 | 0.6 | 17% |
| **99/50** | 8.2 | 7.2 | 8.0 | 8.6 | 8.4 | 8.8 | 10.0 | 10.4 | 2.2 | 27% |
| **99/90** | 3.1 | 2.6 | 2.8 | 3.0 | 3.0 | 3.1 | 3.5 | 3.6 | 0.5 | 17% |
| **gini** | 0.511 | 0.495 | 0.508 | 0.514 | 0.505 | 0.513 | 0.534 | 0.54 | 0.029 | 6% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 1d. SCF (1991-92)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Long-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 40,049 | 34,975 | 36,646 | 37,883 | 40,730 | 43,444 | 46,582 | 47,486 | 7,437 | 19% |
| **median (P50)** | 26,652 | 24,602 | 25,627 | 25,627 | 27,847 | 29,191 | 29,898 | 29,979 | 3,328 | 12% |
| **P90** | 77,906 | 70,710 | 72,608 | 75,726 | 80,520 | 84,703 | 89,150 | 90,231 | 12,326 | 16% |
| **P95** | 107,633 | 92,282 | 98,158 | 101,407 | 111,793 | 119,949 | 126,361 | 128,134 | 20,502 | 19% |
| **P10** | 6,765 | 6,150 | 6,150 | 6,253 | 7,158 | 7,335 | 7,385 | 7,483 | 718 | 11% |
| **P99** | 226,541 | 193,741 | 201,118 | 214,780 | 225,476 | 248,168 | 302,337 | 306,210 | 79,669 | 35% |
| **90/10** | 11.5 | 11.5 | 11.8 | 12.1 | 11.2 | 11.5 | 12.1 | 12.1 | 0.5 | 5% |
| **90/50** | 2.9 | 2.9 | 2.8 | 3.0 | 2.9 | 2.9 | 3.0 | 3.0 | 0.1 | 3% |
| **10/50** | 0.25 | 0.25 | 0.24 | 0.24 | 0.26 | 0.25 | 0.25 | 0.25 | 0.00 | -2% |
| **95/50** | 4.0 | 3.8 | 3.8 | 4.0 | 4.0 | 4.1 | 4.2 | 4.3 | 0.2 | 6% |
| **99/50** | 8.5 | 7.9 | 7.8 | 8.4 | 8.1 | 8.5 | 10.1 | 10.2 | 1.7 | 20% |
| **99/90** | 2.9 | 2.7 | 2.8 | 2.8 | 2.8 | 2.9 | 3.4 | 3.4 | 0.5 | 17% |
| **gini** | 0.499 | 0.483 | 0.492 | 0.499 | 0.491 | 0.501 | 0.522 | 0.526 | 0.027 | 5% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 1e. SCF (1988-89)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Long-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 41,009 | 36,195 | 37,801 | 38,790 | 41,785 | 44,618 | 47,974 | 48,450 | 7,441 | 18% |
| **median (P50)** | 26,074 | 23,908 | 23,988 | 24,598 | 26,711 | 27,949 | 28,719 | 28,692 | 2,619 | 10% |
| **P90** | 74,049 | 67,791 | 69,453 | 72,480 | 77,976 | 81,651 | 87,197 | 87,322 | 13,273 | 18% |
| **P95** | 104,295 | 94,751 | 98,278 | 103,659 | 113,821 | 119,888 | 132,343 | 133,322 | 29,027 | 28% |
| **P10** | 6,258 | 5,237 | 5,534 | 5,601 | 6,258 | 6,360 | 6,378 | 6,518 | 260 | 4% |
| **P99** | 244,049 | 199,376 | 222,895 | 228,329 | 250,059 | 280,639 | 327,867 | 329,292 | 85,243 | 35% |
| **90/10** | 11.8 | 12.9 | 12.5 | 12.9 | 12.5 | 12.8 | 13.7 | 13.4 | 1.6 | 13% |
| **90/50** | 2.8 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 | 3.0 | 3.0 | 0.2 | 7% |
| **10/50** | 0.24 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 0.22 | 0.23 | -0.01 | -5% |
| **95/50** | 4.0 | 4.0 | 4.1 | 4.2 | 4.3 | 4.3 | 4.6 | 4.6 | 0.6 | 16% |
| **99/50** | 9.4 | 8.3 | 9.3 | 9.3 | 9.4 | 10.0 | 11.4 | 11.5 | 2.1 | 23% |
| **99/90** | 3.3 | 2.9 | 3.2 | 3.2 | 3.2 | 3.4 | 3.8 | 3.8 | 0.5 | 14% |
| **gini** | 0.538 | 0.528 | 0.535 | 0.539 | 0.532 | 0.54 | 0.558 | 0.56 | 0.022 | 4% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 2a. SCF (2000-01)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Short-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 69,122 | 63,007 | 56,747 | 51,970 | 57,850 | 55,860 | 48,587 | 70,394 | 1,273 | 2% |
| **median (P50)** | 40,089 | 37,933 | 35,977 | 33,890 | 37,350 | 36,879 | 35,682 | 41,032 | 944 | 2% |
| **P90** | 119,238 | 112,042 | 105,790 | 97,936 | 106,696 | 105,470 | 100,968 | 120,660 | 1,422 | 1% |
| **P95** | 169,605 | 154,187 | 147,013 | 131,617 | 143,449 | 141,880 | 132,811 | 170,633 | 1,028 | 1% |
| **P10** | 10,279 | 9,698 | 8,223 | 7,206 | 9,201 | 8,326 | 7,426 | 11,022 | 742 | 7% |
| **P99** | 513,955 | 424,920 | 371,202 | 330,706 | 362,563 | 350,764 | 293,568 | 513,955 | 0 | 0% |
| **90/10** | 11.6 | 11.6 | 12.9 | 13.6 | 11.6 | 12.7 | 13.6 | 10.9 | -0.7 | -6% |
| **90/50** | 3.0 | 3.0 | 2.9 | 2.9 | 2.9 | 2.9 | 2.8 | 2.9 | 0.0 | -1% |
| **10/50** | 0.26 | 0.26 | 0.23 | 0.21 | 0.25 | 0.23 | 0.21 | 0.27 | 0.01 | 5% |
| **95/50** | 4.2 | 4.1 | 4.1 | 3.9 | 3.8 | 3.8 | 3.7 | 4.2 | -0.1 | -2% |
| **99/50** | 12.8 | 11.2 | 10.3 | 9.8 | 9.7 | 9.5 | 8.2 | 12.5 | -0.3 | -2% |
| **99/90** | 4.3 | 3.8 | 3.5 | 3.4 | 3.4 | 3.3 | 2.9 | 4.3 | -0.1 | -1% |
| **gini** | 0.561 | 0.547 | 0.542 | 0.538 | 0.526 | 0.523 | 0.511 | 0.552 | -0.009 | -2% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 2b. SCF (1997-98)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Short-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 53,072 | 47,955 | 59,917 | 67,674 | 70,302 | 77,416 | 90,410 | 90,115 | 37,043 | 70% |
| **median (P50)** | 33,465 | 32,134 | 34,475 | 36,507 | 38,306 | 40,888 | 42,403 | 41,895 | 8,430 | 25% |
| **P90** | 94,309 | 89,423 | 102,323 | 120,994 | 124,718 | 137,837 | 149,029 | 148,047 | 53,737 | 57% |
| **P95** | 130,816 | 119,661 | 154,820 | 185,132 | 189,417 | 205,076 | 235,069 | 234,262 | 103,446 | 79% |
| **P10** | 8,214 | 7,606 | 8,113 | 8,214 | 9,025 | 9,330 | 9,735 | 9,647 | 1,433 | 17% |
| **P99** | 355,942 | 292,107 | 472,893 | 592,337 | 607,134 | 700,984 | 876,173 | 876,173 | 520,232 | 146% |
| **90/10** | 11.5 | 11.8 | 12.6 | 14.7 | 13.8 | 14.8 | 15.3 | 15.3 | 3.9 | 34% |
| **90/50** | 2.8 | 2.8 | 3.0 | 3.3 | 3.3 | 3.4 | 3.5 | 3.5 | 0.7 | 25% |
| **10/50** | 0.25 | 0.24 | 0.24 | 0.23 | 0.24 | 0.23 | 0.23 | 0.23 | -0.02 | -6% |
| **95/50** | 3.9 | 3.7 | 4.5 | 5.1 | 4.9 | 5.0 | 5.5 | 5.6 | 1.7 | 43% |
| **99/50** | 10.6 | 9.1 | 13.7 | 16.2 | 15.8 | 17.1 | 20.7 | 20.9 | 10.3 | 97% |
| **99/90** | 3.8 | 3.3 | 4.6 | 4.9 | 4.9 | 5.1 | 5.9 | 5.9 | 2.1 | 57% |
| **gini** | 0.524 | 0.507 | 0.571 | 0.589 | 0.583 | 0.597 | 0.639 | 0.64 | 0.116 | 22% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 2c. SCF (1994-95)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Short-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 44,676 | 39,879 | 45,567 | 50,383 | 51,679 | 56,943 | 66,380 | 66,780 | 22,104 | 49% |
| **median (P50)** | 30,729 | 28,602 | 29,741 | 31,526 | 32,437 | 33,965 | 35,431 | 35,189 | 4,460 | 15% |
| **P90** | 81,943 | 78,465 | 85,018 | 94,091 | 96,539 | 107,243 | 116,911 | 116,673 | 34,730 | 42% |
| **P95** | 112,672 | 103,453 | 121,891 | 145,940 | 149,031 | 166,661 | 186,471 | 185,082 | 72,410 | 64% |
| **P10** | 6,863 | 6,248 | 6,555 | 6,658 | 7,090 | 7,375 | 7,621 | 7,582 | 719 | 10% |
| **P99** | 251,975 | 206,457 | 268,626 | 323,125 | 332,948 | 384,962 | 548,446 | 552,770 | 300,795 | 119% |
| **90/10** | 11.9 | 12.6 | 13.0 | 14.1 | 13.6 | 14.5 | 15.3 | 15.4 | 3.4 | 29% |
| **90/50** | 2.7 | 2.7 | 2.9 | 3.0 | 3.0 | 3.2 | 3.3 | 3.3 | 0.6 | 24% |
| **10/50** | 0.22 | 0.22 | 0.22 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | -0.01 | -4% |
| **95/50** | 3.7 | 3.6 | 4.1 | 4.6 | 4.6 | 4.9 | 5.3 | 5.3 | 1.6 | 43% |
| **99/50** | 8.2 | 7.2 | 9.0 | 10.2 | 10.3 | 11.3 | 15.5 | 15.7 | 7.5 | 92% |
| **99/90** | 3.1 | 2.6 | 3.2 | 3.4 | 3.4 | 3.6 | 4.7 | 4.7 | 1.7 | 54% |
| **gini** | 0.511 | 0.495 | 0.53 | 0.547 | 0.543 | 0.559 | 0.602 | 0.605 | 0.094 | 18% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 2d. SCF (1991-92)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Short-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 40,049 | 34,975 | 37,746 | 39,936 | 40,743 | 44,965 | 50,504 | 51,205 | 11,156 | 28% |
| **median (P50)** | 26,652 | 24,602 | 25,627 | 25,877 | 26,655 | 28,496 | 29,725 | 29,711 | 3,059 | 11% |
| **P90** | 77,906 | 70,710 | 73,661 | 78,931 | 80,554 | 87,345 | 92,722 | 94,226 | 16,321 | 21% |
| **P95** | 107,633 | 92,282 | 102,094 | 111,217 | 113,658 | 124,482 | 138,846 | 141,352 | 33,719 | 31% |
| **P10** | 6,765 | 6,150 | 6,253 | 6,355 | 6,633 | 6,868 | 7,135 | 7,167 | 401 | 6% |
| **P99** | 226,541 | 193,741 | 215,560 | 244,411 | 245,326 | 289,264 | 368,013 | 373,356 | 146,815 | 65% |
| **90/10** | 11.5 | 11.5 | 11.8 | 12.4 | 12.1 | 12.7 | 13.0 | 13.1 | 1.6 | 14% |
| **90/50** | 2.9 | 2.9 | 2.9 | 3.1 | 3.0 | 3.1 | 3.1 | 3.2 | 0.2 | 8% |
| **10/50** | 0.25 | 0.25 | 0.24 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | -0.01 | -5% |
| **95/50** | 4.0 | 3.8 | 4.0 | 4.3 | 4.3 | 4.4 | 4.7 | 4.8 | 0.7 | 18% |
| **99/50** | 8.5 | 7.9 | 8.4 | 9.4 | 9.2 | 10.2 | 12.4 | 12.6 | 4.1 | 48% |
| **99/90** | 2.9 | 2.7 | 2.9 | 3.1 | 3.0 | 3.3 | 4.0 | 4.0 | 1.1 | 36% |
| **gini** | 0.499 | 0.483 | 0.5 | 0.512 | 0.51 | 0.526 | 0.561 | 0.563 | 0.064 | 13% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |

**Appendix Table 2e. SCF (1988-89)- Full Income Definition Summary Statistics: ORIGINAL RANKINGS, Short-run RATES OF RETURN**
(household weights applied)

| | SCF income | less capital | plus finance | plus retire | plus home | plus oth invest | plus business | MCI | change: SCF to MCI | change: as % of SCF |
|---|---|---|---|---|---|---|---|---|---|---|
| **mean** | 41,009 | 36,195 | 38,830 | 40,427 | 42,872 | 47,420 | 52,820 | 52,807 | 11,798 | 29% |
| **median (P50)** | 26,074 | 23,908 | 24,475 | 25,031 | 26,752 | 28,612 | 29,429 | 29,218 | 3,144 | 12% |
| **P90** | 74,049 | 67,791 | 71,603 | 75,178 | 79,309 | 89,247 | 97,417 | 96,963 | 22,913 | 31% |
| **P95** | 104,295 | 94,751 | 100,688 | 111,038 | 117,336 | 130,335 | 148,655 | 149,649 | 45,354 | 43% |
| **P10** | 6,258 | 5,237 | 5,898 | 6,048 | 6,258 | 6,395 | 6,421 | 6,532 | 275 | 4% |
| **P99** | 244,049 | 199,376 | 234,377 | 258,780 | 272,183 | 330,174 | 418,331 | 408,506 | 164,457 | 67% |
| **90/10** | 11.8 | 12.9 | 12.1 | 12.4 | 12.7 | 14.0 | 15.2 | 14.8 | 3.0 | 25% |
| **90/50** | 2.8 | 2.8 | 2.9 | 3.0 | 3.0 | 3.1 | 3.3 | 3.3 | 0.5 | 17% |
| **10/50** | 0.24 | 0.22 | 0.24 | 0.24 | 0.23 | 0.22 | 0.22 | 0.22 | -0.02 | -7% |
| **95/50** | 4.0 | 4.0 | 4.1 | 4.4 | 4.4 | 4.6 | 5.1 | 5.1 | 1.1 | 28% |
| **99/50** | 9.4 | 8.3 | 9.6 | 10.3 | 10.2 | 11.5 | 14.2 | 14.0 | 4.6 | 49% |
| **99/90** | 3.3 | 2.9 | 3.3 | 3.4 | 3.4 | 3.7 | 4.3 | 4.2 | 0.9 | 28% |
| **gini** | 0.538 | 0.528 | 0.542 | 0.548 | 0.542 | 0.556 | 0.583 | 0.585 | 0.047 | 9% |

Notes:

| | |
|---|---|
| SCF income | Fed default gross household income definition, includes wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programs provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. |
| less capital | SCF income less income from wealth (interest, dividends, rent, royalties, and income from trusts and non-taxable investments, including bonds, as well as some self-employment income). |
| plus finance | + imputed flows to stocks, bonds, annuities, and trusts |
| plus retire | + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) |
| plus home | + imputed flow to primary residence |
| plus oth invest | + imputed flow to other residences and investment real-estate, transaction accounts, CDs and whole life insurance |
| plus business | + imputed flow to other assets and businesses + imputed flow to vehicle wealth |
| MCI | - imputed interest flow for remaining debt (after adjusting for negative incomes) |