



**GROWING INEQUALITIES AND THEIR IMPACTS IN THE UNITED STATES**

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**Country Report for the United States**

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## Executive Summary

In brief, we find that inequality is high and rising in the United States, but the great majority of the increase was captured by the top end of the distribution since the mid-1990s—the top 1 percent in any given year and the top 5 to 10 percent overall—over the past 40 years. Overall inequality increased at a slow pace in recent years owing to the better economic status of the elderly, but inequality among families and children has continued to rise in the United States.

The general focus in chapter 2 is on longer-term trends in inequality and poverty going back to 1967 or 1979. Data on trends in income and consumption inequality, poverty, and wealth inequality, show considerable increases over this period but a relatively constant level of poverty using European relative poverty definitions.

When we assess the proximate causes or driving factors of U.S. inequality and find that labor markets (rising inequality in wages and earnings) and income from capital drive the inequality distribution in the United States, with redistribution playing only a minor and more or less constant role. There is a huge body of research on the causes of rising inequality and the consensus view is that technological change has increased the demand for skilled workers faster than the supply of skilled workers in the United States. Goldin and Katz (2008) show that the growth of U.S. schooling slowed for people entering the labor market in the late 1970s. As the supply of skills slowed down and the demand for skills continued to rise (due to technological change and wider international markets), the premium for having an education led to a rapid rise in wages at the top of the distribution.

We also argue that without a more complete understanding of the long term effects of the Great Recession on U.S. standards of living as well as other dimensions of inequality, one cannot expect to understand the current and future path that the United States is now on. The long, painful, and slow recovery of the United States may well herald a new era of diminished living standards and greater arguments about the distribution of both rewards and penalties in such circumstances.

Our report also suggests that income inequality and poverty in the United States has risen with high and continuing joblessness, but primarily among non-elderly households. When all households are included, we can see that some of the increases in poverty are not as severe as in past recessions. Capital markets and executive pay have recovered faster than wages or jobs, just as they have in past recessions. Middle and lower-income households—those relying on earnings to provide essentially all of their income, those whose primary asset is their home, and those with something less than an

advanced degree—are faring much worse. The very steep decline in housing values has reduced mobility, led to higher rates of default and foreclosure, and negatively affected aggregate consumption.

What have been the social and political impacts? We hesitate to ascribe causality based on observation of trends in a single country. Instead, we call attention to outcomes in which the timing of change appears to be consistent with what we would expect if rising inequality did have a causal effect. In some cases the trends are correlated and in others they are not. But, again, causation is hard to establish for such wide-ranging topics. We also find that inequality's effects on most social and political outcomes are more muted than what one might expect. The one area where inequality has had a large impact is intergenerational mobility, where by all measures; the young generation today is less upwardly mobile than its parents' generation.

We conclude that living standards in the middle of the distribution were and are falling during the Great Recession. Moreover, with faint prospects of a rapid recovery, the losses of the Great Recession increasingly mount. The forecast is that unemployment will not return to 6.5 percent levels for another three years or longer. While the trend in inequality in the United States has been ever upward, we believe that it will be politically and socially difficult for U.S. inequality to continue to grow at the top at the expense of the collapsing middle class, the majority of whom believe, perhaps rightly so, that their children will be worse off economically than they are. If so, we might expect some moderation in the growth of United States inequality in the next decade.

## 1. Introduction

We present data on changes in inequalities in income, wealth, earnings, and education over time and their social, political, and cultural impacts using data from 1970/80 to 2010/2011 for the United States. Among the world's affluent countries, the United States can be considered an especially revealing test case. The level of income inequality is very high, and it increased very rapidly in the past generation. If income inequality has adverse impacts on social, political, cultural, or other outcomes, they are likely to be particularly visible in the United States.

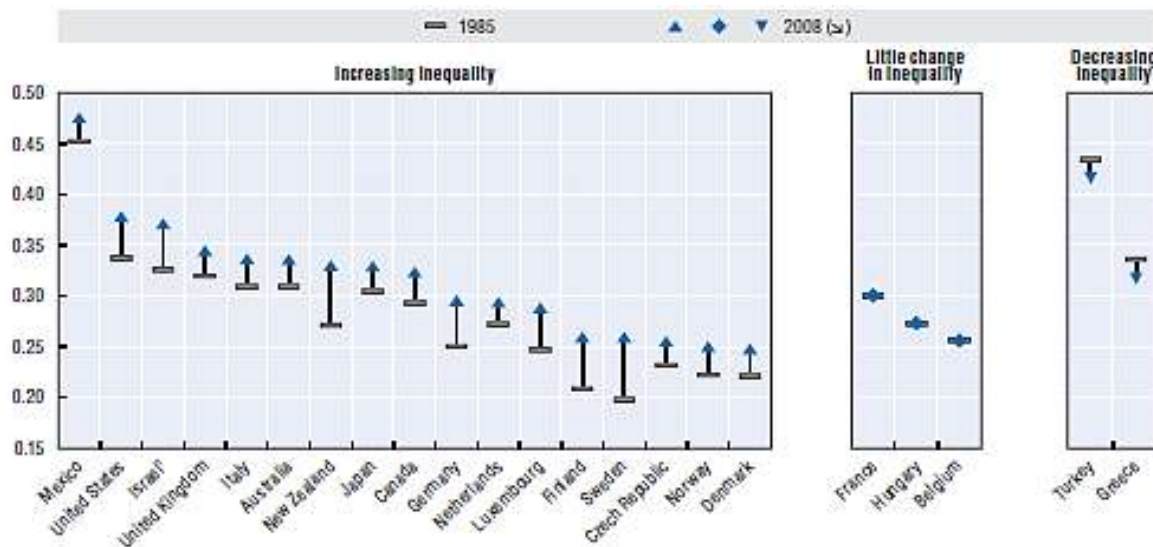
While this report is mainly about longer-term economic change, we also include a section on the U.S. experience with the Great Recession through 2010/2011 and its impacts. While the long-run trends in inequality are indeed important, we believe that the Great Recession has both permanently and negatively changed the level of well-being as well as its distribution in the United States.

The United States also has the highest share of top incomes (top 1 percent) among rich countries and has experienced the largest increase in that share from 1990 to 2007 (Divided We Stand, 2011, figure 12, page 39). And the trend continues as cash market income in the 90th percentile and above—before individual income taxes—rebounded nicely in 2010, the year after the end of the recession (see figure 2.18). Income inequality in the United States has always been the highest among rich OECD nations and it still leads the pack in 2012 in both level and trend among the rich countries in the OECD (excluding Mexico) just as it did in the 1980s and 1990s, see figure 1.1 (Divided We Stand, 2011, figure 1, page 24; also see Brandolini and Smeeding, 2009).

These data and those below suggest that most of the well-known forces that drove the United States to the top of the rich country inequality tables are continuing. What is less clear is how the distribution fared beyond the growth in the very top shares, and the drivers of and outcomes from these changes, and how it affected groups such as the elderly versus families with children, a topic we address to some extent below.

Figure 1.1 Income inequality increased in most, but not all OECD countries

Gini coefficients of income inequality, mid-1980s and late 2000s



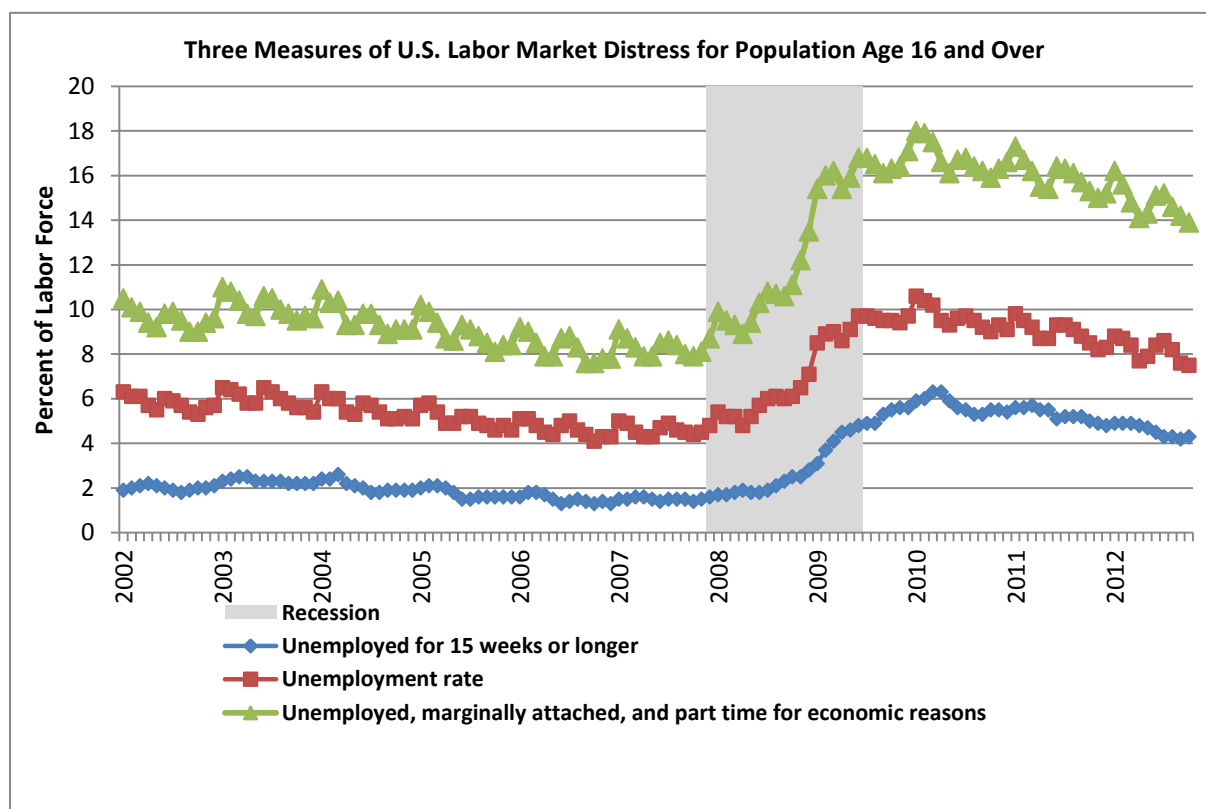
Note: For data years see Table 1. "Little change" in inequality refers to changes of less than 2 percentage points.  
 1. Information on data for Israel: <http://dx.doi.org/10.1787/8889322315602>.  
 Source: OECD Database on Household Income Distribution and Poverty.

Source: OECD (2012)

### 1.1 The United States Macro Economy in Late 2012

The United States has been mired in the Great Recession much longer than have other countries. And the recession has been much deeper as well, with incomes falling about 8 percent at the median and with a large (average 30 percent) loss on the value of owner-occupied homes, the mainstay assets of the middle class. Over 8 million jobs were lost and, with employment still 3 percentage points below its 2007 peak, more than three years after the declared end of the GR in summer 2009 (Rampell, 2012). Over 14 million Americans now seek work, are involuntarily working part time, or have left the labor force as discouraged workers. Long term unemployment and unemployment per se are still far above their 2007 levels and are recovering only slowly (figure 1.2). The good news for job creation is that the American population is growing older and retirements at the rate of 100,000 per month are expected, hence reducing the need for as much job creation, but still leaving the United States about 11 million jobs below pre-recession employment levels. With population growth, the United States is three or more years away from a 6.5 percent full employment target at current rates of job growth (Greenstone and Looney, 2011). New household formation is just beginning to tick up, after three years of negative growth and unemployed and jobless young adults moved back in with their older families.

Figure 1.2 Three Measures of U.S. Labor Market Distress for Population Age 16 and Over



Source: Bureau of Labor Statistics (2011): Labor Force Statistics, Table A15. Accessed at <http://www.bls.gov/webapps/legacy/cpsatab15.htm>

Middle skill jobs in manufacturing and construction have hardly recovered at all, and hence the least educated are being pushed into service sector jobs which pay far less than the cost of supporting a family (Thompson and Smeeding, 2012). The cost of higher education is rising at the same time that the labor market demands additional skills, but educational attainment is only just beginning to perk up. Indeed, the premium for the most educated relative to those with a secondary education or less is very high in the United States (Ermisch et al., 2012).

On the other hand, overall GDP and GDP per capita in the United States have rebounded to or beyond their pre-recession heights (U.S. Department of Commerce, 2012a). Corporate profits are at an all-time high (U.S. Department of Commerce, 2012b) and the stock market has recovered over 90 percent of its earlier peak value (Thompson and Smeeding, 2012).

President Obama won re-election but is faced with deficit reduction policies at the same time that the economy needs stimulation. Taxes may well rise on the richest, and the safety net which has performed well during the GR will likely be cut. The fear is that these actions may well depress aggregate demand and result in a double dip recession, such as that being experienced right now by the United Kingdom. According to a recent report, extending the recession relief efforts instead of

rising taxes and cutting spending at this juncture would cost the U.S. economy at least 400,000 jobs lost next year (Greenstone and Looney, 2012).

## 1.2 Rest of Report

In this report we first document the nature of inequality, poverty, and wealth in the United States and its development over time, using three different income concepts to track trends. Each of these reveals the same upward pattern. Then we assess the drivers of this inequality rise, including the effects of the Great Recession (Section 2). The labor market, with widening wage and earnings inequality, deserves most of the credit for the rise in American inequality, though demographic factors play some role as well.

Section 3 then reviews the social impacts of inequality, while the political and cultural impacts of inequality are in Section 4. Using several indicators, it does not seem that United States social indicators are very responsive to greater inequality. Explanations for this surprising lack of response are given. The one exception is intergenerational mobility where the United States is suffering less equality of opportunity, mainly because of rising inequality and overall advantages of well-to-do parents in an economy where public goods are less plentiful and parental wealth is more important in determining future economic chances. In Section 5 we assess the long-term (non)response of government to the rise in pre-tax and transfer, or market income inequality, even as it has been more successful in fighting poverty. In Section 6, we discuss the ineffectiveness of policies in combating inequality, as the pattern of market income inequality dominates overall inequality trends. Section 7 is a short conclusion summarizing our results.



## 2. The nature of inequality: Income, poverty, consumption, wealth, and their development over time

### 2.1 Income Inequality

Income inequality in the United States has always been the highest among rich OECD nations, as far back as the late 1970s.

In this section of the chapter we explore the longer-term trends in inequality which has steadily risen in the decades leading up to the Great Recession and is continuing to rise, as income and consumption inequality have all risen in tandem over the past 30 years (with some cyclical ups and downs). We examine inequality in household incomes and poverty rates using data from three sources: the Current Population Survey, for official cash gross money income and equivalized net of tax and transfer income, and also from the Congressional Budget Office after-tax income series (CBO 2010). We then examine poverty and wealth inequality, and then assess the proximate drivers of these changes, especially those occurring in the labor market. We also briefly explore the degree to which the tax and transfer system mitigated the impacts of growing pre-tax inequality. Finally we look at the impact of the Great Recession on U.S. income levels and inequality. The choice of income measure matters in determining the extent to which inequality rose, as does the inclusion of taxes and transfer programs and the age groups analysed. But, that said, most measures of inequality remained at or near historically high levels through 2009 or 2010.

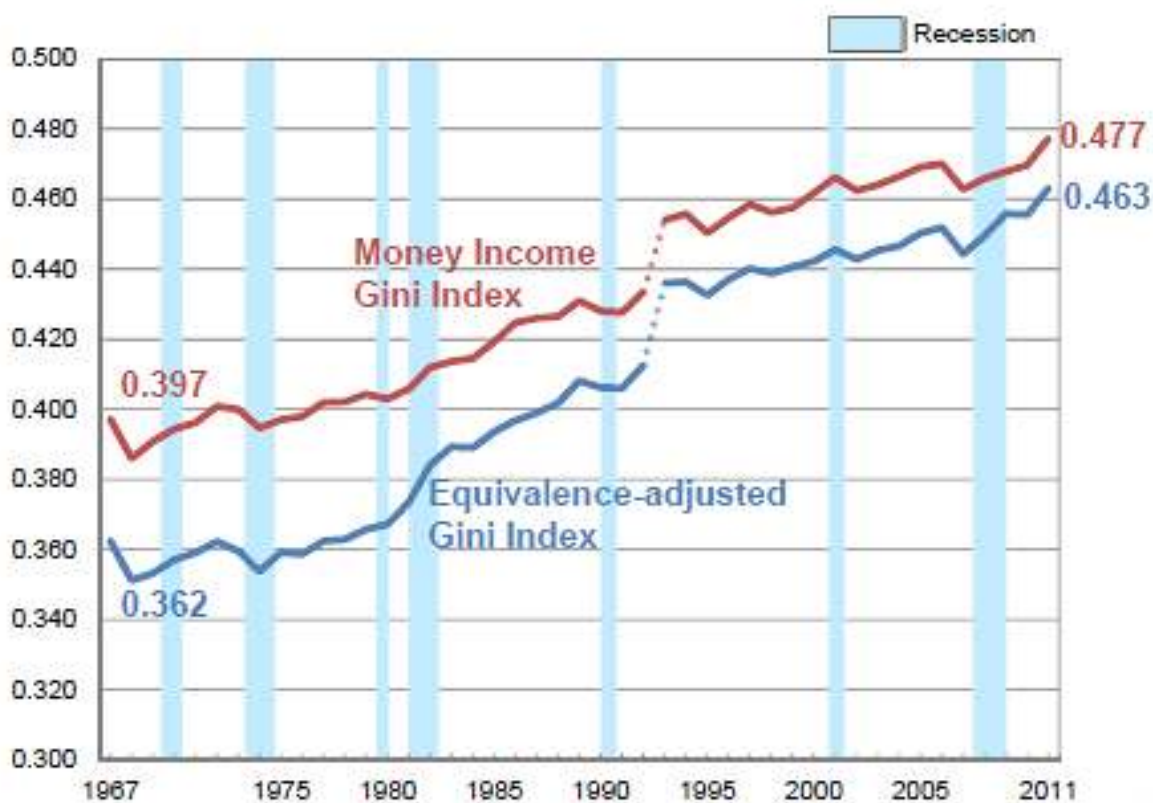
#### 2.1.1 Basic income inequality trends for the United States: Three sets of Gini's

In this chapter we can rely on at least three very different measures of income inequality, but they all point to the same conclusion: long-term income inequality in the United States has been rising, is rising, and in the future will also most likely increase. The appendix contains complete definitions of each income concept, (and also the definitions of other measures of well-being used in this chapter).

First, Census "money income" includes cash incomes received on a regular basis (exclusive of certain money receipts such as capital gains) and before payments for personal income taxes, but gross of income transfers such as social security. This is the oldest income definition and the longest series in the United States dating back to 1967 in household terms and to the 1950s for families (DeNavas-Walt et al., 2012).

The trends in this cash-only income series from 1967 to 2011 are seen below in figure 2.1. One series is not adjusted for changes in family size (equivalence adjusted), the other one is. Both series show steadily increasing inequality, with some cyclical fluctuation. Hence, changes in household size have had a small effect on income inequality in the United States as the lines do grow closer together (though changes in family structure might have had a larger impact as we mention below). The equalized results suggest the U.S. Gini increased from about .36 to .46 in the course of 1967–2011 period.

Figure 2.1 Census Long Term Cash-only Money Income Inequality: 1967–2011



Gini Index of Equivalence-Adjusted Income Compared to Money Income: 1967–2011

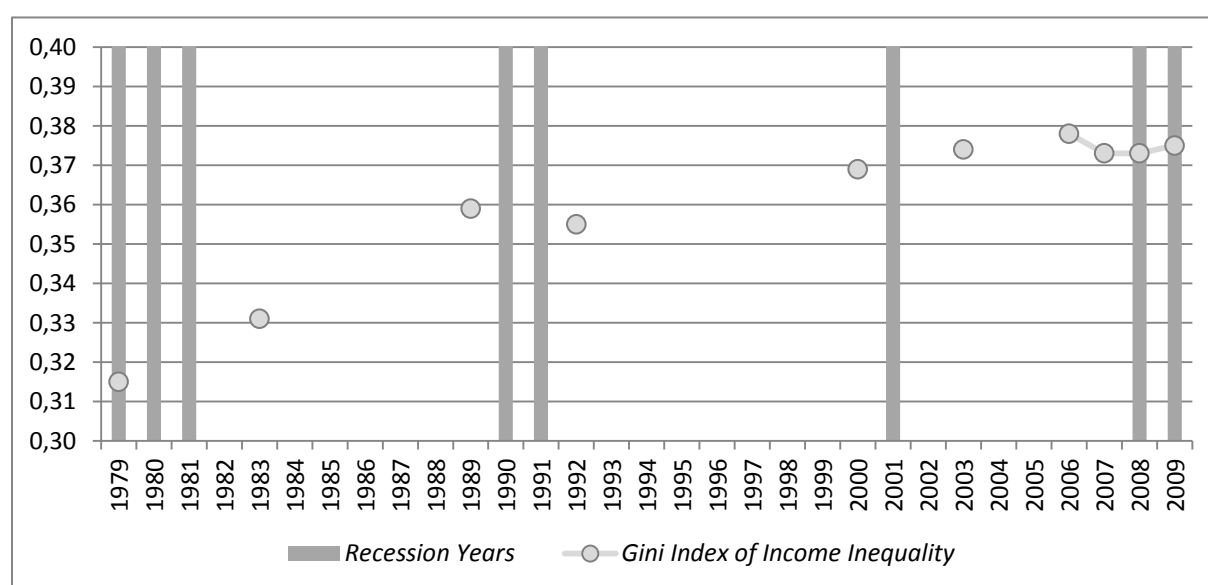
Source: DeNavas-Walt et al. (2012).

Second, we have calculated ‘Net Equalized Income’ by starting with ‘gross money income’ as above and then, first, adding near-cash transfer income not included in ‘money income’ (food stamps benefits, housing benefits) and refundable tax credits (including the EITC and the child tax credit; second, subtracting direct taxes (state and federal income taxes the employee share of social insurance taxes (with taxes and refundable credits estimated using the NBER TAXSIM program); and

third, adjusting for differences in household size using an equivalence scale, dividing net income by the square root of household size (Thompson and Smeeding, 2012). This income definition is closest to the EU-SILC, LIS, and Canberra definitions employed by most rich nations. But it includes income with top codes so it misses the rapid increases in the incomes at the top of the U.S. distribution as well as capital gains and employer benefits such as health insurance and pensions which are of particular importance in the United States.

This series, shown in figure 2.2 below, suggests that inequality followed the same general trend as in the Census money income measure, though the series only goes from 1979 to 2009 and does not show the increase in inequality since the end of the Great Recession (see also Piketty-Saez definition below in figure 2.18). These equalized results suggest the U.S. Gini increased from about .32 to .38 in the course of 1979–2010 period.

**Figure 2.2 Net Equalized Income Inequality (NEI)**



Source: Thompson and Smeeding (2012).

Finally, we use the various definitions of income as defined by the Congressional Budget Office (CBO). Here we find three lines on figure 2.3. The top line is for ‘market income’ before taxes and benefits. This is the steepest line, because wage and capital income (including capital gains) are both pushing up overall inequality. The second line, ‘before tax income’ includes transfers but not taxes and, other than capital gains, is similar to the census cash income line in figure 2.1. The CBO figures are different because all of the three definitions are matched to IRS records so there is no issue about top coding of income as with the Census money income and the NEI income measure in figure

2.2, and a much richer set of government benefits are included in the transfers definition (as iterated below).

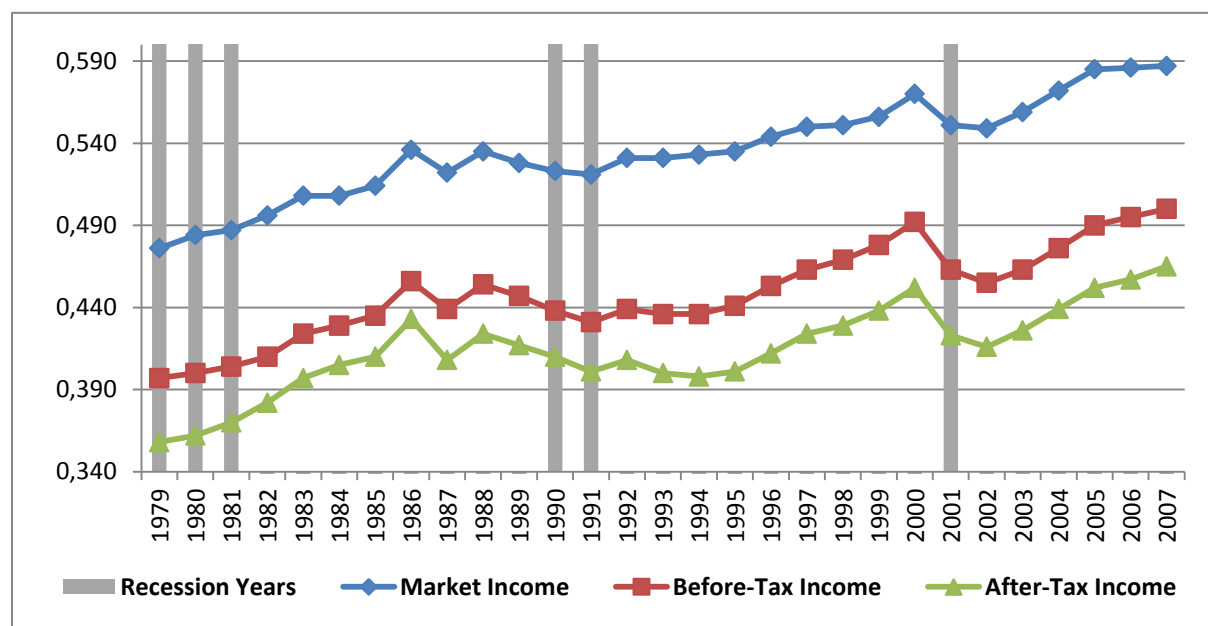
The final line in figure 2.3, CBO comprehensive after-tax income, just subtracts taxes paid from CBO before-tax income to separately determine the effects of taxes alone on the distribution. And so it includes wages, salaries, self-employment income, rents, taxable and non-taxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employees' contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Then it subtracts all federal taxes. Individual income taxes are attributed directly to households paying those taxes. Social insurance, or payroll, taxes are attributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are attributed to households according to their share of capital income. Federal excise taxes are attributed to them according to their consumption of the taxed good or service.<sup>1</sup>

This definition, shown below in figure 2.3 at the bottom, indicates a slightly flatter increase in net income inequality (in bottom line) than in market income inequality, but with a more or less constant difference between before- and after-tax income (as shown again in Figure 5.1 and 5.2 and as discussed in section 5 below). This diagram also shows how before tax and transfer market income inequality mushroomed throughout the 1979 to 2007 period.

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<sup>1</sup> For more information on CBO comprehensive income, see [www.cbo.gov/publications/collections/collections.cfm?collect=13](http://www.cbo.gov/publications/collections/collections.cfm?collect=13) and the Appendix income definitions.

Figure 2.3 1979–2007 Gini indexes for Household Income: CBO



Source: Congressional Budget Office, 2011a.

In summary then, the CBO results suggest the United States Gini increased from about .36 to .46 in the course of 1979–2007 period, about the same as the Census cash income inequality rose from 1967–2011. The NEI results in figure 2.2 suggest a smaller increase in inequality, but do not count many of the dis-equalizing factors in the income distribution compared to the CBO data.

In our sections on the social consequences of inequality we present two trend lines. One is the NEI line (figure 2.2) as it is closest to the income definition used in other Gini country income measures. It is more or less the Canberra income definition, and is similar to the definitions of income based on EU-SILC, OECD reports (2011), and the Luxembourg Income Study (LIS). The other line is the CBO comprehensive after-tax income measure (bottom line in figure 2.3), which includes a richer set of transfers but most importantly includes non-top coded incomes, and hence reflects the massive increase in income level and share at the very top of the income distribution in the United States (as seen in figures 2.7, 2.8, and 2.20 later in this section of the chapter). Both of these series are consistent with the longer running official cash income series in figure 2.1.

### 2.1.2 Income inequality trends in the United States: A closer look

Because workers are typically part of a household unit that shares resources across several members, oftentimes including multiple earners, and because households are able to draw upon non-labor sources of income, it is important to go beyond individual wages or earnings and explore other

aspects of the level and distribution of household income, consumption, and wealth. The trend in wages and salaries is discussed below under drivers of inequality.

### **Average incomes for Census and NEI definitions**

Absolute incomes also matter. Indeed, one can see long-term growth in both money income and NEI for all persons in figure 2.4, up to 2000, for money income and since that time, it has been flat or falling, but with a slight increase in the NEI value since 2000. The period of the 2000s is oftentimes referred to as a lost decade in the United States. And it appears to be so for non-elderly households under both definitions, as 2009 values are below 2000 values. This is clearly not true for the elderly whose real income growth took a small dip in the early 2000s but rose steadily from 2003 onward.

In 2009, average real household income was 2.9 percent lower than it had been in 2007, hitting the lowest level in twelve years (figure 2.4, panel A). While average money income fell for all households, and for non-elderly households, it actually rose somewhat for households headed by someone age 65 and older, reflecting a much longer-term trend in elder incomes. Median income for all households fell 3.7 percent over the same period, and increases in the Gini index and the P90/P10 and P90/P50 ratios all indicate modest increases in income inequality during the Great Recession using this income definition. Below, when we discuss the Great Recession, we see that average incomes had fallen even further in the United States by the middle of 2012 (see figure 2.20).

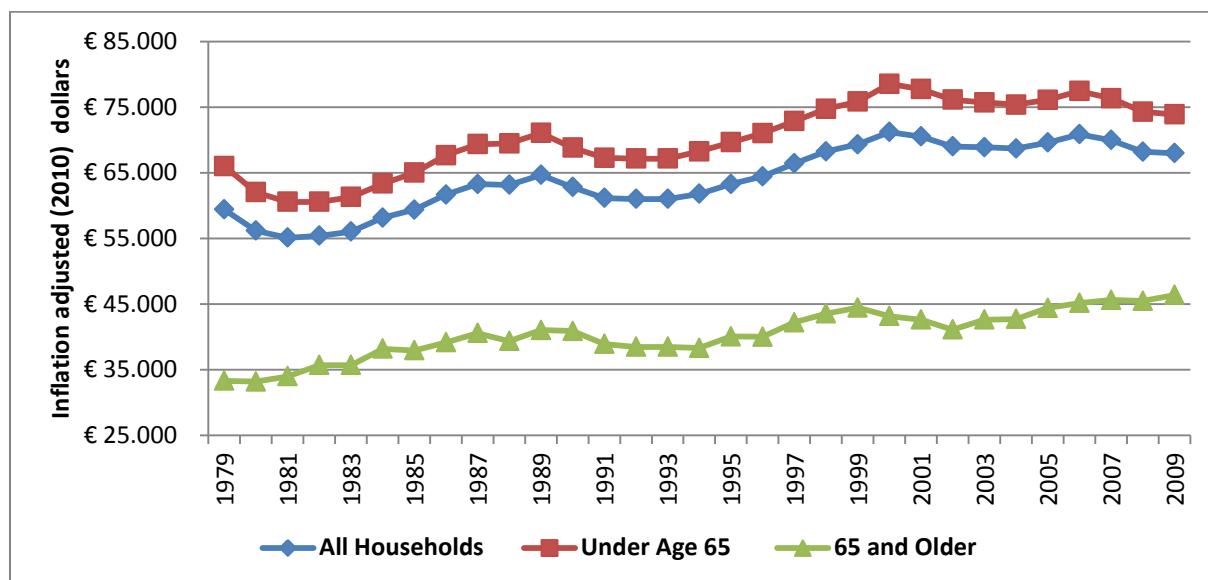
The baseline Census ‘money income’ definition does include some sources of transfer income (UI, TANF, and Social Security), but it does not include others such as the Earned Income Tax Credit (EITC) and SNAP, and it also excludes taxes. To reflect the influence of these transfers and taxes, we calculate a measure of net income which subtracts taxes (including federal and state income taxes and the employee share of social insurance FICA taxes) and additional transfer payments (including the EITC and SNAP benefits) from money income. To reflect household economies of scale, we then divide real net household income by the square root of the household size. The resulting measure, Net Equivalized Income (NEI) is a superior measure of household well-being, since an equivalent amount of gross money income results in a lower standard of living if family size is larger or applicable taxes are higher.

Accounting for taxes, transfers, and household size, average household income declined by only two-thirds as much—falling just 2 percent between 2007 and 2009, and actually rising slightly after 2008 (figure 2.4, panel B). Non-elderly households follow a similar trend, except income is flat after 2008, but elderly households saw their incomes rise over this period. The equivalized net income figures (NEI) show incomes at a lower income level as taxes have been subtracted (figure 2.4, panel B). Most

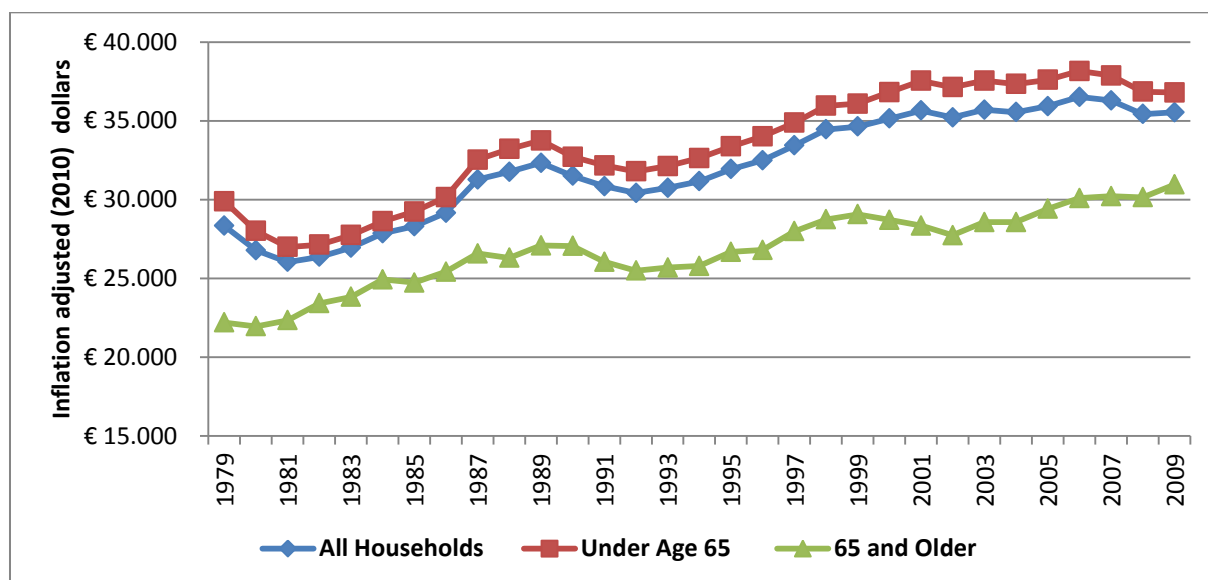
of the downward movement is in the incomes of the non-elderly as the elderly pay far less in direct taxes than do the non-elderly.

**Figure 2.4 Mean Inflation-Adjusted Household Income, By Age and Income Definition, 1979–2009**

Census ‘money income’



Equivalentized net income



Note: Top-coded income values adjusted using consistent cell means, and series adjusted to smooth over the effects of the 1993 change in CPS data collection methods.

Source: Smeeding and Thompson (2012) analysis of March CPS (various years), CEPR extracts, and NBER Taxsim.

### **Inequality trends: P90/P10 and P90/P50**

In addition to the Gini's shown above, we can also measure inequality by decile ratios (P90/P10) and by growth at the top relative to the median (P90/P50) for both Census cash income and NEI. The rise in inequality of Census cash income seen in figure 2.5 is muted once we move to the NEI definition. But both series show a rise in inequality in the United States from 1979 onward, with that rise being driven largely by change in the P90/P50 ratio.

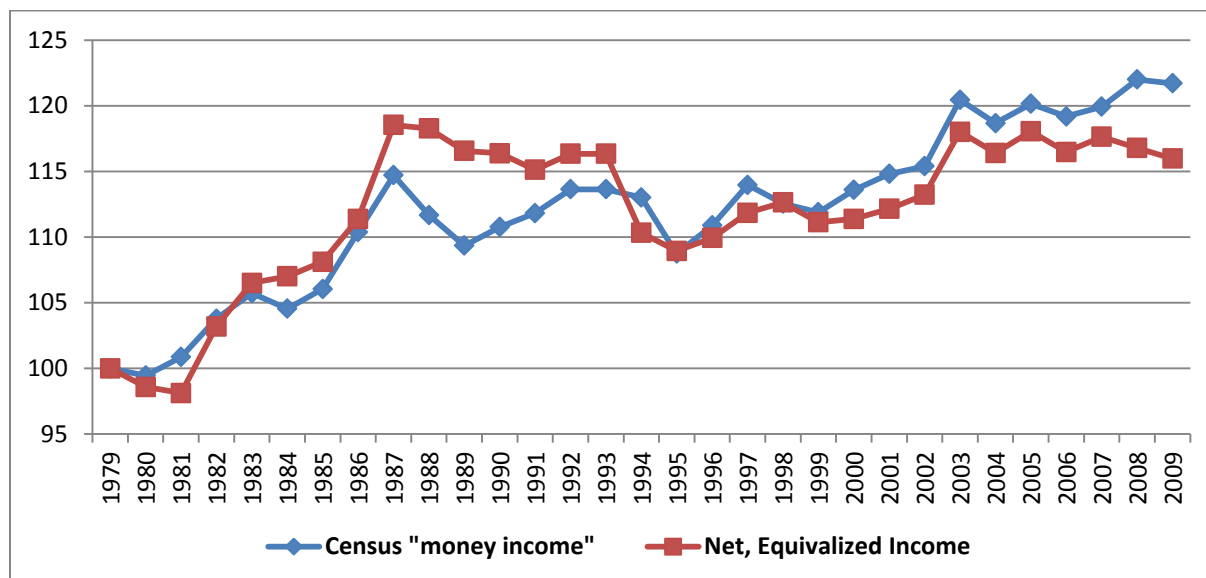
Instead of rising as with cash income, the P90/P10 ratio is shown to decline slightly between 2007 and 2009 once taxes, transfers, and household size are incorporated into the measure by the NEI (figure 2.5, panel A). Figure 2.5 suggests, as Burkhauser and Larrimore (2011) have argued, that taxes and transfers have an impact on the income distribution in a different way than during previous recessions. In the 1980s, policy changes exacerbated inequality trends measured by the P90/P10 ratio for all households, but during the Great Recession, taxes and transfers have reduced this measure of inequality.

The difference between the two series using the P90/P50 ratio is less pronounced, as inequality continues to rise, however faintly, using NEI (figure 2.5, panel B). The longer-term trends in both the P90/P10 and P90/P50 ratios, however, indicate that inequality is indeed different in the Great Recession than in previous downturns. In the deep recession of the early 1980s, and during and immediately following the mild recession of the 2001, inequality increased sharply. Inequality also appears to have increased somewhat during the early 1990s recession, although the pattern is more difficult to discern given the 1993 series break in the March CPS—the result of a general redesign of the survey, including switching to automated coding and expanded use of top-code censoring of income values (Ryscavage, 1995). Trends in the Gini index above (figures 2.1 and 2.2) also suggest that any change in inequality between

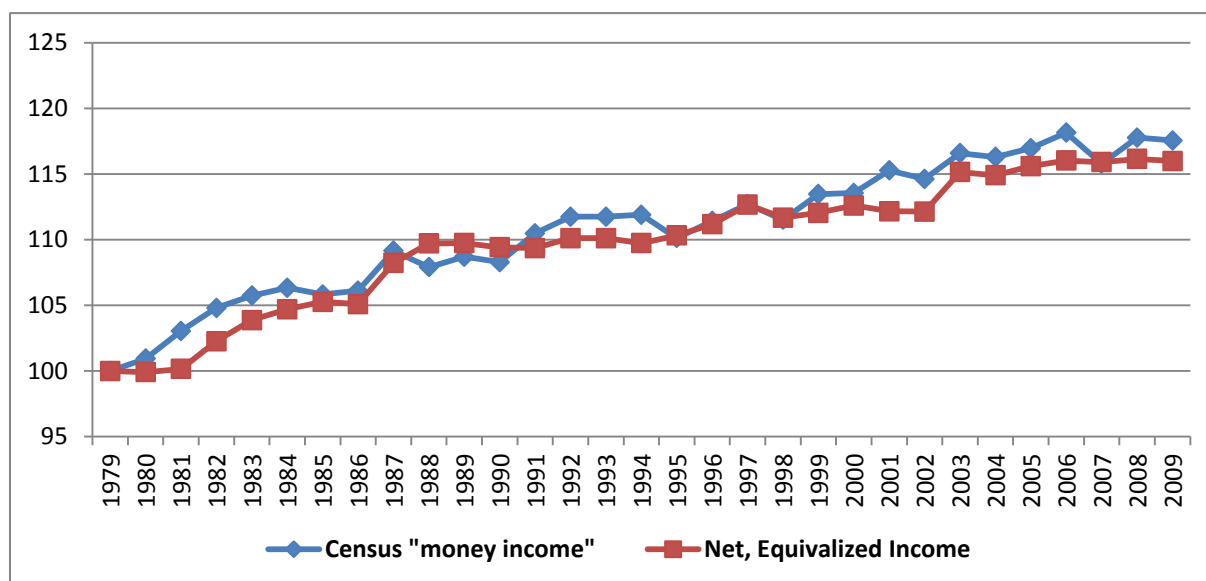


**Figure 2.5 Selected Household Income Inequality Indices, Census 'Money Income' and Equivalized Household Net Income 1979–2009 (Indexed 1979=100)**

**A. P90/P10 Ratios**



**B. P90/P50 Ratios**



Note: Top-coded income values adjusted using consistent cell means (Larrimore et al., 2008), and series adjusted to smooth over the effects of the 1993 change in CPS data collection methods.

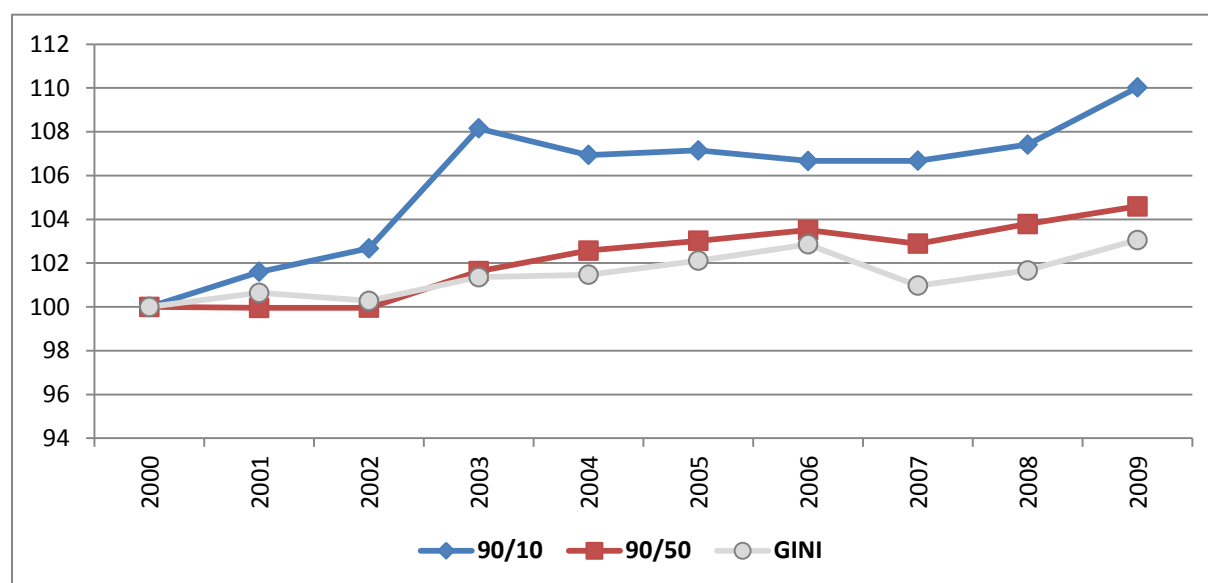
Source: Smeeding and Thompson (2012) analysis of March CPS (various years), CEPR extracts, and NBER Taxsim.

2007 and 2009 was very slight, rising just one-half of one percent, owing most likely to the rising real incomes of the elderly. Indeed, when we restrict the focus to include only non-elderly households, a very different pattern emerges for inequality measures from 2000 to 2011 in figure 2.6. Here we are able to use a modified measure of NEI that is not top coded. Among non-elderly households, the Gini index and the P90/P50 and P90/P10 ratios have all increased substantially between 2007 and 2009,

and, more generally, since 2000 (figure 2.6). While these data are limited to the most recent decade, they all have consistent treatment of top-coded incomes, including assignment of cell means by income source to top-coded observations, so top end income changes are more accurately measured. For non-elderly working age households (head under age 65), net equivalized incomes fell less at the top of the distribution than for the non-rich, causing the P90/P10 ratio to climb 3 percent, and the P90/P50 ratio and the Gini index to rise approximately 2 percent (Thompson and Smeeding, 2012, table 8.A3, panel C; see also Smeeding et al., 2011).

These comparisons suggest that households headed by the elderly and non-elderly have experienced different income paths throughout the 2000s up to and through the Great Recession. Why did the elderly do better than the non-elderly? The elderly depend much more on income transfers (Social Security in the United States, social retirement elsewhere) and sources of investment income and far less on the labor market than do the non-elderly. The elderly who were already retired in 2008 lost some home value along with most other owners, but were generally invested in relatively safe portfolios, which protected their assets and income flows (Gustman, Steinmeier, and Tabatabai, 2010; but also see Wolff (forthcoming), and wealth section below). Older workers take up Social Security benefits at high rates once they pass age 62. The 46 percent of elders who take up benefits between ages 52 and 65 are subject to an earnings test which discourages work in these age ranges (Smeeding et al., 2011). But those who wait until they are at least 65 not only receive higher benefits than at age 62, but are allowed to receive these social pensions without any penalty for earnings. Among the higher-skilled elderly, employment has increased throughout the recession, owing in part to reluctance to retire (in terms of not working) and increased work after retirement (likely reflecting falling home prices). The success of the tax and transfer system in sustaining the incomes of, and mitigating inequality among, older households, and its failure to do so for non-elderly households is consistent with Ben-Shalom and colleagues' (2011) assessment of U.S. anti-poverty programs as being increasingly directed toward the elderly (and the disabled) and away from the young, except for the temporary measures put into place in response to the Great Recession.

**Figure 2.6 Inequality of equivalized household net income, non-elderly households, 2000–2009 (Indexed 2000 = 100)**



Source: Smeeding and Thompson (2012) analysis of March CPS (various years), CEPR extracts, and NBER Taxsim.

But in any case, the three trend lines in figure 2.6 are consistent with the Gini's above in figures 2.1 and 2.2, suggesting that the upward trend in inequality in the United States has continued for over 30 years, with some differences for the nonelderly whose inequality has increased more than for all households and especially less than for the elderly.

### Trends in comprehensive income shares

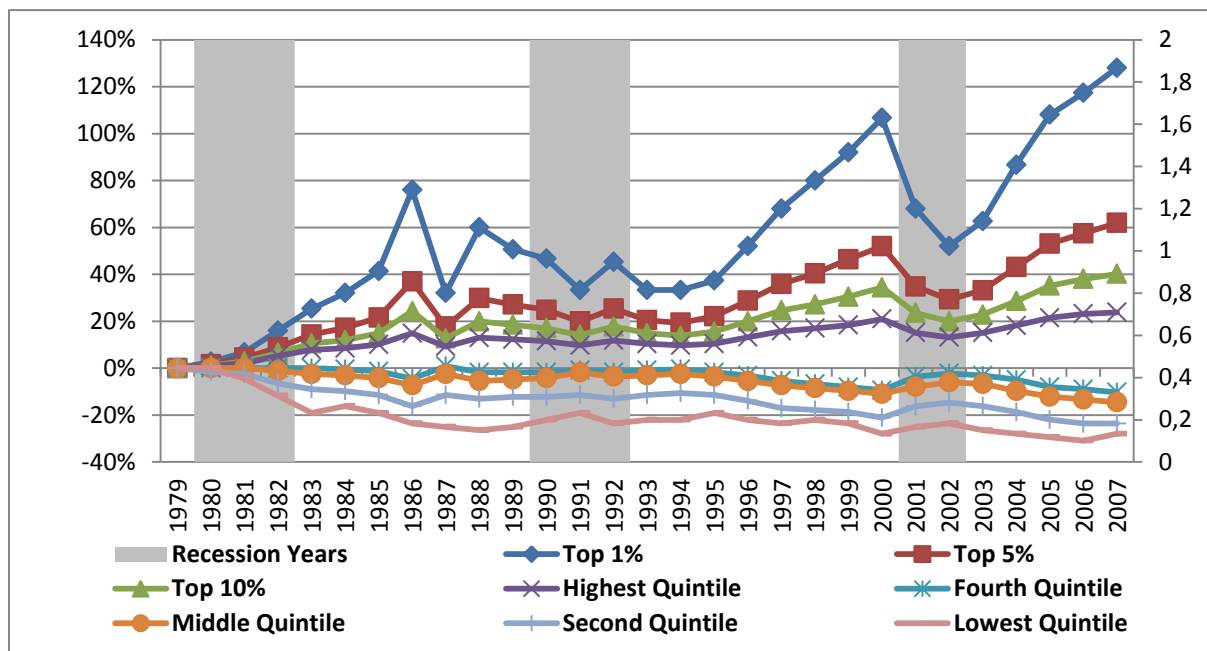
Because of income top-coding and the presence of a few extremely high income households in the sample, it is difficult to use the March CPS (either Census income or NEI) to accurately estimate inequality at the very top of the income distribution over a longer period than 2000 to 2009. In recent years, a number of studies have demonstrated that much of the growth in inequality since the 1970s has been isolated to the top few percentiles of the distribution. To the extent that the top few percentiles are driving inequality, the P90/P10 ratios, and Gini indices calculated with the March CPS using NEI or census cash income understate the level of inequality at any point in time and possibly the trends toward greater inequality over time.

The Congressional Budget Office's 'comprehensive income' measure, while only available up through 2007 (or with new definitions and methods to 2009 only, which we do not show), demonstrates the importance of accounting for trends at the very top of the distribution (CBO, 2010). As mentioned above and as seen in figure 2.3, The CBO's 'comprehensive income' is much more expansive than Census 'money income,' (see also appendix) and by statistically matching the Census data to IRS tax

return data, CBO comprehensive after-tax income includes much more in realized property income and capital gains than do the other series.

And indeed, comprehensive income shows an even larger rise in inequality from 1979 to 2007, especially driven by changes in incomes at the very top of the distribution (figure 2.7). These data show that inequality contracted in the 1990 to 1993 and 2001 to 2002 recessions, but rose dramatically after 2002. The top quintile group’s share is 52.5 percent of after-tax net income in 2007 according to the CBO series compared to 48.5 percent in the Census money income inequality series (DeNavas-Walt et al., 2010, table A.5).

**Figure 2.7 Shares of CBO Household After-Tax ‘Comprehensive Income’, Quintile and Top Income Groups, 1979–2007 (Indexed 1979=0)**



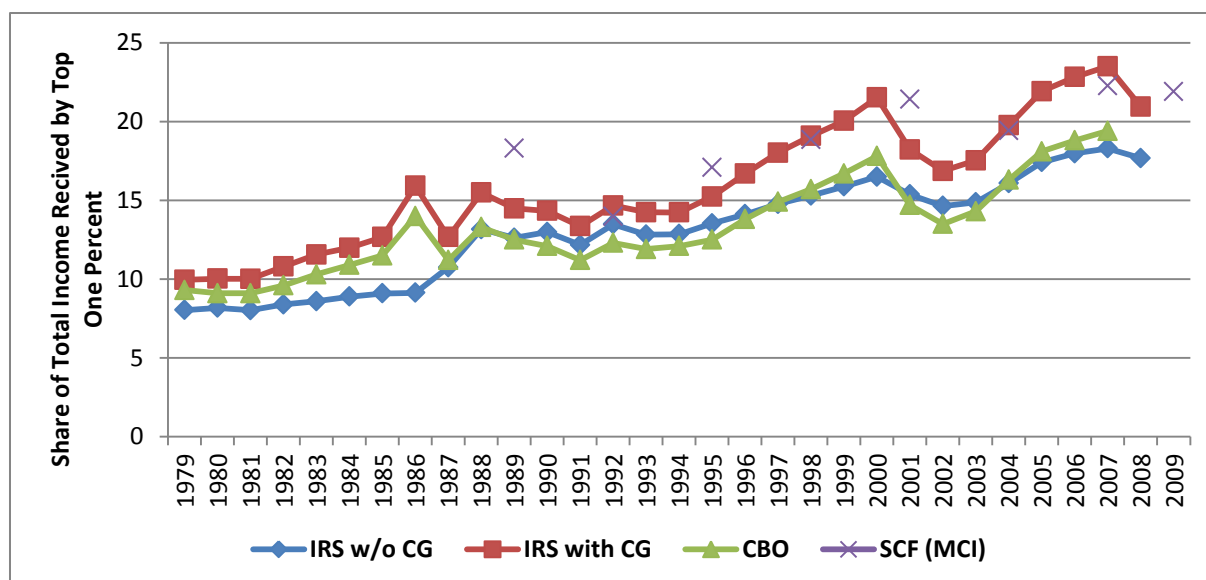
Data Source: Congressional Budget Office (2010)

We should mention that 2009 data from the CBO show sharp drops in top incomes and shares, but the CBO data for 2010 and 2011 are not yet available. The recovery of top incomes in 2010 is shown in Saez (2012) and figure 2.20. The trend toward inequality is driven in figure 2.7 by the top 1 percent share (which rises by 228 percent, from 7.5 percent in 1979 to 17.1 percent in 2007), but also by a 15.2 percent increase in the share of the next 4 percent of household units, with no change in the share of the next 10 to 15 percent.

### Closer look at top incomes

There is also corroborating evidence from several sources that the top 1 percent income share rose at least through 2007. Figure 2.8 plots the CBO share against several other datasets' shares, the IRS taxable income data with and without capital gains (IRS-CG) and a measure which takes account of the flow value of capital incomes (covered below in figure 2.19). Each of these sources shows that with cyclical ups and downs, the income share of the top 1 percent has risen from a level of 7 to 10 percent in 1979 to 17 to 23 percent by 2007. The recession in 2008 and 2009 reduced top shares, but as we will see below in figure 2.18, the top share has begun to rebound in 2010, just as in past U.S. recessions.

**Figure 2.8 Income share of top 1 percent, by data source, 1979–2009**



Source: Smeeding and Thompson (2012).

Inequality in the CBO data since 1993 and through 2007 is driven almost exclusively by gains in the income of the 95th percentile and higher percentiles of households, see also figure 3.1.1. These households change post tax and transfer ranks year to year but they almost never depart the top quintile (Auten and Gee, 2009). Hence the growing share of the top quintile, now at 52.5 percent of net income is also mainly driven by movement at the very the top end of the distribution.

We also note that the CBO share of net income for the bottom quintile group is 4.9 percent by their measure in 2007, compared to 3.7 percent in the 2007 Census income data (DeNavas-Walt et al., 2010).

Finally, the trends in both the Census cash and CBO after-tax income series are the same, with the CBO showing declining shares for all of the bottom four quintile groups since 2002, though especially

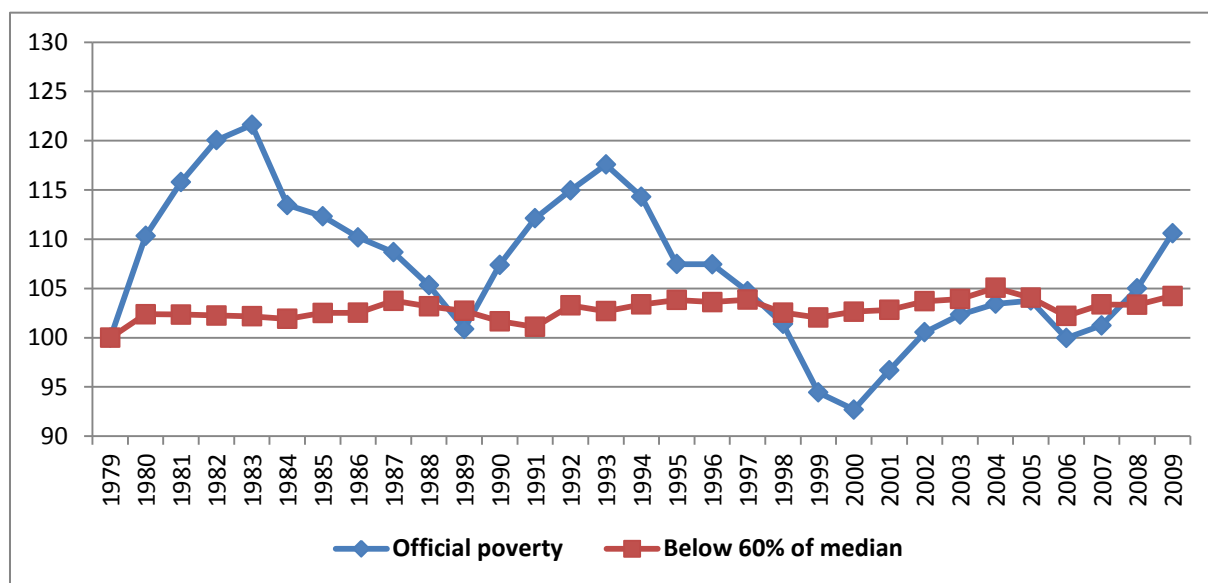
for the bottom two quintile groups. While the United States has not yet reached a tipping point, a long run pattern in which the top fifth continues to pull away from the bottom four-fifths and where real incomes are falling especially for the lowest income groups, is not liable to be sustainable in the long run in any democracy, including the United States.

## 2.2 Poverty

As income has declined, dramatically so for young and less-educated families, poverty has risen. According to the official U.S. Government cash-only definition of absolute income, poverty rose sharply in 2008 and 2009, but overall household poverty rates remain below levels reached during the economic downturns in the early 1980s and early 1990s. By 2010 and again in 2011, the rates reached 15 percent (figure 2.10), higher than at any time since 1995. In figure 2.9 we see that poverty rates from the absolute measure rise steeply in all recessions. In contrast, the broader definition of poverty adopted by the European Union—set at 60 percent of annual median household income—is considerably higher than the official U.S. definition but it fluctuates much less over time. Over most of the last 30 years this poverty measure hovered at 30 percent in good and bad economic times. This evidence suggests that in relative terms alone, the U.S. poverty rate is high but not changing much. Of course, given that nearly all the growth in inequality has come from above the median, we should expect this to be the case. Further, because the median is dropping in real terms (figure 2.20 below) those below the EU cutoff are worse off in real terms today than in earlier years, even if their relative position has not been changed terribly much.

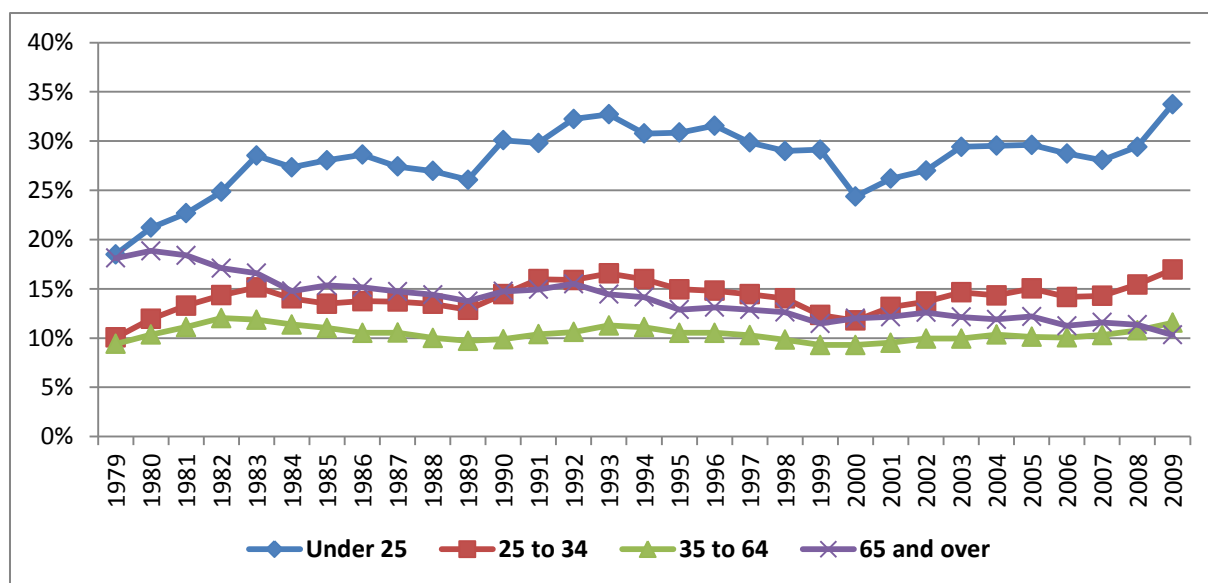
The trend in poverty, at least by official U.S. standards using Census money income, differs markedly for different demographic groups. Among younger households, including those headed by individuals under age 35, poverty rates hit 30-year highs in 2009 (figure 2.10). Between 2007 and 2009, the official poverty rate rose from 28.1 percent to 33.7 percent for households headed by individuals under age 25, and for households with heads between 25 and 34, poverty rose from 14.3 percent to 16.9 percent, both now all-time highs since 1979. For those between ages 35 and 64, poverty has not much changed since 1979. Indeed poverty rates were flat or ticked up for all types of units, except for those headed by a person 65 or over, across this period. Consistent with the other data reviewed above, poverty among elderly households which was about the same as poverty among persons under 25, largely children, at 18 percent in 1979, has fallen to 10.3 percent in 2009, hitting a new 30-year low.

Figure 2.9 Household poverty rates, U.S. Official and 60 percent of median, Census ‘money income’, 1979–2009 (indexed 1979 = 100)



Source: Smeeding and Thompson (2012); DeNavas-Walt, et al. (2012).

Figure 2.10 Official poverty rate (5), by age of household head

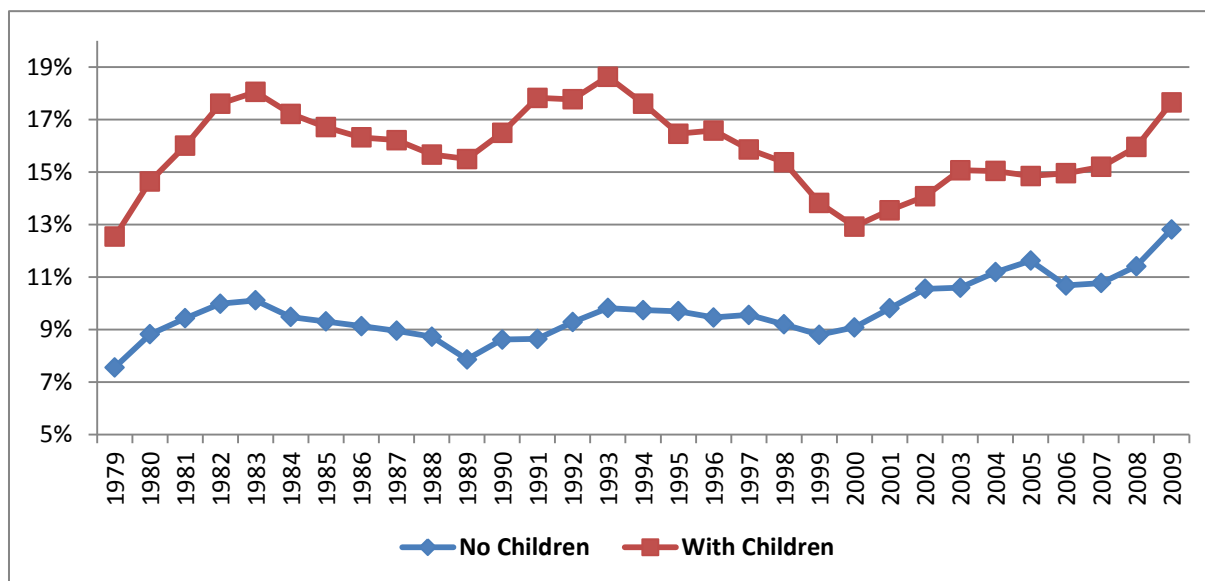


Source: DeNavas-Walt et al. (2012).

The rate of official poverty among households with children is typically several percentage points higher than it is among households without children, as we see in figure 2.10. But over the last decade the gap has narrowed (figure 2.11). Poverty rates fell dramatically for households (with heads aged less than 55) with children during the 1990s, while they declined only slightly among those without children. For those households with children, the poverty rate rose 2.5 points between 2007 and 2009, returning to levels near, but still below, previous high points from the early 1980s and

early 1990s. Among households without children, poverty rose by similar levels, but now exceeds high points from those previous recessions by more than 25 percent. By and large, the rise in poverty among households without children reflects the increasingly poor situation of younger less-skilled workers in the U.S. job market.

**Figure 2.11 Official poverty rate (%), by presence of children, households with head aged less than 55**



Source: Smeeding and Thompson (2012); DeNavas-Walt et al. (2012).

### 2.3 Consumption and Income Inequality for the Same Persons

A recent paper by Fisher, Johnson, and Smeeding (2012) examines the distribution of income and consumption in the United States using data that obtains measures of both income and consumption from the same set of individuals and then develops a set of inequality measures that show the increase in inequality income, consumption, and the maximum or minimum of each during the past 25 years using the 1985 to 2010 Consumer Expenditure (CE) Survey.

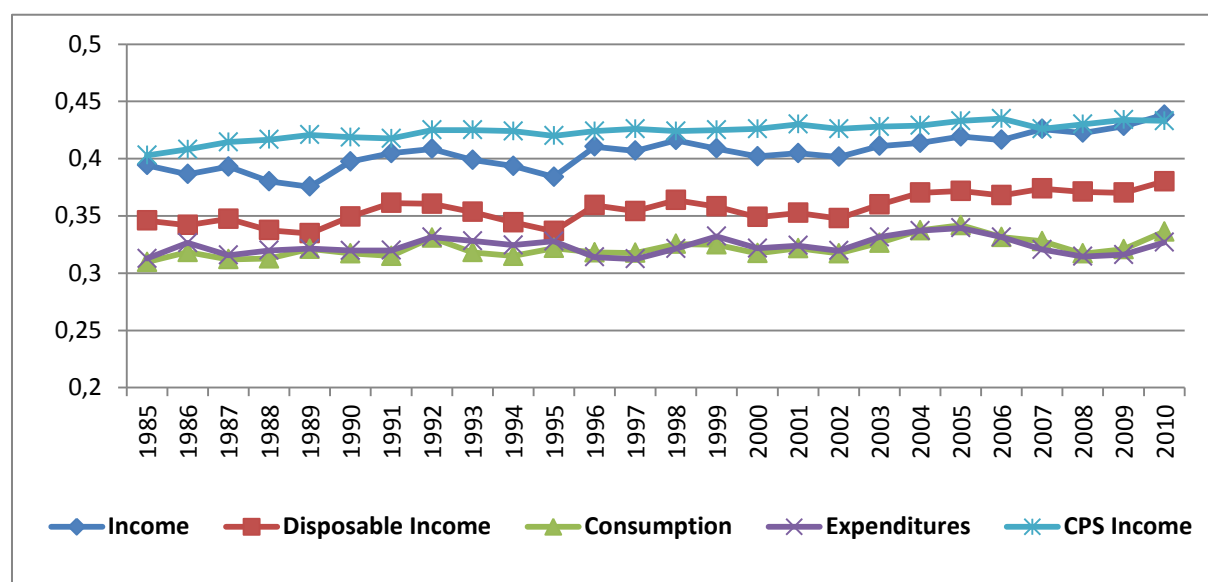
The dispute over whether income or consumption should be preferred as a measure of economic well-being is well known among economists. Exploiting the Hicks-Simons identity, consumption plus or minus changes in net worth equal incomes, Fisher, Johnson, and Smeeding (2012) use this identity to construct complete and consistent measures of income and consumption inequality. They show that while the level of and changes in inequality differ for each measure, inequality increases for all measures over this period and, as expected, consumption inequality is lower than income inequality (figure 2.12). Differing from other recent research, they find that the trends in income and consumption inequality are similar between 1985 and 2006, and diverge during the first few years of



the Great Recession (between 2006 and 2010). Fisher, Johnson, and Smeeding also find that consumption inequality increases about two-thirds as much as income inequality (figure 2.13).

They go farther to show that the differences in the trends in inequality, using measures of both income and consumption provides useful information. Fisher, Johnson, and Smeeding also present the level of and trends in inequality of both the maximum and the minimum of income and consumption for each household. Given the negative correlation between the Average Propensity to Consume (APC) and income, the economic well-being of many of the low-income households may be more accurately represented by their consumption, which may be consistent with the Lifetime Permanent Income Hypothesis (LPIH). However, many of the high-income households may be more accurately represented by their incomes due to lower APCs.

**Figure 2.12 Trends in income and consumption inequality using the Gini coefficient**



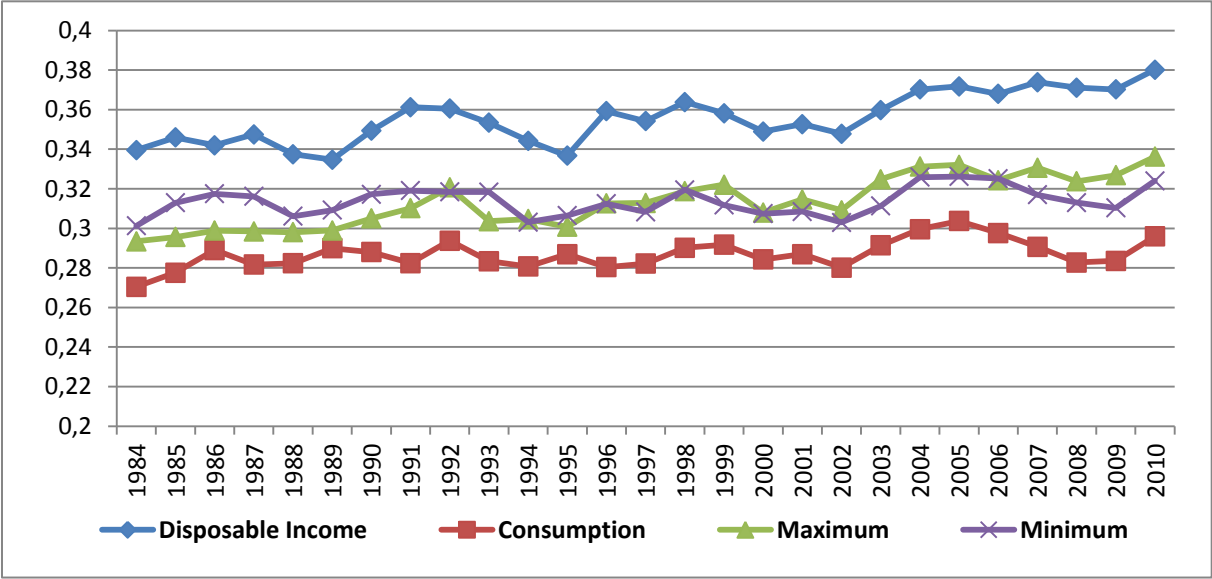
Note: Average household size by income quintile group, 1979–2009 (indexed 1979 = 100).

Source: Fisher, Johnson, and Smeeding (2012).

The purpose of using the maximum and minimum is that they should be bounds on the true level of economic resources for each consumer unit. Underreporting could exist for both income and consumption, which would suggest that the true level of resources lies above both, but if all four measures demonstrate similar trends, then one can be more confident of the actual trend in inequality and years with differences can suggest data or measurement issues or that changes in wealth affected inequality trends. Because both income and consumption provide information about the distribution of resources and trends over time, using the maximum and minimum of both provides another measure of well-being. In evaluating the levels as well as the trends, if the

consumption Gini is less than the Gini for disposable income, the correlation between income and consumption is positive, and APC decreases with income, then the Gini for the maximum will lie between the Gini coefficients for income and consumption, and similarly for the minimum. The maximum and minimum are also useful to adjust for other life-cycle (LIPH) effects of income and consumption and for potential measurement error in either income or consumption.

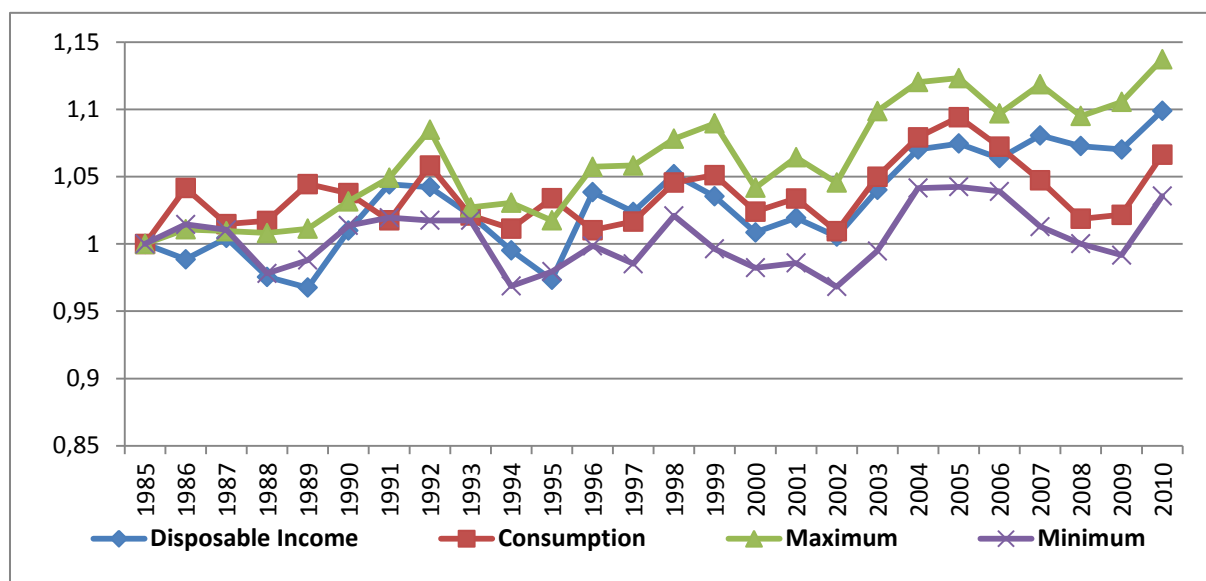
Figure 2.13 Trends in inequality (Gini) using the maximum and minimum



Source: Fisher, Johnson, and Smeeding (2012).

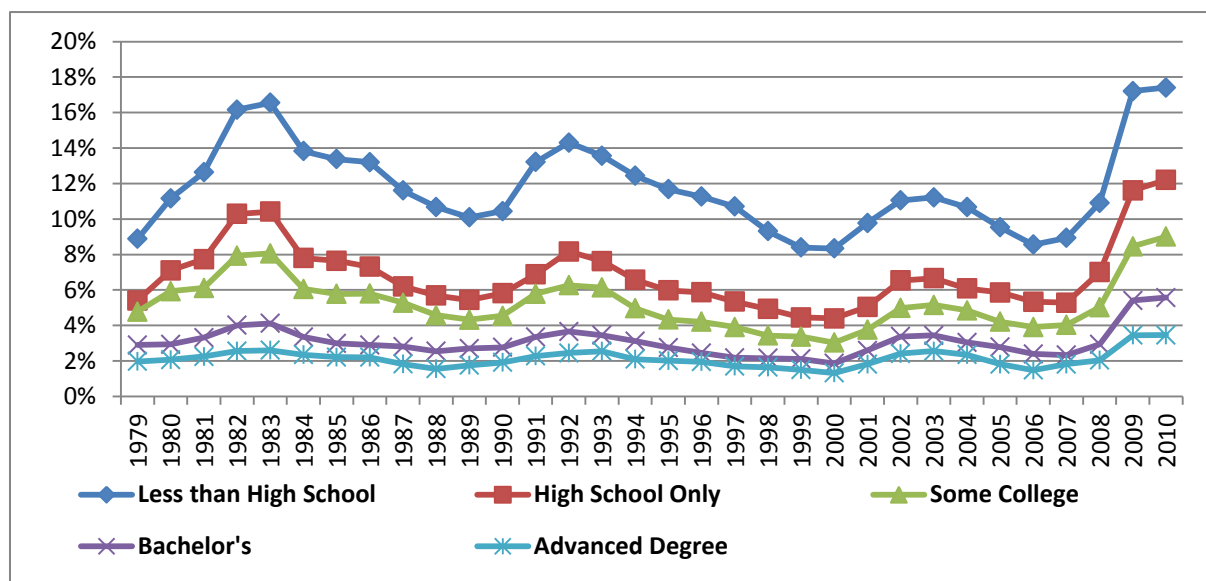
The maximum and minimum patterns in figures 2.14 and 2.15 show that the Gini for the maximum increases 13.7 percent between 1985 and 2010, and the Gini for the minimum increases 3.6 percent (which bound the actual increases in income and consumption inequality of 6.6 and 9.9 percent respectively). If increases in mean reversion exist mainly for consumption by high-income households, then using the maximum may yield no changes in mean reversion. In such cases, the trend in the Gini for the maximum may better reflect the overall increase in inequality. Given that the period under examination was marked by substantial increases in top incomes, we expect that this is indeed the case.

Figure 2.14 Changes in inequality: Gini indexed to 1.0 in 1985



Source: Fisher, Johnson, and Smeeding (2012).

Figure 2.15 Unemployment Rate (%), by Educational Attainment, 1979–2010



Source: Smeeding and Thompson (2012).

Examining income and consumption together using the same sample provides an important contribution to the literature on the economic well-being of individuals. That the trends in the two measures are nearly identical provides even more confidence in the results. Estimates of permanent income inequality using the maximum and minimum of income and consumption find that the trend in inequality is approximately the same as that seen using income or consumption by itself. In sum, U.S. inequality has risen since 1985 using either income or consumption or the maximum and minimum of each. There is no doubt that, by either measure, economic inequality has risen.

## 2.4 Wealth Inequality: Level and Trend

A recent study by Edward Wolff (forthcoming) finds that median wealth plummeted between 2007 and 2010. While Wolff's estimates are taken at the trough of the recent stock market downturn in April 2010, much of the loss in housing values since 2005 have persisted in the United States through 2011 and into 2012. Because of the housing decline, the mean net wealth in the United States has fallen back to 2001 levels, while the median fell even more (Wolff, forthcoming, table 1). In contrast, mean non-housing wealth—largely stocks, bonds, and financial investments, also fell to about 2001 levels, but the decline was only 14 percent from 2007 to 2010. Hence financial wealth has a smaller decline and by most accounts has now fully recovered by mid-2012 (Definitions of net worth and financial assets are given in the appendix).

The sharp fall in mean and median net worth and the rise in its inequality in the late 2000s are traceable to the high leverage of middle class families in 2007 and the high share of homes in their portfolio. The racial and ethnic disparity in wealth holdings, after remaining more or less stable from 1983 to 2007, widened considerably in the years between 2007 and 2010. Hispanics, in particular, were hard hit by the Great Recession in terms of net worth and net equity in their homes. Finally, young households (under age 45) also lost a large share of their net worth since 2007, again driven in large part by the housing value decline.

The inequality of net worth, after almost two decades of little movement, was up sharply during the late 2000s (table 2.1) where we see trends in net worth and financial wealth in the United States since 1983. The first apparent fact is that in the U.S., wealth is highly concentrated. Indeed the Federal Reserve Board (Bricker et al., 2012) and recent cross-national studies (Davies et al., 2008; 2011) find the United States to have the most unequal wealth distribution among rich nations. As of 2010, the top 1 percent of households owned 35.4 percent of all privately held wealth, and the next 19 percent had 53.5 percent, leaving only 11 percent of the wealth for the bottom 80 percent. In terms of financial wealth (total net worth minus the value of one's home), the top 1 percent of households had an even greater share: 42.1 percent, while the financial wealth share of the bottom 80 percent of all households fell below 5 percent. Table 2.1 presents further details, drawn from the careful work of Wolff (forthcoming) where Gini coefficients for net worth and for financial wealth hit 27-year highs in 2010. Still while the level of wealth inequality as measured by the Gini is incredibly high in the United States, in many ways it has increased by less than income inequality over this period.

**Table 2.1 Distribution of net worth and financial wealth in the United States, 1983–2010: Fraction of wealth by various percentiles of the wealth distribution and Gini coefficients**

	Total Net Worth			
	Top 1 Percent	Next 19 Percent	Bottom 80 Percent	Gini
1983	33.8%	47.5%	18.7%	799
1989	37.4%	46.2%	16.5%	832
1992	37.2%	46.6%	16.2%	823
1995	38.5%	45.4%	16.1%	828
1998	38.1%	45.3%	16.6%	822
2001	33.4%	51.0%	15.6%	826
2004	34.3%	50.3%	15.3%	829
2007	34.6%	50.5%	15.0%	834
2010	35.4%	53.5%	11.1%	870
	Financial (Non-Home) Wealth			
	Top 1 Percent	Next 19 Percent	Bottom 80 Percent	Gini
1983	42.9%	48.4%	8.7%	893
1989	46.9%	46.5%	6.6%	956
1992	45.6%	46.7%	7.7%	903
1995	47.2%	45.9%	7.0%	914
1998	47.3%	43.6%	9.1%	893
2001	39.7%	51.5%	8.7%	888
2004	42.2%	50.3%	7.5%	902
2007	42.7%	50.3%	7.0%	908
2010	42.1%	53.5%	4.7%	927

Source: Wolff, Forthcoming, Tables 1 and 2.

## 2.5 Towards Explanation for the Factors Driving Inequality: Especially Labor, Educational, and Capital Market Inequality

Labor market inequality is likely the major factor driving changes in income inequality in the United States, followed by capital market and capital income inequality. Together they measure the lion's share of changes in market income inequality which has risen more or less with after-tax and benefit inequality (figures 2.3, 5.1, and 5.2). Meanwhile, demographic shifts accounted for at most 20 percent of the overall change in inequality since 1980, and other forces exhibited smaller degrees of impact as well, as we see below. Moreover, inequality rose despite the fact that average household size is increasing, especially at the bottom of the distribution, and this factor reduces the increase in inequality compared to these individuals living alone.

### 2.5.1 Employment and unemployment

In 2010 the unemployment rates for all major educational-attainment and age groups hit 30-year highs. While unemployment in the United States has, overall, been cyclical in nature, the less the education, the higher the cyclical change all the way back to the early 1980s (figure 2.15). Even among college graduates, the unemployment rate jumped from 2.4 percent in 2006 to 5.6 percent in 2010, and among those with advanced degrees it rose from 1.5 percent to 3.5 percent in the same period (figure 2.15). But the largest increases and greatest pain—in absolute terms—were felt by younger workers with the lowest levels of education, groups which traditionally have the highest rates of unemployment, but whose situation has rapidly deteriorated in recent years. Unemployment among workers with only a high school degree jumped from 5.3 percent to 12.2 percent between 2006 and 2010, and among those lacking a diploma it climbed from 8.6 percent to 17.4 percent. Highly educated workers continue to have lower unemployment rates, but the increases experienced since 2006 are proportionally as large as for less-educated workers. All age groups also saw dramatic increases in their unemployment rates, with rates roughly doubling between 2007 and 2010. Workers aged 35 to 64 saw their unemployment rates go from around 3 percent to nearly 8 percent. The youngest workers (aged 18 to 24) saw their unemployment rate quickly shoot up from 9 percent to 17 percent, and the unemployment rate for somewhat more experienced workers (those aged 25 to 35) went from 4.3 percent to 9.7 percent.

The official unemployment rate excludes ‘discouraged’ workers who have ceased looking for work. In fact, 35 percent of men aged 25 to 54 without a high school diploma are out of the labor force (and they are clearly also not in school), compared with less than 10 percent of those with a college degree (U.S. Department of Labor, 2011). Labor force participation also declined for most age and education groups, although less dramatically than the rise in unemployment. The decline in labor force participation has been most prominent among younger and less-educated workers. Participation fell by 0.7 percent among college graduates and 0.2 percent among those with advanced degrees, but it dropped by roughly 2 percent for all workers with education below the bachelor’s degree level (table 8.A2). For workers with less than a high school degree, the rate of labor force participation slid from 61.6 percent in 2007 to just 59.4 percent in 2010.

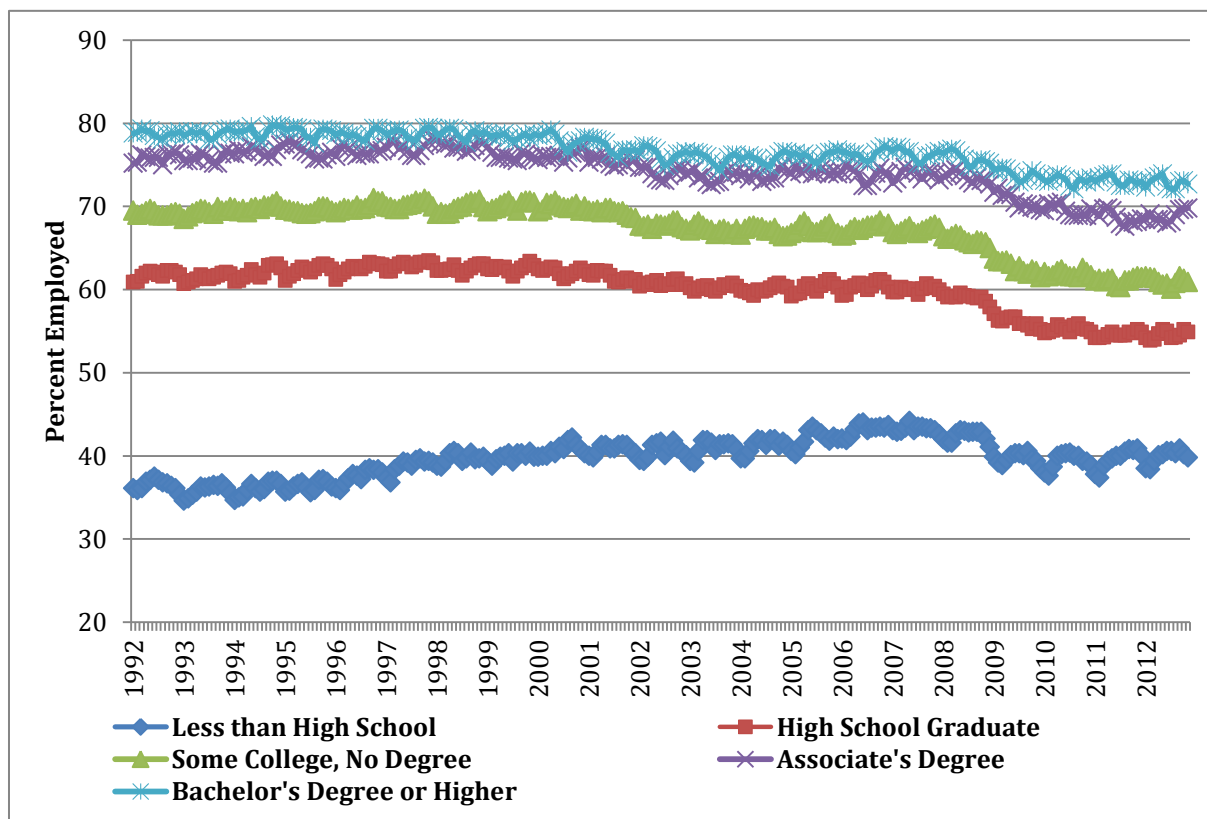
Most age groups also decreased their participation in the labor force. Among more experienced workers, including those aged 36 to 45 and 46 to 54, the declines were relatively minor, dipping by 0.4 percent and 0.9 percent, respectively, between 2006 and 2009. Among workers aged 18 to 24, however, the labor force drop off has been sizeable, falling nearly 4.5 percent from 69.5 percent in 2006 to 65 percent in 2010. This recent labor force decline among young workers continues a trend present since the early 1990s. In each of the last three recessions, labor force participation has

declined among young workers, and not recovered in the ensuing recovery, with the decline in the Great Recession being the greatest. Between 1979 and 2009, the labor force participation rate of 18 to 24 year olds declined 10 percent, while the share enrolled full-time in post-secondary education rose by 10 percent (Snyder and Dillow, 2011). The opposite trend has held for older workers, who have steadily raised their participation rates since the late 1980s, through good and bad economic times. The participation rate in the 55 to 64 year old population climbed from 63.7 percent to 65.1 percent between 2006 and 2010, continuing a trend where participation rose in 21 of the last 24 years. And the over-65 group has also increased both its labor force participation and employment (U.S. Department of Labor, 2011).

We also present a chart showing employment by education level from 1992 to 2012 (figure 2.16). The chart shows very large and constant differences in employment by education level, ranging from 70 percent and above for those with post-secondary degrees to only about 40 percent for those with less than a secondary degree. We also observe that employment-to-population ratios dropped for all education groups from 2008 to 2012 owing to the Great Recession, with the largest drops for those with only a high school degree or with some college, but no diploma. The group with the smallest drop were those with less than a high school degree.

These figures are consistent with others from the same data source (Edsall, 2012) which show that employment levels (millions of employed workers) for those without college degrees actually rose above those for college degree holders from 2005 to 2008, but then fell rapidly from 2008 to 2010 before levelling off in 2011 and 2012. Employment for college graduates has since expanded by 2.2 million since January 2008, while it has fallen by 5.5 million for those without a college degree, especially for those with high school alone or some college but no degree, as seen in figure 2.16.

Figure 2.16 U.S. Employment to Population Levels, by Education: 1992–2012



Source: Bureau of Labor Statistics (BLS) (2012) Labor Force Statistics from the Current Population Survey. Data available at <http://data.bls.gov>.

In summary, the labor market picture is one of continuing mass devastation as of mid-2011 and even into 2012. Both Farber (2011) and Sum and colleagues (2011, 2011b) suggest that the numbers of displaced workers—those losing their jobs—and the numbers of long-term unemployed were at an all-time high in 2010 and 2011. Howell and Azizoglu (2011) show that new hires and job openings were at a decade-long low in 2010, while permanent job losers were at an all-time high over this same period. And the full effect of the Great Recession on employment is not known with certainty. According to one popular estimate (Greenstone and Looney, 2011) it might take six to eight years to get back to the number of jobs that there were before the Great Recession. Both of the main routes to the middle class for those with only a high school education, manufacturing and construction, are closed (Smeeding et al., 2011; Glaeser, 2010). Public sector jobs are down by over 700,000 since the Great Recession began as well. In fact, the two major forces driving job opportunity polarization are technological change, with workers being replaced by machines, creating demand for fewer, more-skilled workers to run and repair the machines (Goldin and Katz, 2008). The second is trade and the growth in imports from China of goods that had been produced in the United States by U.S. workers. But altogether, these trade factors only account for 25 percent of the decline in U.S. manufacturing (Autor, Dorn, and Hanson, 2012). Autor and colleagues (2011) show that manufacturing employment



more generally has been falling for 30 years and will continue to do so. These data suggest the need for more-skilled U.S. workers in non-manufacturing jobs, and skill upgrading for those who will remain in manufacturing.

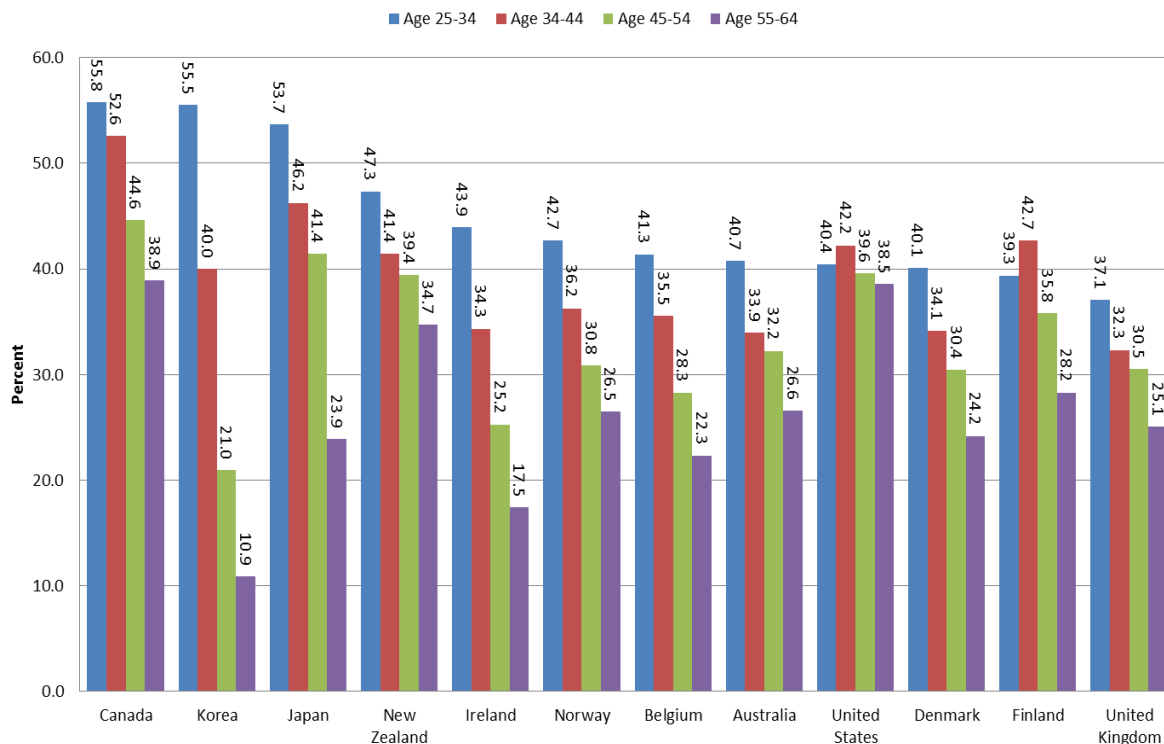
While many argue that job losses are cyclical, there are good reasons to note that they are secular as well. But even a cyclical job loss that extends for four to six years becomes a secular issue almost by definition. Long-term joblessness is very damaging to the career and life chances of all workers, especially younger workers, and also negatively impacts family stability and the future of children in these households (von Wachter, 2010). Indeed in November 2012, nearly 5 million American workers have been unemployed for six months or longer (Rampell, 2012). These issues are especially damaging to young men with a high school degree or less, 72 percent of whom are fathers by age 30, and only 38 percent of whom earned more than \$20,000 in 2002 when the economy was in far better shape than it is today (Smeeding, Garfinkel, and Mincy, 2011).

### 2.5.2 Inequality of educational attainment

Human capital, the skills and knowledge of workers, is paramount in explaining differences' in labor incomes especially when there are rapidly changing skill demands. Indeed as we saw above, employment is expanding for the best trained and falling for others. At the same time, the economic benefits of higher education have risen. In 1979, the average college graduate made 37 percent more than the average high school graduate. The comparable figure today is 76 percent (DeNavas-Walt, et al., 2012). Not everyone needs a bachelor's degree to succeed in the labor market, but all workers need better skills, even those with less than a four-year college education.

Educational attainment levels rose rapidly throughout much of the 20th century, with the college completion rate quadrupling for those born between 1915 and 1960 in the United States (especially for the generation which is today 55–64). But it has been largely stagnant since. The slowdown in college attainment levels has been most pronounced in the United States, compared to other nations (figure 2.17; OECD Economic Outlook, 2012). As can be seen, successive younger generations in each other country have increased their post-secondary educational attainment. But the United States has fallen from being the leader amongst the 55-to-64 generation, to the middle of the pack for the 25-to-34 year old generation. Clearly, some nations are advancing much faster than others in tertiary education, and the laggard United States has so far been losing the race between education and technology.

**Figure 2.17 Percent of Adults with an Associate’s Degree or Higher by Age Group: Selected Top Countries**

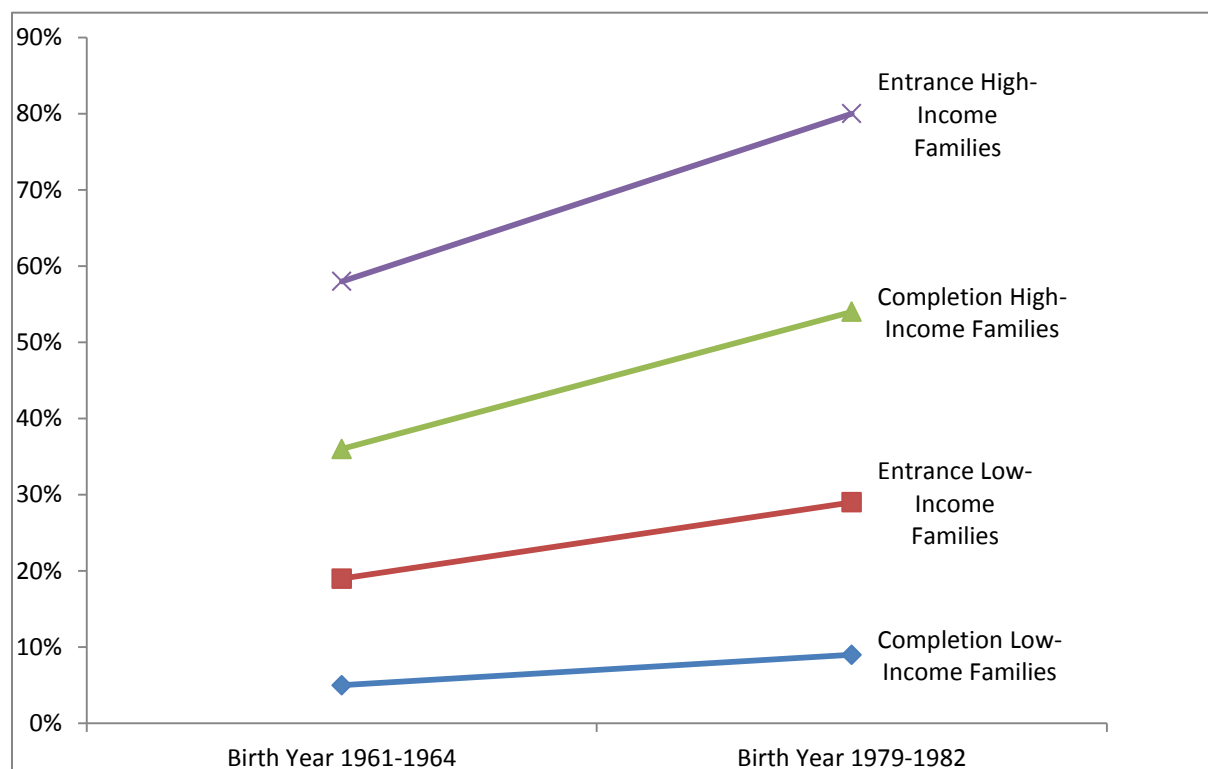


Source: OECD, Education at a Glance, (2011c).

**The biggest losers (smallest gainers) are the kids from low income families**

During the last three decades, the gap between educational entrance and attainment of children raised in rich and poor families has widened dramatically. The fraction of students entering into institutions granting four-year degrees has mushroomed to 80 percent among those from the top parental income quartile, and to 54 percent among children whose parents are in the bottom income quartile. But while graduation rates from the top income children rose from 36 to 54 percent, at the bottom the increase in graduates was only from 5 to 9 percent. While the gaps between college entrance and completion are large for both groups, suggesting a failure to graduate at all levels, the gap between the rich and poor in all dimensions, especially graduation with a four-year degree is staggering. While educational differences reveal themselves remarkably early in children’s lives and while they are most pronounced for individuals from low-income families, the differences shown at the education culmination point (college graduation) are truly staggering (see also Ermisch et al., 2012).

**Figure 2.18 Four year college entrance and completion among persons from low-income and high-income families—overall, mostly a flat level of degree attainment**



College completion: four or more years of college (solid line) and entrance (dashed line). Low-income family: the person's family income during childhood was in the lowest quarter of the income distribution. High-income family: income during childhood was in the highest quarter.

Data source: Bailey and Dynarski (2011), figure 6.3, using National Longitudinal Survey of Youth data.

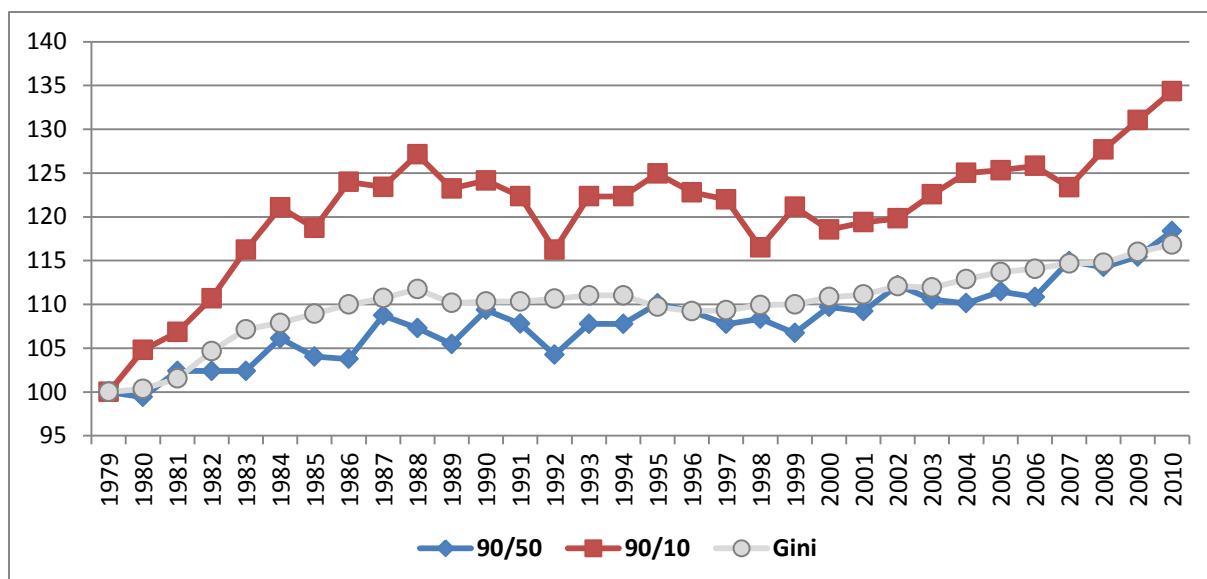
### 2.5.3 Record high levels of wage inequality

In the face of lagging educational attainment and in the face of a deep and sustained labor market downturn, real hourly wages can be expected to decline at the bottom but rise at the top. The age trends in the United States show both—consistently accelerating inequality, but with differences that are not shared across the entire distribution of wages. In the most recent period, between 2007 and 2010, real hourly wages fell roughly 1.5 percent at the 10th percentile (P10) and at the median (P50), but rose by nearly five percent at the 90th percentile (P90).

Trends in inequality of average real hourly wages, in fact, have been ever increasing in the United States since 1979. The Gini for hourly wage inequality has risen in straight-line fashion since the mid-1990s (figure 2.19) driven especially by the 90-50 differences reflecting higher demand for the educated relative to their more slowly growing supply. Similar evidence for the P90/P50 ratio is also found in Machin and Van Reenan (2012, figure 3). These divergent wage trends—rising at the top and falling in the middle—drove several measures of wage inequality to 30-year highs in 2010, further reinforcing longer-term trends (figure 2.19). The graph indicates that over the 15 years

preceding the Great Recession, there were only relatively modest changes in these measures after a rapid increase from 1979 to 1989.<sup>2</sup> The P90/P50 ratio fluctuated from year-to-year, but by 2006 remained at the same levels as in the late 1980s. After falling during most of the 1990s, the P90/P10 ratio exhibited modest increases starting in 2001, so that it had returned to 1994 levels by 2006. Starting in 2008, though, each of these inequality measures increased sharply. The P90/P10 ratio of real hourly wages, however, rose in each year since 2007, climbing from 4.4 to 4.8. Downward wage pressures over this period have been most evident among younger and less-educated workers, while older and more highly educated workers have registered wage increases (Thompson and Smeeding, 2012, table 8A2, panel C).

Figure 2.19. Hourly wage inequality, percentile ratios, and Gini, 1979–2010 (Indexed 1979 = 100)



Notes: Estimates adjusted to smooth over the effects of the 1993 change in CPS data collection methods.

Source: Smeeding and Thompson (2012); DeNavas-Walt et al. (2012).

Finally, Machin and Van Reenan (2012, figure 4) also suggest that wage inequality in the form of the P50/P10 ratio has also declined since the 1990s, suggesting that wage inequality patterns are even further polarizing than shown in figure 2.17, and that the middle of the wage distribution is therefore falling into low wages or being superseded by high wages (see also Acemoglu and Autor, 2010 on this point).

<sup>2</sup>The impact of the series break, which is the result of a general redesign in the CPS, including a move to computer-assisted interviewing and expanded use of internal censoring for top-coded values, on measures of wage inequality in the CPS ORG is discussed by Mishel, Bernstein, and Schmitt (1998).

Because workers are typically part of a household unit that shares resources across several members, oftentimes including multiple earners, and because households are able to draw upon non-labor sources of income, it is important to go beyond wages or earnings and explore the level and distribution of household income as we have done above. But still, wages can be seen as the key driving factor in overall U.S. income inequality.

### **Top incomes**

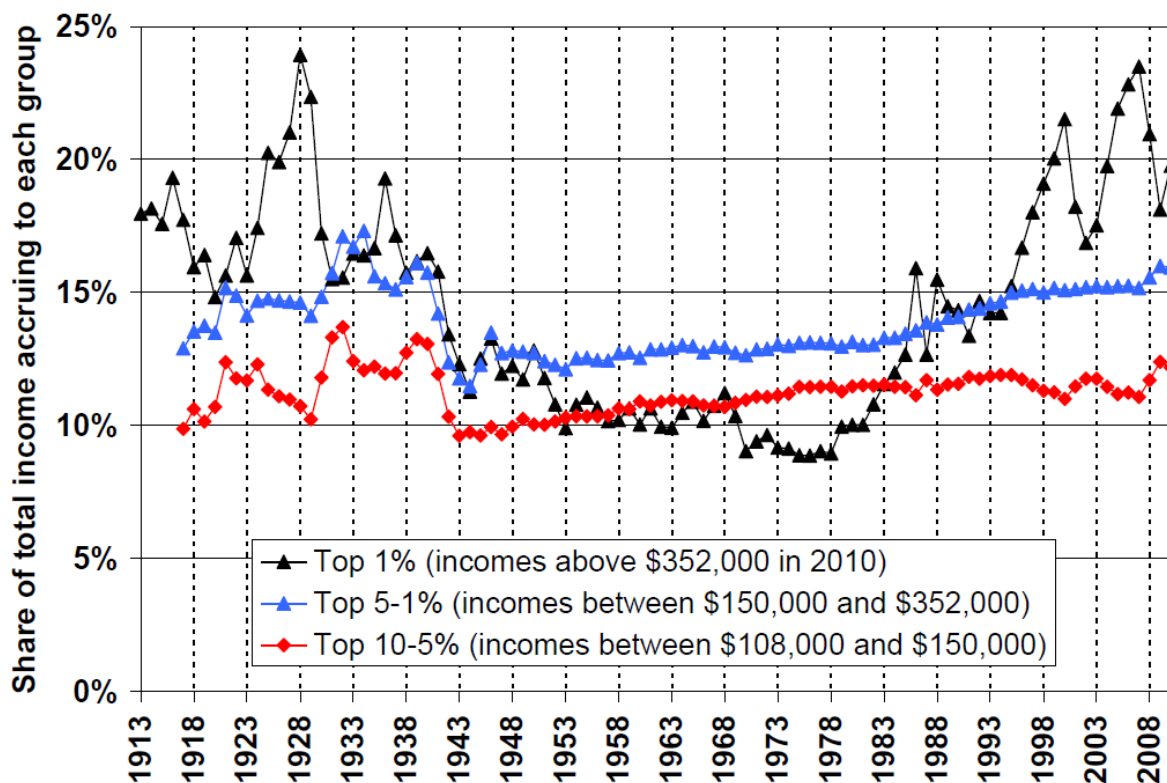
While comprehensive income is only available through 2007 for the CBO measure, several other top income data sources mentioned above can be used to estimate inequality trends since that date. These include income tax records from the IRS (analyzed by Piketty and Saez, 2007; Saez, 2012; and Atkinson et al., 2011) and the Federal Reserve Board's Survey of Consumer Finances (SCF).<sup>3</sup> Analysis using these data sources suggests that income inequality has risen dramatically at the very top of the distribution (figure 2.18). The analysis by Saez (2012) of IRS data through 2010 finds that the share of federal pre-tax Adjusted Gross Income held by the richest 1 percent of households more than doubled between 1979 and 2007, rising from 10 percent to 23.5 percent (including capital gains). Further, the income of the top 1, next 4, and next 5 percent all rebounded by 2010 (figure 2.20). Indeed from 2009 to 2010, average real taxable income per family grew by 2.3 percent but the gains were very uneven. Top 1 percent incomes grew by 11.6 percent while bottom 99 percent incomes grew only by 0.2 percent. Hence, the top 1 percent captured 93 percent of the income gains in the first year of recovery in the United States.

Income is defined as market income including capital gains. Top 1% denotes the top percentile (families with annual income above \$352,000 in 2010). Top 5–1% denotes the next 4% (families with annual income between \$150,000 and \$352,000 in 2010), Top 10–5% denotes the next 5% (bottom half of the top decile, families with annual income between \$108,000 and \$150,000 in 2010).

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<sup>3</sup>See the Appendix for more about income definitions.

Figure 2.20 Decomposing the Top Decile U.S. Income Share into Three Groups, 1913–2010



Source: (Saez, 2012) Table A3, cols. P90–95, P95–99, P99–100.

### Income from wealth

The CBO ‘comprehensive income’ measure (not adjusted for taxes) shows that the top 1 percent share of total income rose from 9.3 percent to 19.4 percent over the 1979 to 2007 period (figure 2.7). However, even these enriched CBO data exclude the vast majority of capital income that is not realized in a given year, including imputed rent on owner-occupied homes as well as accumulated financial and business wealth and changes in such incomes over the 2007 to 2009 recession and earlier recessions. Smeeding and Thompson (2011) use the SCF data to calculate a ‘more comprehensive income’ (MCI) measure which combines standard income flows with imputed income to assets. They show that the top 1 percent share of MCI rose from 18 percent in 1989 to 22 percent in 2007.

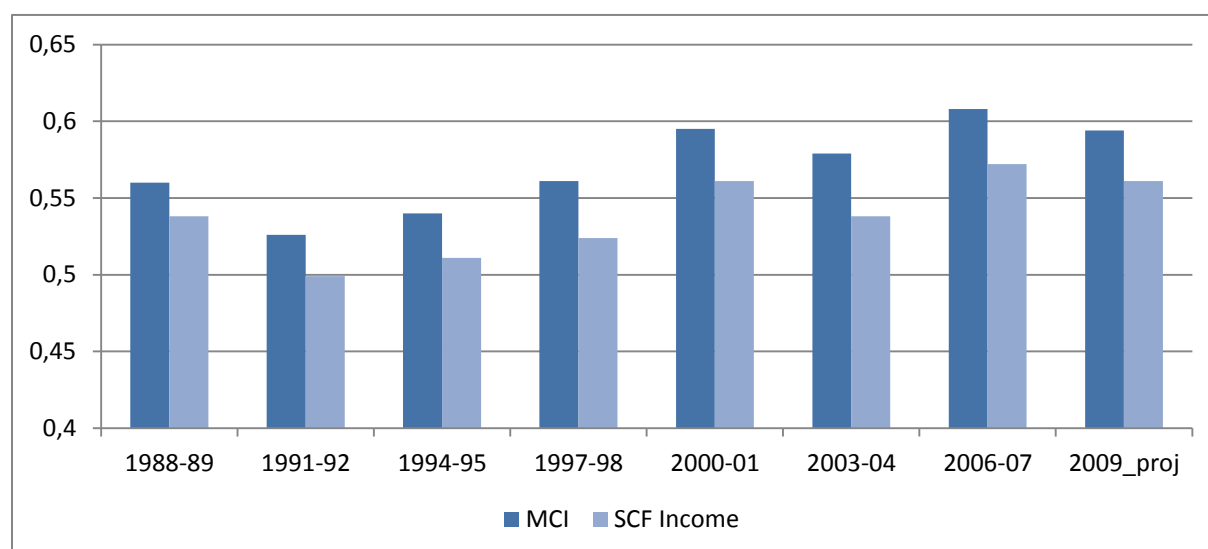
The data sources for CBO top incomes often have an even longer lag time than the standard household surveys in most cases, but we do have some evidence on inequality at the very top of the distribution. Saez (2012) and figure 2.18 above show that, between 2007 and 2008, the income share of the top 1 percent, including capital gains, dropped from 23.5 percent to 21 percent, and then dropped again to 18 percent in 2009. But, as in all past U.S. recessions, it then rebounded back to 20

percent in 2010. And, we expect it will continue to rebound once the 2011 data are available. In other words, were we able to smooth the IRS series, the trend would be toward continued long-term gains at the top of the distribution in the United States.

Projecting the SCF data forward to 2009, Smeeding and Thompson (2011) estimate that the top 1 percent share of MCI fell from 22.3 percent to 21.9 percent. Both sets of results suggest that there have been small declines in top income shares during in the Great Recession, but that levels are now only slightly lower than the previous peak levels from 2007.

The trend in overall income inequality from 1988–89 to 2009 is shown in figure 2.21. Two measures are given—first, SCF income which is very close to NEI and exhibits that same rise from 1991 to 2001 followed by a less steep increase to 2007 and a fall in 2009, leaving inequality by this measure at the same level as in 2001. The dark-colored bars are the Smeeding-Thompson MCI incomes. They show a higher level of inequality at each point, and a smaller drop-off in 2009 compared to 2007, dropping back only to 2004 levels.

**Figure 2.21 Gini Index with SCF Income and MCI**



Source: Smeeding and Thompson (2012).

#### 2.5.4 Other forces

While immigration does not seem to have had a large impact on U.S. inequality (Blau and Katz, 2012) changes in family structure likely account for about 20 percent of the longer-term rise in U.S. income inequality since 1979 (Western et al., 2008).

Another not-very-well-founded explanation is that trade with low-wage countries such as China and Mexico drove down wages and eliminated jobs for unskilled workers. Although globalization is the

favorite hobby horse of many politicians and pundits, the evidence for trade causing the majority of the change in inequality is weak. As Autor, Dorn, and Hanson (2012) show, Chinese imports account for at most 25 percent of the jobs lost in U.S. manufacturing over the past 30 years.

Also highly debated, the decline in the real value of the U.S. minimum wage and the demise of unions in the United States are two institutional changes that are likely to have also played a role in widening wage inequality. These explanations are more applicable to the 1980s and early 1990s than the periods after (Levy and Temin, 2009).

Perhaps most surprisingly, as hinted in figure 2.3 and as further explored below in Section 5 of this report (figures 5.1 and 5.2), redistribution in the United States has stayed more or less constant at least from 1979 through 2007 and is therefore only a small or non-factor in explaining the drivers of U.S. after-tax-and-transfer income inequality.

### 2.5.5 Summary

There is a huge body of research on the causes of rising inequality and the consensus view is that technological change has increased the demand for skilled workers faster than the supply of skilled workers in the United States. Goldin and Katz (2008) show that the growth of U.S. schooling slowed for people entering the labor market in the late 1970s. As the supply of skills slowed down and the demand for skills continued to rise (due to technological change and wider international markets), the premium for having an education led to a rapid rise in wages at the top of the distribution.

Most nations, including those where institutional stability plays a large role in the lower half of the distribution, and where institutional changes have been less dramatic than in the United States have also experienced increases in the demand for skilled workers and increases in inequality since the 1990s, driven mainly by the rise in the top end of the income distribution, again largely owing to the rise of world markets for their products, and sometimes in an idiosyncratic way. For instance, in the mid-1990s, Nokia made up well over half of the total worth of the Finnish stock market (Smeeding and Thompson, 2010).

A single argument for why the top 1 percent or top 0.1 percent in the United States and elsewhere have done so extraordinarily well is more controversial. It could be that the same forces of technology and globalization have created a super form of ‘winner take all’ first noticed in 1995 by Robert Frank and Philip Cook (1995), where the prize for being the best product on the market—be it Microsoft in the 1990s or Apple and Google in the 2000s has grown enormously. Other explanations include key workers in ever-growing industries and natural resources, especially in oil, as well as in



other industries, who benefit from the expansion of demand from growing markets (Smeeding and Thompson, 2010).

It may also be that weak regulation of the financial sector has allowed some individuals to use super leverage to exploit the rest of the asset holders in the market. Indeed, the share of the U.S. GDP made up by the financial sector grew from about 2.5 percent in the late 1980s to about 7.5 percent by 2007, thus propelling unequal capital incomes to be complementary with higher earnings.

## 2.6 Income and Wealth Impacts of the Great Recession

The effects of the Great Recession, the most dramatic economic downturn the United States has experienced in more than six decades, has strengthened almost all of the longer-term trends observed above. Tumbling stock and housing markets erased more than \$15 trillion in national wealth in 2008 to 2010, or nearly 10 percent of real total national financial assets, the largest drop on record since 1945 as suggested by Wolff (forthcoming).

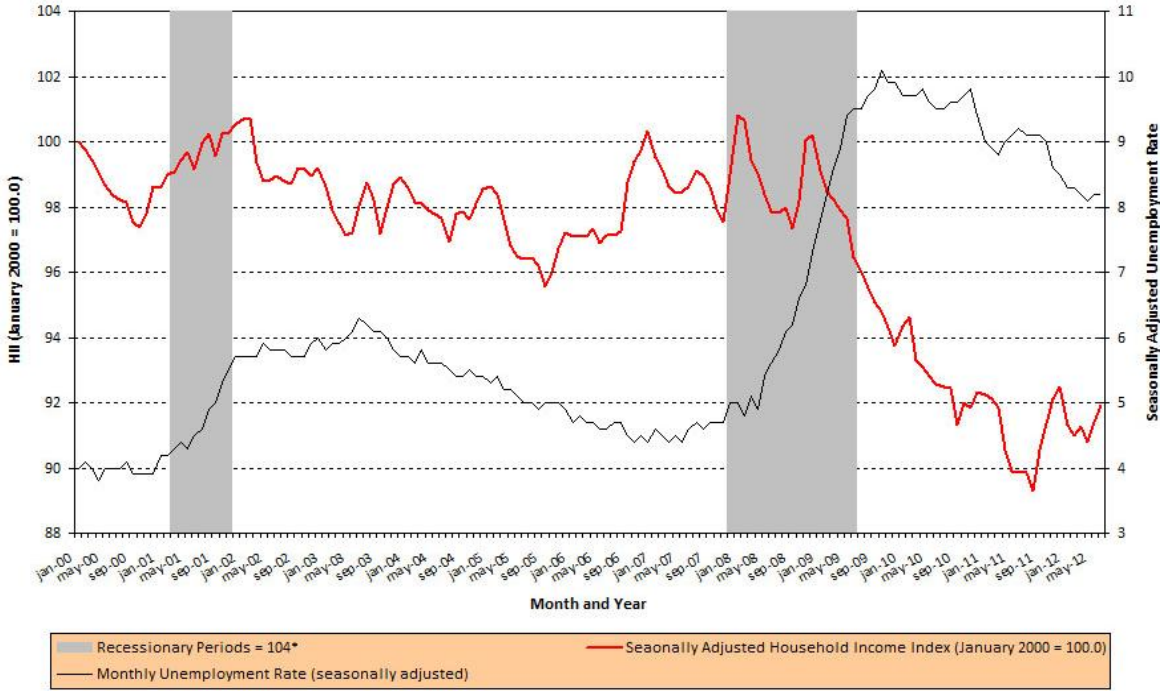
With the nation's economic growth abruptly halted in the Great Recession, millions of workers lost their jobs. Between July of 2008 and 2009 the U.S. economy shed 6.8 million jobs. Total non-farm employment fell by 5 percent, more than at any point since the nation returned to a peacetime economy following World War II. The employment-population ratio (number of adults 16 and over with jobs relative to same population) fell to its lowest level since 1990, 58.2 percent, even as older workers increased their employment. A full 20 percent of 25-to-54 year old prime age male workers were not in work in April 2011, the lowest fraction employed since 1948 and a full 5 points below the trough of any previous recession (Leonhardt, 2011; U.S. Department of Labor, 2011). And the unemployment rate climbed to over 10 percent at its highest. It has fallen only to 7.9 percent 40 months after the recession was declared ended in summer 2009 (U.S. Department of Labor, 2012).

### **Falling real money incomes**

Policies for redistribution, growth, and recovery are all affected by a permanent (or at least very long run) drop in incomes that has for the first time been experienced in the United States over the past several years. Figure 2.22 suggests that real money incomes in the United States are a full 8 percent below their 2007 levels in summer 2012, up a bit from summer 2011, but flat since early 2012. According to the U.S. Census (2012), median incomes by 2011 had fallen back to 1995 levels. The United States is today producing more output per capita in 2012 than in 2007, but with 5 million fewer workers. Such profound changes have been experienced by only minority of nations, with

Ireland, Greece, Spain, and the United Kingdom being similarly affected in terms of middle class income loss.

**Figure 2.22: Median Household Income Index (HII) and Unemployment Rate by Month: January 2000 to June 2012**



Source: Coder (2012).

**Big drop in housing values**

The United States has also suffered a massive wealth loss especially in housing, where net wealth has lost 30 to 40 percent of its value since 2007 in the middle three deciles of the wealth distribution (table 2.2). Only the top wealth quintile, ranked by income quintile, has gained net wealth since 2007, further reinforcing the trend estimates above. In addition, house prices have dropped 30 percent since their 2005 peak (Kowalski, 2011). Overall, the Great Recession has resulted in over \$7,300 in foregone consumption per person, or about \$175 per person per month by 2011 (Lansing, 2011).

**Incomes from capital and profits**

Finally we must mention the most recent evidence on incomes from capital compared to labor over the recession. Sum and colleagues (2011a) show that since the beginning of the recovery in June 2009, 88 percent of the growth in U.S. national incomes (through to March 2011) accrued to owners

of capital (mainly business owners and corporations, but also pensions, rental property owners, and stockholders) and less than 12 percent to workers in the form of wages or benefits. The drop in aggregate wages and salaries is almost surely because of the lack of job growth over this period. The failure of real wages and salaries to grow over the first seven quarters of recovery is unprecedented in any post-World War II recovery in the United States. These data suggest that working class and prime age employees are not gaining from the recovery at this point, and that any increases in aggregate personal incomes since the trough of the recession are accruing to the owners of capital other than owned homes—the top percentiles of the income distribution, stockholders, and retirees.

**Table 2.2: Percent change in reported income and wealth, 2007–2010, by percentile of family income**

Percentile	Income	Wealth
0–19.9	3.9%	-27.1%
20–39.9	-6.6%	-35.4%
40–59.9	-7.7%	-28.6%
60–79.9	-8.9%	-40.4%
80–89.9	-5.6%	-23.2%
90–100	-5.3%	1.9%

Source: Federal Reserve (2012) Survey of Consumer Finances, available at <http://www.federalreserve.gov/pubs/bulletin/2012/pdf/scf12.pdf>.

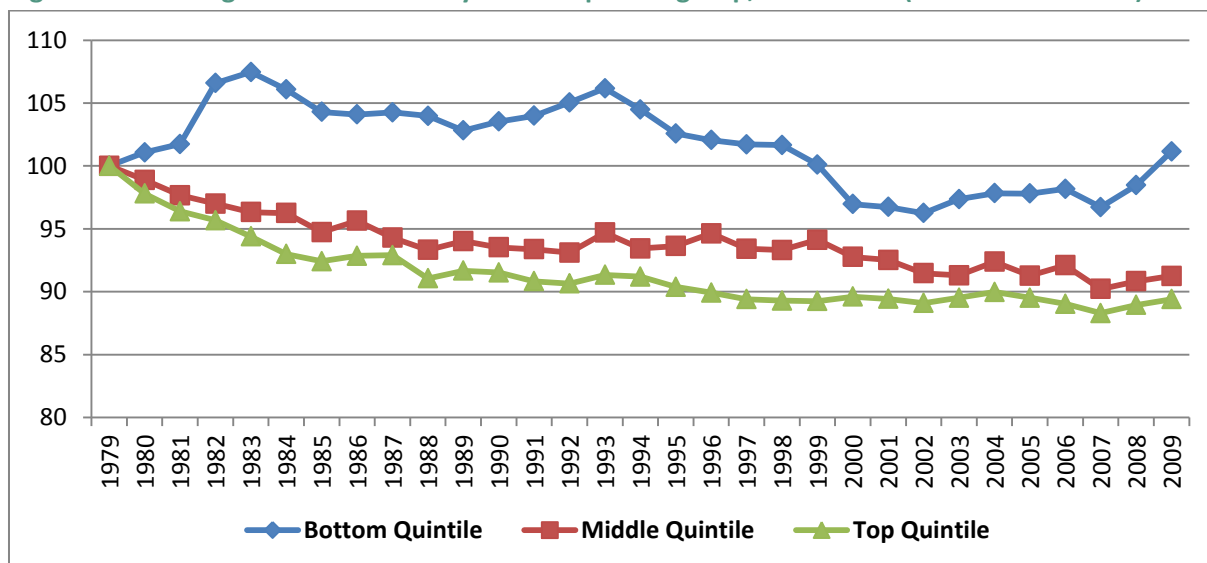
### **Anti-inequality and anti-poverty policy during the Great Recession**

In addition to the market factors driving employment losses and depressing wages, a host of actions by the public sector and households combined to influence household well-being. Automatic ‘stabilizers’ (including Unemployment Insurance (UI), SNAP, and the Temporary Assistance to Needy Families program (TANF)) as well as increases in refundable tax credits and discretionary fiscal policy all injected hundreds of billions of dollars into household incomes between 2008 and 2010. Total SNAP benefits rose from \$37 billion in 2008 to \$54 billion 2009, with 2.5 million new households getting food stamps. Although it was only signed into law in February of 2009, tax cuts and increased benefits worth hundreds of billions of dollars in the Obama Administration’s ‘American Recovery and Reinvestment Act’ (ARRA) bolstered household incomes during that year (CBO, 2009). But still families adjusted to the recession by doubling up, as anti-recession policies were not enough to stop falling incomes.

**Increasing household size as a coping mechanism**

Measures of net equivalized income adjust for household size to reflect the economies of scale associated with sharing a household. Because of these economies of scale, some people opt to combine households as a coping mechanism during difficult economic times. In fact, the economic stresses from the Great Recession seem to have inspired an increase of ‘doubling up’ or other forms of shared housing and sharp decline in household formation (Painter, 2010; Mykyta and Macartney, 2012). Figure 2.23 traces the trends in average household size (indexed to 1979=100) by income quintile group, and suggests that the long-term trend toward falling household size has been reversed during the Great Recession. The average household size of the bottom quintile group rose by nearly 5 percent between 2007 and 2009, climbing from 1.8 to 1.9 persons per household. Average household size in the highest income quintile group rose a little more than 1 percent, going from 3.09 to 3.13 people per household.

**Figure 2.23 Average household size by income quintile group, 1979–2009 (indexed 1979=100)**



Source: Smeeding and Thompson (2012) analysis of March CPS (various years).

The extent to which young adults delay home-leaving, join households, or to which families combine into households in response to economic stress suggest that younger adults and those who were not in the labor force were more likely to be doubled-up in 2010 than in 2007. Moreover, doubled-up householders and adults were more disadvantaged and experienced a larger increase in poverty rates during the recession than their counterparts who were not doubled-up (Mykyta and Macartney, 2012).

But this is only part of the story. The official poverty increases noted above took place despite the fact that there was an increase of 8.4 percent in young adults (aged 24 to 35) living with their

parents; as well as an 11.6 percent increase in families who moved in with relatives in large part to avoid poverty. If these two groups instead lived alone, their poverty rates based on their own income would be 43 percent (Sherman, 2011). And so, while doubled-up households had poverty rates higher than those who did not experience this change, the situation would have been far worse had the units who were forced to double up not been able to do so.

### **2.6.1 The gathering storm: fiscal consolidation in the United States**

The impacts of the Great Recession on the distribution of household income, inequality, and poverty described here extend through 2009. In the final accounting, when data are available through 2010 and 2011, the impacts on income levels and poverty are likely to be more dramatic than what is described here. While the recession officially ended in the United States in the summer of 2009, the job market remained depressed up through the middle of 2012, with unemployment remaining higher than 8 percent, and forecast to remain there until 2014 (CBO, 2011). In addition to continued high levels of unemployment, the policy orientation, at both the federal and state levels, has shifted in ways that may well decrease incomes at the bottom of the distribution.

The 2009 figures in this chapter reflect a large infusion of transfers and tax cuts to households through the American Recovery and Reinvestment Act (ARRA). The ARRA included billions of dollars in increases in Supplemental Nutrition Assistance Program (SNAP) benefits (\$20 billion), but no change in Temporary Assistance for Needy Families (TANF) benefits. Unemployment Insurance was also increased (\$40 billion). Earned Income Tax Credit (EITC) benefits and refundable child tax credit benefits also rose, as well as a one-time “Making Work Pay” tax cut for all households. These benefits and tax cuts bolstered household incomes in 2009, as is reflected above. The transfer share of income rose 4.7 percentage points for non-elderly households in the bottom fifth of the distribution, and the tax share fell by 1.3 percentage points for the middle fifth of all households. The Center on Budget and Policy Priorities has estimated that in 2009 these provisions of ARRA helped six million Americans keep their incomes above the U.S. poverty threshold, and reduced the severity of poverty for 33 million others (Sherman, 2011).

The poverty-reducing components of ARRA, however, were primarily concentrated in the last half of 2009 and the first half of 2010. In 2011, many of the provisions of ARRA were being phased out and eliminated. Three quarters of the \$780 billion in ARRA spending was completed by the end of Fiscal Year 2010, and 91 percent was completed by the end of 2011 (CBO, 2009). The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (TRUJCA), continued many programs into 2011 and 2012, including extended Unemployment Insurance and a temporary two

percentage point cut in the payroll tax for all earners. None of these provisions have been extended to 2013.

Not only are the temporary components of ARRA and TRUJCA scheduled to be phased out, but the general discussion over fiscal policy matters has shifted away from economic stimulus efforts toward ways to reduce federal deficit and debts. The set of policies that will be ultimately adopted are not yet known, but a unified Republican Party opposition to increased tax revenue or cuts to defense spending suggests that much of federal deficit reduction will center on non-military discretionary domestic spending. Budget proposals by new leaders in U.S. House of Representatives (the “Ryan Budget Plan”) include, for example, cuts in SNAP funding of \$127 billion over ten years, a reduction of nearly twenty percent (Rosenbaum, 2011).

Preliminary steps toward deficit reduction have already begun to impact spending on the transfer programs that support the incomes of many non-elderly low-income households. In 2010 President Obama announced a three-year freeze in discretionary spending. The CBO projects that non-defense discretionary spending will fall by 1.2 percent between 2011 and 2012, compared to a 5.7 percent increase in “mandatory” (Social Security, Medicare, Medicaid) spending and a 2.0 percent increase in defense spending (CBO, 2011). The Budget Control Act of 2011 also implemented budget caps on discretionary spending, which will reduce those programs by 5 percent between 2012 and 2021 (CBO, 2011).

Total federal debt in the United States hit modern highs in the Great Recession, and is projected to rise above 70 percent of GDP—levels not seen since World War II—by 2012 (CBO, 2011). If the political solution to bringing down the U.S. debt—it was less than 40 percent of GDP as recently as 2006—does not include major tax increases and leaves defense spending protected, there is no way to avoid deep cuts in non-defense discretionary spending. These programs, which include TANF, SNAP, and the federal contributions to Unemployment Insurance benefits, amount to just 19 percent of all federal spending. If the debt is decreased solely by driving down spending on these programs, incomes of low-income households, particularly the non-elderly will fall as well. Government transfers accounted for nearly 60 percent of the income of the lowest-income fifth of non-elderly households in 2009 and without job and earnings recoveries, they will be hard hit by mandatory budget rescissions.

## 2.7 Conclusions and Discussion

The general focus in this chapter (2) is on longer-term trends in inequality and poverty going back to 1967 or 1979, with a focus on ever-rising income inequality using three definitions of income. We assess trends in income and consumption inequality, poverty, and wealth inequality, showing considerable increases in incomes and consumption inequality, and a modest rise in already very high levels of wealth inequality, but a relatively constant level of poverty using European relative poverty definitions. We also show that including a more complete definition of income that includes full income from capital (MCI) shows a trend toward greater inequality.

We also assess the proximate causes or driving factors of U.S. inequality and find that labor markets (rising inequality in wages and earnings) and income from capital drive the inequality distribution in the United States, with redistribution playing only a minor role. Indeed the top income shares are made up of both labor and especially capital incomes and these have rebounded nicely from the recession through 2010.

We also argue that without a more complete understanding of the long term effects of the Great Recession on U.S. standards of living as well as other dimensions of inequality, one cannot expect to understand the future path that the United States is now on. One book on the Great Recession versus past recessions has been titled “This time is different” and, indeed, it is (Reinhart and Rogoff, 2009). The long, painful, and slow recovery of the United States may well herald a new era of diminished living standards and greater arguments about the distribution of both rewards and penalties in such circumstances.

We suggest that income inequality and poverty in the United States has risen with high and continuing joblessness, but primarily among non-elderly households. When all households are included, we can see that some of the increases in poverty are not as severe as in past recessions. And, the public transfer and tax policy during the Great Recession has played an important role in limiting the rise in inequality so far. But, when we focus on non-elderly households, the Great Recession is shown to have a dramatic effect on inequality and poverty, producing 30-year record high levels of wage inequality and household poverty, despite the lower poverty rates experienced by those who have been doubling up.

Capital markets and executive pay have recovered faster than wages or jobs, just as they have in past recessions. Middle and lower-income households—those relying on earnings to provide essentially all of their income, those whose primary asset is their home, and those with something less than an advanced degree—are faring much worse. The very steep decline in housing values (about 30

percent from 2005 to early 2011) has reduced mobility, led to higher rates of default and foreclosure, and negatively affected aggregate consumption (Leonhardt, 2011a; Smeeding and Thompson, 2011).

Discretionary service spending (including non-housing, energy, food, transportation, education, entertainment, restaurant meals, and insurance spending) fell by 6.9 percent in the current recession, after never falling below 2.9 percent in any previous post-war recession. Without a revival in consumer spending, employment growth will remain weak, and the incomes of those relying on earnings will continue to suffer. The large overhang of household debt from before the Great Recession, though, continues to put considerable pressure on households. Indeed Greenspan and Kennedy (2007, updated to 2011) suggest that, at the peak of the housing bubble in 2004 through 2006, U.S. households were annually withdrawing about 9 percent of home equity for spending. By the end of the first quarter of 2011, that fraction had fallen to negative 4 percent.

An extended period of high unemployment also threatens to have long-term consequences. Rising poverty, especially among young jobless adults and families, is permanently scarring the futures of millions of unemployed younger (under age 30) unskilled adults. Unless short-term action is taken to improve employment prospects for these particular workers, and to support the incomes of their children as we come out of the recession, poverty will remain high among this group (Smeeding et al., 2011). Over the longer term, traditional upward routes to the middle class in manufacturing and construction jobs will continue to disappear as high school-and-below wages and employment drop. It is estimated that it will take eight years or longer for employment to rise to levels where low-skill workers can find good jobs. These individuals need more-productive skills than they have at this time, given their current levels of education and human capital.

Two other forces deserve mention, one short term and the other longer term. The first is the political push to right the deficit in the United States by reducing outlays, not by raising taxes, while at the same time attempting to protect the elderly from income loss. Based on our findings, the elderly are the one demographic group that has fared relatively well during the Great Recession and the feeble expansion that preceded it, and should not be singled-out for protection in policies to close long-term deficits. Tax increases on upper- and middle-income families are not being seriously considered at this writing. If outlays are cut, they will be reduced most for non-elderly discretionary programs and entitlements such as SNAP, UI, and the EITC. Making these changes at this time would surely increase poverty and inequality over the coming years.

The other longer-term force involves the weakness of labor as a political force in the United States. Output per capita in the United States in 2012 is above pre-recession 2007 levels, but these goods and services are being produced with 5 million fewer workers. Labor parties are a force in Europe



and have shown their ability to more equally share the burden of the recession.<sup>4</sup> But organized labor is a relatively weak political and economic actor in the political economy of the United States. Unionization is at all-time low levels, and even the public sector, among the most heavily unionized sectors in the United States, has lost 700,000 jobs since the beginning of the recession. The reasons for the long-term decline of labor are complex (Levy and Temin, 2009; Levy and Kochan, 2011), but any reckoning of the U.S. labor market and the Great Recession's effects on employment, wages, and incomes must recognize this reality.

Policy pundits and applied economists of all ilk and background recommend that the U.S. increase its stock of human capital (as suggested by Goldin and Katz, 2008). But the country has not yet been very effective at reaching this goal (consistent with the polarization in wages seen above). Graduation rates from high school are now below 1980s rates, unless General Education Degrees (GEDs) are included and then they become flat since 1980. College completion rates by males, especially those from the most disadvantaged backgrounds, are abysmally low and may in fact be falling (Haveman and Smeeding, 2006, figure 2.17). The 2010 education bill will help increase U.S. postsecondary enrollment and completion (including two-year technical colleges) but not for a few years if then. Larger future increases in human capital are therefore anticipated and will be necessary to increase employment and incomes for more Americans. Income transfers can alleviate poverty, but the solution to permanent poverty reduction is a steady well-paying job for otherwise poor people. Unfortunately these jobs are not currently on the horizon for low-skilled workers, and especially not for low-skilled men.

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<sup>4</sup> See, for example, OECD (2011) and, for Germany, Burda and Hunt (2011) on work sharing.



### 3. Social Impacts of Inequality

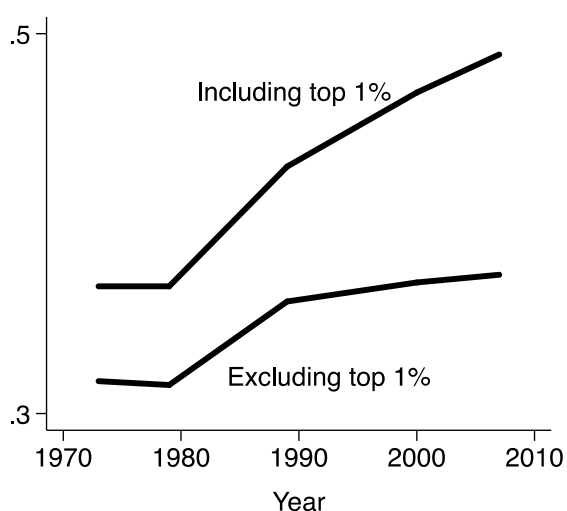
#### 3.1 Introduction

We focus our attention on the impacts of post-transfer-post-tax household income inequality (rather than inequality of wages, market income, or wealth). For the purpose of chapters 3 and 4, we summarize the trend in income inequality as follows: no change in the 1970s, a sharp rise in the 1980s, and then either a modest or a rapid rise in the 1990s and 2000s. If the top 1 percent is excluded, as is the case with the data used for most (perhaps all) of the other countries in the GINI project, then the rise in inequality in the 1990s and 2000s was fairly small. If we include the top 1 percent, as the Congressional Budget Office (2011a) does by merging data from household surveys with income tax records, then we observe a rise in inequality in the 1990s and 2000s that was nearly as rapid as in the 1980s.

These two over-time patterns are shown in figure 3.1.1. In order to focus on the long-run pattern, we show the data only at comparable points in the business cycle—business-cycle peak years (1973, 1979, 1989, 2000, and 2007). The Gini coefficient with the top 1 percent included is from the Congressional Budget Office (2011a). The CBO data only begin in 1979, but other data sources suggest little or no change in income inequality in the 1970s (Atkinson, Piketty, and Saez 2011), so we extend the series back in time indicating this. The Gini with the top 1 percent excluded is from Smeeding and Thompson (2011).

In the graphs in chapters 3 and 4, we show both of these income inequality series in the background. We adjust them, however, so that they begin at the same level, as the focus is on changes over time.

Where data permit, we also examine the social gradient. For reasons of data availability we use education rather than income. In the American context educational attainment is a good stand-in for income, as earnings and incomes for Americans with different amounts of schooling have diverged sharply (Mishel et al., 2012). For the most part we use four education groups: less than secondary school completion (0–11 years of school completed), secondary only (12), some tertiary (13–15), and four-year tertiary degree or more (16+).

**Figure 3.1.1 Income inequality**

Gini coefficient for posttransfer-posttax household income. Data sources: Smeeding and Thompson 2011; Congressional Budget Office 2011a.

## 3.2 Material Deprivation

The United States has various sources of data that could be used to create a multidimensional indicator of material deprivation, in particular the Survey of Income and Program Participation (SIPP). But the data do not yield a reliable time series. We therefore focus on two income-based indicators of deprivation: the relative poverty rate and average absolute income of households in the bottom income quintile.

Relative poverty is in effect a measure of income inequality within the lower half of the distribution. We would therefore expect that as income inequality rises, so too will relative poverty. An exception would be if the rise in income inequality is concentrated at the top of the distribution.

An increase in income inequality may slow absolute income growth for households at the low end of the distribution, as a rising share of economic growth is captured by those at the top and/or in the middle. If this happens, we would expect to observe little or no growth of absolute incomes for households in the bottom quintile.

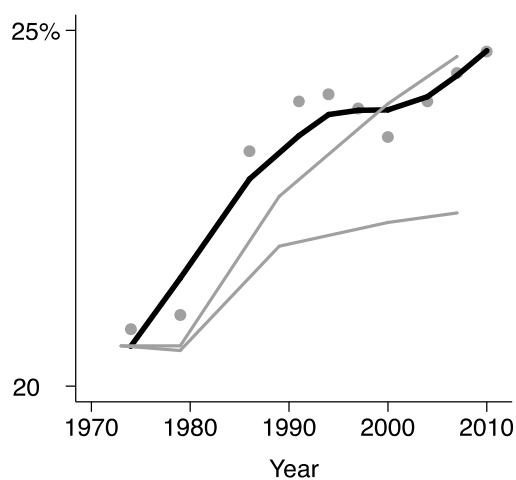
### Relative poverty rate

Figure 3.2.1 shows the rate from 1974 to 2010 according to data from the Luxembourg Income Study. There was an increase between the early-1980s and the early- to mid-1990s, followed by little change. This is consistent with the trend in income inequality within the bottom 99 percent.

**Average absolute income of households in the bottom income quintile**

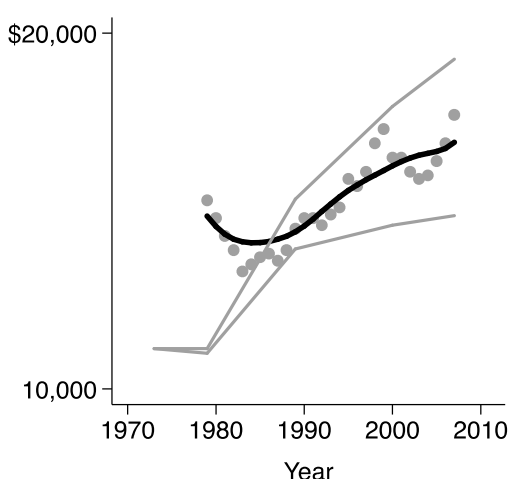
This measure is similar to an absolute poverty rate combined with poverty gap. The data, from calculations by the Congressional Budget Office, are available beginning in 1979. They are shown in figure 3.2.2. What we observe is stagnation in the 1980s, slow growth in the 1990s, and stagnation in the 2000s. This is what we would expect if rising income inequality has had an adverse impact.

**Figure 3.2.1 Relative poverty**



Posttransfer-posttax income, adjusted for household size. Poverty line is set at 60% of median income. The line is a loess curve. Data source: Luxembourg Income Study 2012.

**Figure 3.2.2. Average income of households in the bottom fifth of the income distribution**



### **Posttransfer-posttax income**

The income measure includes earnings, capital gains, government transfers, and other sources of cash income. It adds in-kind income (employer-paid health insurance premiums, Medicare and Medicaid benefits, food stamps), employee contributions to 401(k) retirement plans, and employer-paid payroll taxes. Tax payments are subtracted. The incomes are in 2007 dollars; inflation adjustment is via the CPI-U-RS. Data source: Congressional Budget Office (2011a), "Average Federal Tax Rates and Income, by Income Category, 1979–2007."

## **3.3 Cumulative and/or Multidimensional Disadvantage**

### **Persistent poverty rate**

It would be possible to use the PSID to generate a relatively good time series on persistent poverty in the United States, but to our knowledge no one has done so. Jenkins and van Kerm (2011) have found that single-year poverty and persistent poverty (poverty in two or more of the prior three years) are very closely correlated across 11 European countries. If this is true of the United States as well, then the persistent relative poverty rate in the U.S. probably has followed the upward trend in the single-year relative poverty rate (see section 3.2).

## **3.4 Social Cohesion/Isolation**

### **Close personal connections**

In 1985 and 2004, the General Social Survey asked "Think back over the last six months and the people with whom you discussed the things most important to you. How many were there?" The share was constant over those two decades (Fischer, 2009).

## **3.5 Family**

The chief hypothesis here is that rising income inequality will reduce income growth for people in the middle and lower parts of the distribution. This will produce greater financial strain, causing reduced child bearing (fertility) and marriage and increased divorce and lone parenthood. The notion that limited economic resources weaken families has played a prominent role in American academic and policy debate (Wilson, 1987; Edin and Kefalas, 2005). During the period of rising income inequality we expect to observe falling fertility and marriage rates and rising divorce and lone parenthood rates.

## Fertility

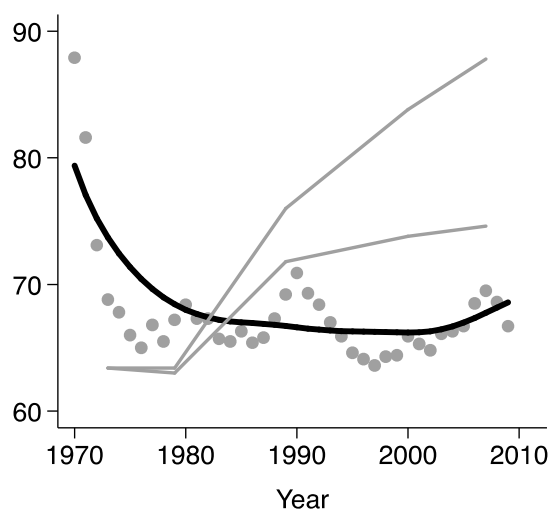
The trend in the fertility rate is shown in figure 3.5.1. It fell sharply in the 1970s but then levelled off. This does not correspond to the trend in income inequality, which was flat or slowly-rising in the 1970s, jumped sharply in the 1980s, and then rose slowly or rapidly (depending on the measure) in the 1990s and 2000s.

## Marriage and couple formation

As the first chart in figure 3.5.2 shows, the share of Americans age 25 to 64 who are married has declined since 1970s. This predates the rise in income inequality.

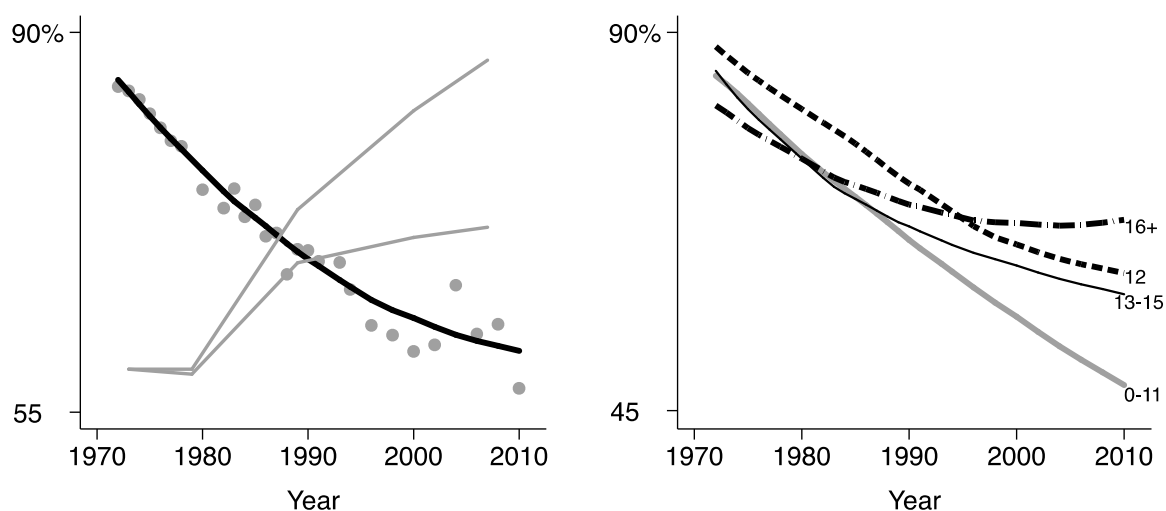
The second chart in figure 3.5.2 shows the social gradient for marriage by education. We see a widening of the gap in marriage: marriage has declined more rapidly among those with less education. And the timing corresponds to the rise in income inequality: it begins in the 1990s, shortly after income inequality began to increase. Whether there is a causal link is another question.

**Figure 3.5.1 Fertility**



Births per 1,000 women age 15–44. Data source: National Center for Health Statistics. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1 percent; the line that rises less does not (see figure 3.1.1 for sources).

Figure 3.5.2. Marriage



Share of persons age 25 to 64 who are currently married. Data source: General Social Survey, variable marital. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

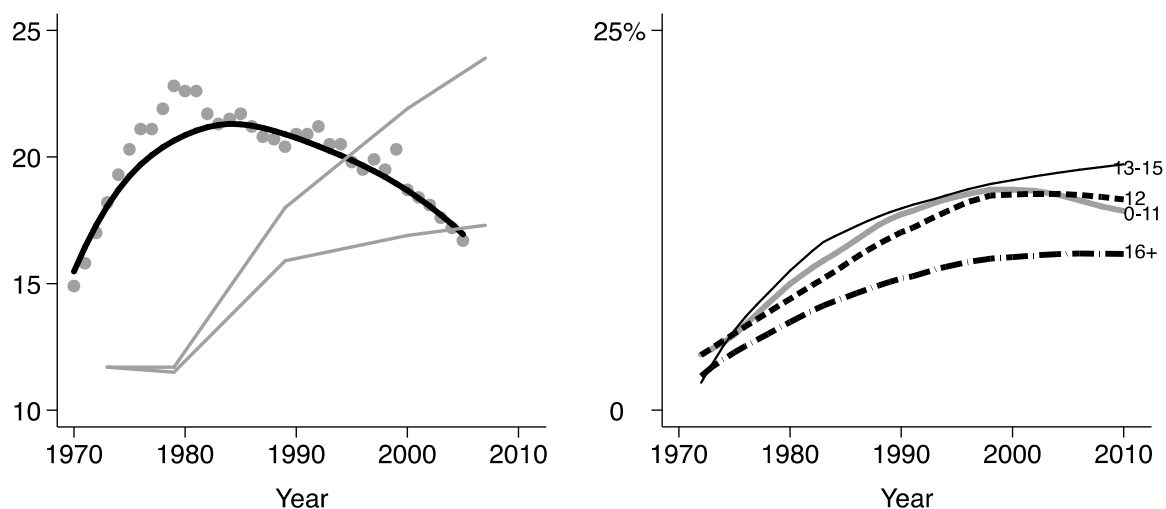
### Dissolution of households

The first chart in figure 3.5.3 shows the divorce rate over time. (We lack a good time series on dissolution of cohabiting couples.) Divorce increased sharply in the 1970s. That followed a steady rise throughout the twentieth century and an acceleration in the 1960s. At the end of the 1970s the upward trend stopped and reversed. In the 1980s, 1990s, and 2000s the divorce rate declined. This does not correlate well with the trend in income inequality.

The second chart shows the social gradient by education. Here we see a widening of the gap, but it much of it looks to have occurred in the 1970s, which is prior to the rise in income inequality.



Figure 3.5.3 Divorce



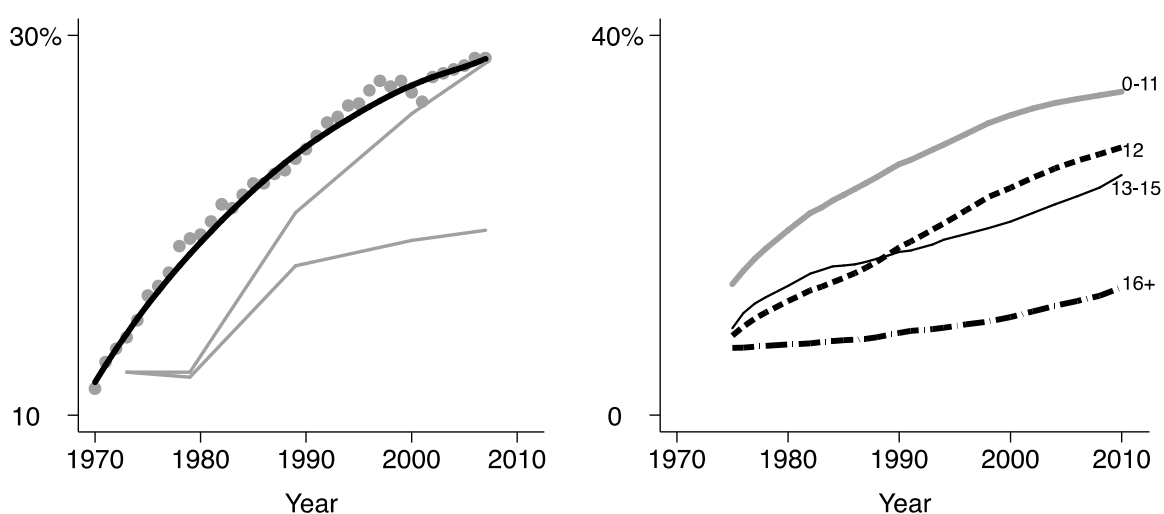
First chart: Divorces per 1,000 married couples. Data source: Stevenson and Wolfers (2007). The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves. Share of persons age 25 to 64 who are currently divorced. Data source: General Social Survey, variable marital.

### Lone parenthood

Figure 3.5.4's first chart shows the trend in lone parenthood—single-parent families with children as a share of all families with children. The trend is steadily up, broadly similar to that of income inequality. But the rise in single parenthood actually began in the 1960s (not shown here), a good while before income inequality began to increase. And it slowed in the 1980s, 1990s, and 2000s, when the increase in income inequality occurred.

The second chart in figure 3.5.4 shows the social gradient by education. We observe a rise in inequality of lone parenthood by years of schooling completed, with the rate rising more rapidly among those with less education. However, it appears that this development began in the 1970s, prior to the increase in income inequality.

Figure 3.5.4 Lone parenthood



First chart: Single-parent families with children as a share of all families with children. Data source: Census Bureau. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. Nonmarried non-cohabitating families with children as a share of all families with children. Data source: General Social Survey, variable `hhtype1`.

### 3.6 Health

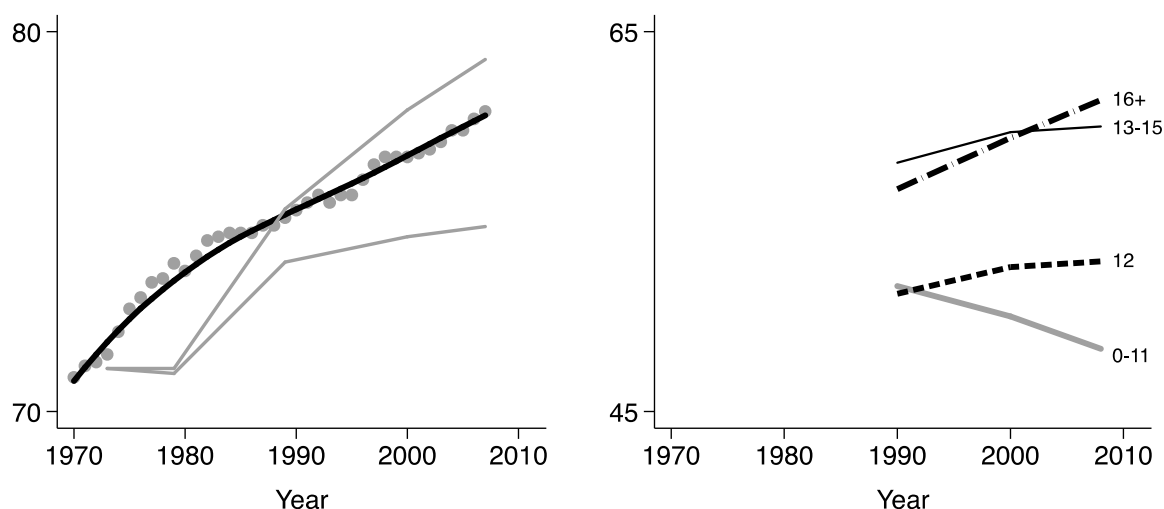
There are three main hypotheses about why income inequality might have adverse effects on health (Leigh, Jencks, and Smeeding, 2009; Wilkinson and Pickett, 2009). One is that the marginal utility of income in improving health declines as income rises. If we compare across individuals within a country, it is almost always the case that income is positively associated with health. But the degree of improvement per extra unit of income declines as we move up the income scale. Thus, taking some money from a rich person and giving it to a poor person should reduce the life expectancy of the rich person by less than it increases the life expectancy of the poor person. The second hypothesis is that larger differences in income within a society increase stress and anxiety, due to heightened relative deprivation and/or status competition. The third hypothesized causal link is public policy. Greater income inequality may produce heightened opposition by the rich to higher taxes, thereby blocking expansion of public health care coverage or widespread adoption of new medical technology. If so, the quality of health care services and the quantity of its provision may improve less than they otherwise would.

## Life expectancy

The first chart in figure 3.6.1 shows the trend in life expectancy in the United States since 1970. It has risen steadily. On the surface, this suggests no adverse health impact of rising income inequality. But technological advances in medical care, enhanced access to health insurance (via Medicare, Medicaid, and S-CHIP), and reductions in smoking surely have contributed to heightened longevity. What we need to know is whether life expectancy has increased as rapidly as it should have given these other changes. The rise in life expectancy slowed as income inequality began to increase in the 1980s, suggesting a possible adverse impact.

The second chart in figure 3.6.1 shows the social gradient by education (for non-Hispanic males only). We observe a large widening of the gradient, consistent with the hypothesis that rising income inequality contributes to rising inequality of health outcomes. Unfortunately, the data series begins in 1990s, so we don't know whether the timing is truly consistent with that of income inequality's rise.

**Figure 3.6.1 Life expectancy**



First chart: Years of life expectancy at birth. The dark line is a loess curve. Data source: OECD. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. Years of life expectancy at age 20 for non-Hispanic white males. Data source: Olshansky 2012, appendix exhibit A6.

### **Self-reported health**

Since the early 1970s the U.S. General Social Survey has asked “Would you say your own health, in general, is excellent, good, fair, or poor?” As the first chart in figure 3.6.2 shows, the share responding excellent or good increased steadily in the 1970s, 1980s, and 1990s. But then in the 2000s the trend reversed. Neither of these patterns is consistent with what we would expect given developments in income inequality.

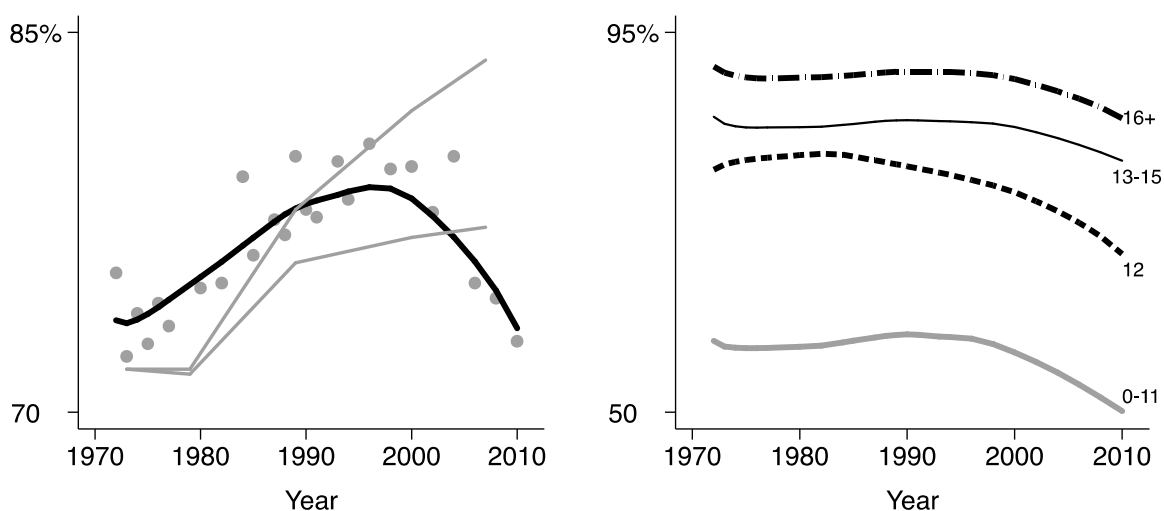
The second chart in figure 3.6.2 shows the social gradient by education. The gradient is quite strong; educational attainment is positively correlated with self-reported health. But there is only a slight widening of the gradient over time—less, perhaps, than we would expect given the sharp rise in income inequality.

### **Obesity**

Another health outcome thought by some to be influenced by income inequality is obesity. The chief hypothesis is that rising inequality increases stress, which causes people to overeat (Wilkinson and Pickett, 2009). The first chart in figure 3.6.3 shows that adult obesity in the United States jumped sharply in the 1980s, 1990s, and 2000s. Estimates for earlier years suggest that it was flat in the 1960s and 1970s. This trend correlates very well with that of income inequality.

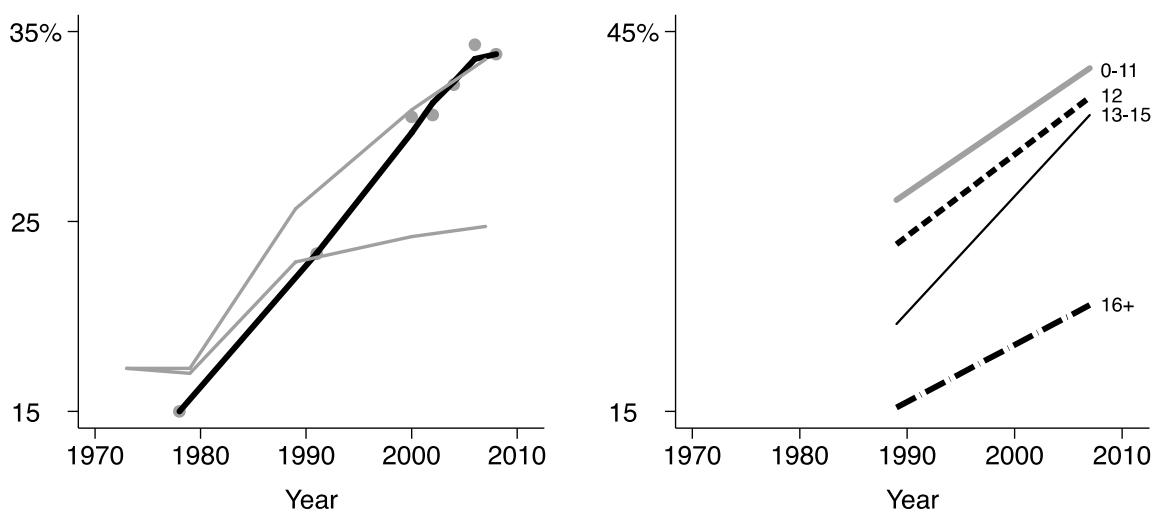
There are, however, plausible alternative explanations for this trend. One is rising economic insecurity (Offer et al., 2010). Another is weak regulation of food and restaurants and to the lack of a well-entrenched healthy eating culture (Kenworthy, 2012). Large-portion restaurants, particularly fast-food ones, proliferated rapidly during this period. Junk food became more easily available in larger quantities at grocery and convenience stores. And there was a shift away from home cooking and limited snacking.

Figure 3.6.2 Subjective health



Percent saying health is excellent or good. Question: “Would you say your own health, in general, is excellent, good, fair, or poor?” Data source: General Social Survey, variable health. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

Figure 3.6.3 Obesity



First chart: Share of adults with body mass index (BMI) greater than 30. The line is a loess curve. Data source: OECD. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. Share of female adults with body mass index (BMI) greater than 29, 1988-94 and 2005-08. Data source: Ogden et al 2010, figure 5, using National Health and Nutrition Examination Survey data.

The second chart in figure 3.6.3 shows the social gradient by education (for females). We observe the expected gradient: obesity correlates negatively with years of schooling completed. These data are available at only two points in time—around 1990 and around 2007. During these two decades we see a separation between those with less than a university degree and those with a university degree or better. Specifically, obesity increases among all groups, but it grows most rapidly among those with 12 or 13 to 15 years of schooling, so that people in these two groups nearly catch up to those with 0 to 11 years. This pattern is consistent with one aspect of the rise in income inequality in the United States—the widening education premium.

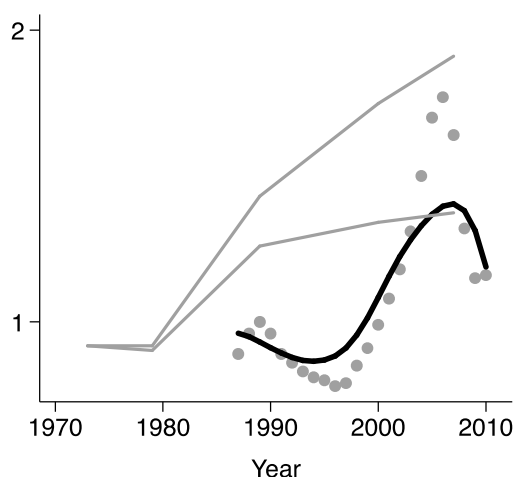
### 3.7 Housing

Robert H. Frank (2005) argues persuasively that housing is a “positional” good. That is, people’s happiness with their home depends more heavily on relative comparison with other nearby homes than is true for many other goods (such as toothpaste or vacation time). Consider a hypothetical scenario, Franks says, in which you must choose “between world A, in which you will live in a 4,000-square-foot house and others will live in 6,000-square-foot houses; and world B, in which you will live in a 3,000-square-foot house and others will live in 2,000-square-foot houses. Once you choose, your position on the local housing scale will persist. If only absolute consumption mattered, A would clearly be better. Yet most people say they would pick B, where their absolute house size is smaller but their relative house size is larger” (Frank, 2005, p. 137).

Frank suggests that rising income at the high end of the distribution in the United States allowed the well-to-do to purchase increasingly large and elaborately-equipped homes. Because housing satisfaction depends on relative comparison, middle-class homeowners felt compelled to follow suit, leading to dramatic increases in home prices and housing expenditures and hence to a reduction in household saving.

#### **House prices**

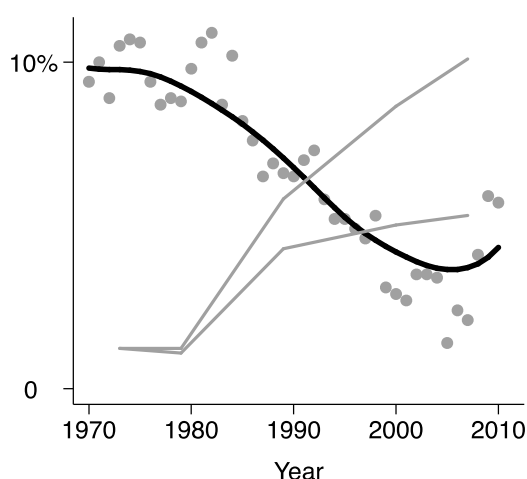
Figure 3.7.1 shows the trend in U.S. house prices according to the most commonly-used measure—the Case-Shiller index. The bubble from 1997 to 2007 is readily apparent. This fits roughly with Robert Frank’s hypothesis, though the bubble began nearly two decades after the rise in income inequality commenced.

**Figure 3.7.1 House prices**

Case-Shiller 10-city home price index (1989=1). In 2010 dollars. Data source: [research.stlouisfed.org/fred2](http://research.stlouisfed.org/fred2). The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

### Household saving

Figure 3.7.2 shows the trend in average household saving as a share of household disposable income. The trend is down throughout the period. On the surface this might seem consistent with the Frank hypothesis. However, the timing is not consistent with that of the run-up in housing prices: the housing bubble began in the late 1990s, but household saving began falling long before that.

**Figure 3.7.2 Household saving**

Household saving as a share of disposable household income. Data source: OECD. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

### 3.8 Crime

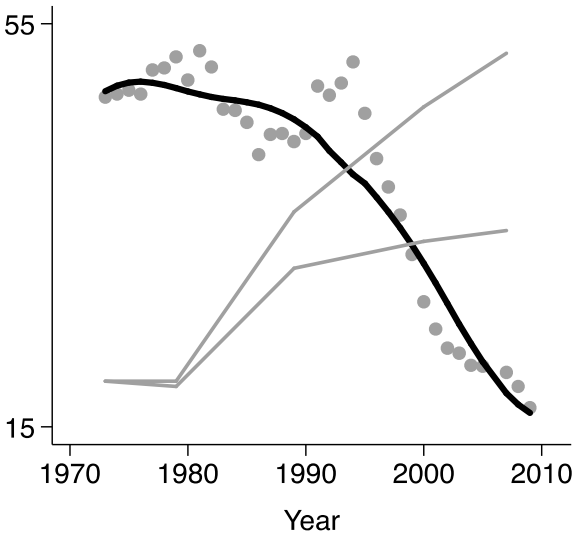
The relative deprivation approach to crime hypothesizes that income inequality will spur crime by increasing perceived deprivation, hopelessness, and/or envy (Merton, 1968; Freeman, 1996). Given the sharp rise in income inequality in the United States in the 1980s, 1990s, and 2000s, we would expect to observe a rise in the violent crime and property crimes rates during those decades.

Income inequality may also produce effective lobbying by the well-off for stricter punishment, as they may fear a rise in crime, have more to lose from it, and have greater political influence. This predicts a rise in incarceration.

#### Violent crime

There is no correlation between the trend in U.S. income inequality and the trend in violent crime. The violent crime rate rose in the 1960s (not shown), 1970s, and 1980s, but then fell sharply in the 1990s and 2000s.

Figure 3.8.1 Violent crime



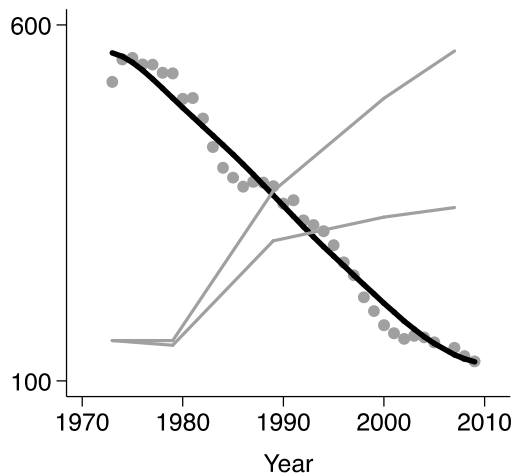
Number of victimizations per 1,000 households. Violent crime includes murder, rape, robbery, aggravated assault, and simple assault. Data source: Bureau of Justice Statistics, National Crime Victimization Survey. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).



### Property crime

The property crime rate decreased steadily from the early 1970s through the end of the 2000s. This is exactly the opposite of what the income inequality hypothesis predicts.

**Figure 3.8.2 Property crime**

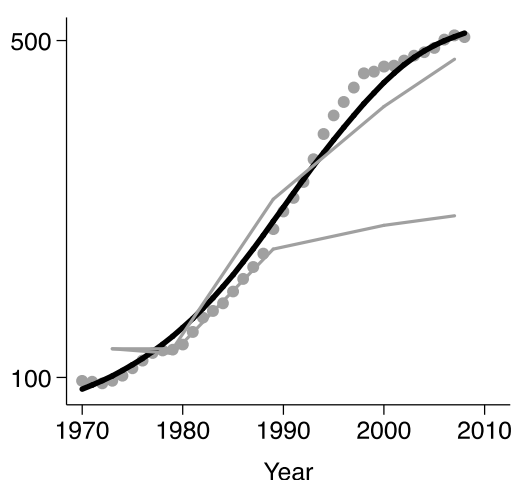


Number of victimizations per 1,000 population age 12 and over. Property crime includes burglary, theft, and motor vehicle theft. Data source: Bureau of Justice Statistics, National Crime Victimization Survey. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

### Prison population

The incarceration rate rose steadily throughout the four decades beginning in 1970. This is broadly consistent with that of income inequality. But the fact that the increase in incarceration predates the increase in income inequality is problematic for the hypothesis.

Figure 3.8.3 Prison population



Sentenced prisoners under jurisdiction of state and federal correctional authorities per 100,000 population (does not include jail inmates). Data source: Bureau of Justice Statistics. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

### 3.9 Subjective Well-Being

A rise in income inequality should produce a decline in mean subjective well-being. Among individuals, life satisfaction and happiness increase linearly with income up to a point, but after that the gain per extra unit of income is less. There are diminishing returns, in other words. Thus, if the income share of the well-off increases at the expense of those in the middle and/or lower part of the distribution, the former's gain in subjective well-being will be more than offset by the reduction in the latter's.

#### Happiness

Since 1972, the General Social Survey has regularly asked Americans "Taken all together, how would you say things are these days: would you say that you are very happy, pretty happy, or not too happy?" The trend in the average level of happiness is shown in the first chart in figure 3.9.1. Mean happiness was flat in the 1970s and 1980s and then declined slightly in the 1990s and 2000s. This is roughly consistent with the trend in income inequality, if we assume a lag time of about a decade.

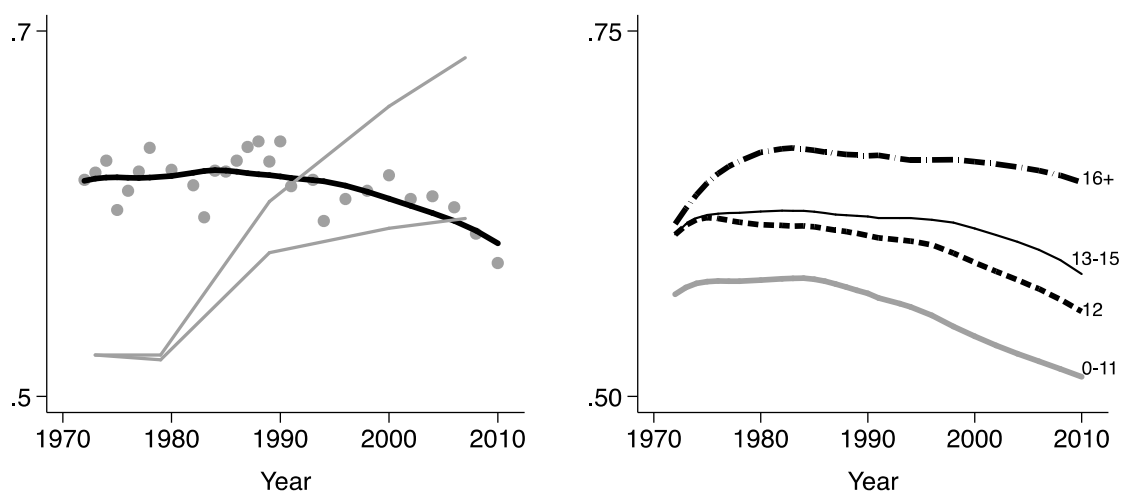
The second chart in figure 3.9.1 shows the social gradient by education. The gradient has widened. This appears to have begun in the late 1970s, which is prior to the rise in income inequality. But

much of the widening in the social gradient looks to have occurred beginning in the 1990s, which is a better fit in terms of timing.

### Life satisfaction

There is no lengthy time series for life satisfaction for the United States.

**Figure 3.9.1 Happiness**



Average happiness. Question: “Taken all together, how would you say things are these days: would you say that you are very happy, pretty happy, or not too happy?” The average is calculated with very happy coded as 1, pretty happy coded as 0.5, and not too happy coded as 0. Data source: General Social Survey, variable happy. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

### 3.10 Intergenerational Mobility

The standard approach to measuring intergenerational mobility looks at earnings or household income. To assess the trend over time in intergenerational mobility, we need a data set with reliable income information for parents and their adult children over three or more generations. The best U.S. data set of this type, the Panel Study of Income Dynamics, doesn’t go quite far enough back in time, and analyses using other data sets have yielded mixed conclusions (Harding, Jencks, Lopoo, and Mayer, 2005; Levine and Mazumder, 2007; Aaronson and Mazumder, 2008; Lee and Solon, 2009; Winship, 2012).

We do have evidence on test scores of elementary and secondary students and on college completion, both of which are good predictors of earnings and income. According to data compiled by Sean Reardon (2011), the gap in average test scores between children from high-income families and those from low-income families has risen steadily since the early 1970s. (It is now much larger than the gap between white and black children.) Martha Bailey and Susan Dynarski (2011) have compared college completion rates of Americans who grew up in the 1960s and 1970s versus those who grew up in the 1980s and 1990s. In the earlier group, 36 percent of those from high-income families and 5 percent of those from low-income families got a four-year college degree. In the latter group the share rose to 54 percent among those from a high-income family but only to 9 percent among those who grew up in a low-income household. Given these widening gaps in test scores and college completion, the gap in earnings and income very likely has expanded too, or will do so soon.

### 3.11 Conclusions

The key problem with trying to infer from over-time trends in a single country is that it is difficult to establish the counterfactual. For instance, income inequality rose steadily and sharply in the United States in the 1980s and also, if we include the top 1 percent, in the 1990s and 2000s. During those same years, life expectancy increased. But we shouldn't conclude that income inequality had no impact (or a beneficial impact) on longevity, because life expectancy might have increased even more rapidly in the absence of a rise in income inequality. Here we need cross-country comparison.

With that caveat, here is what we can say about the association in trends and timing between income inequality and the mean level of social outcomes in the United States: We observe the expected association for relative and absolute incomes of low-end households (poverty), marriage rates, obesity, happiness, and intergenerational mobility.

If we focus instead on the association between trends in income inequality and trends in inequality of social outcomes (the social gradient), we find much more indication of a strong correlation. This is true for marriage, divorce, lone parenthood, life expectancy, subjective health, obesity, and happiness.

Social impacts: Summary chart						
	1970s	1980s	1990s	2000-07	2008-11	Figure #
Income inequality	→	↗	↗	↗	↗	3.1.1
Relative poverty	→	↗	→	↗	↗	3.1.2
Absolute incomes of poor households		→	↗	→		3.1.3
Fertility	↘	→	→	→	↘	3.5.1
Close personal connections		→	→	→		
Marriage	↘	↘	↘	→	↘	3.5.2
Divorce	↗	↘	↘	↘		3.5.3
Lone parenthood	↗	↗	↗	↗		3.5.4
Life expectancy	↗	↗	↗	↗		3.6.1
Self-reported health	↗	↗	→	↘	↘	3.6.2
Obesity	→	↗	↗	↗		3.6.3
House prices			→	↗	↘	3.7.1
Household saving	→	↘	↘	↘	↗	3.7.2
Violent crime	↗	→	↘	↘	↘	3.8.1
Property crime	→	↘	↘	↘	↘	3.8.2
Prison population	↗	↗	↗	↗		3.8.3
Happiness	→	→	↘	↘	↘	3.9.1
Intergenerational mobility		↘	↘	↘		



## 4. Political and cultural impacts of inequality

### 4.1 Introduction

Here we turn from social impacts to political impacts. Again we consider trends both in the mean level of outcomes and in the social gradient of outcomes.

### 4.2 Political and Civic Participation

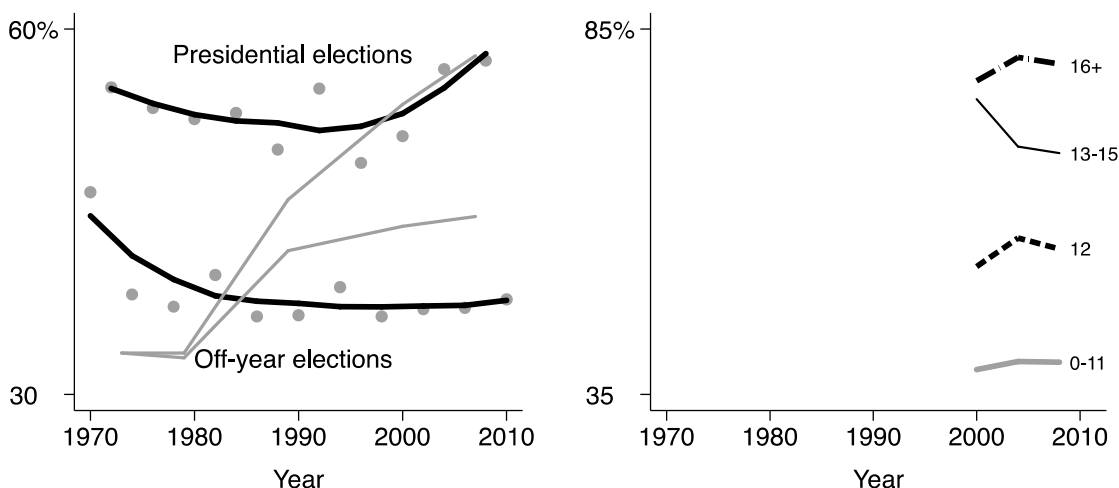
If rising income inequality causes stagnation or decline in the incomes of those in the middle or at the bottom, it may result in withdrawal from participation in civic and political activity (Solt, 2008; Levin-Waldman, 2012). The causal mechanism can be financial (need to work longer hours or more than one job) or psychosocial (embarrassment, frustration, weakened sense of common interests).

#### **Voter turnout**

The first chart in figure 4.2.1 shows the voter turnout rate since 1970s. There is one line for presidential-year elections and another for “off-year” elections. After falling in the 1960s, the trend for presidential elections stayed constant between 1970 and 2010. The fall in turnout in off-year elections continue through the 1970s, but it too then stopped. In neither case does the over-time pattern support the hypothesis of a negative impact of rising income inequality.

The second chart shows the social gradient by education. Unfortunately, these data cover only eight years—the three presidential-year elections of 2000, 2004, and 2008. The social gradient is huge; better-educated Americans are much more likely to vote. But we do not observe any increase in the gradient during this short time span for which data are available.

Figure 4.2.1 Voter turnout



Persons voting in national elections as a share of eligible voters. First chart: Data source: Federal Election Commission. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. Presidential election years only. Data source: exit polls, compiled by [www.dimpledchad.info](http://www.dimpledchad.info). The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed.

**Union membership**

Union density in the United States is shown in the first chart in figure 4.2.2. It has decreased during the years of rising income inequality. Yet the drop in unionization began in the mid-1950s (not shown here), long before inequality started to increase.

The second chart in figure 4.2.2 shows the social gradient by education. Among better-educated Americans, those with a college degree, union membership began low and has been flat since the early 1970s. In contrast, among the least-educated, those with less than secondary school, union membership in the 1970s was somewhat higher but since then has plummeted. By the late 2000s we observe the emergence of an education gradient. Was this due to rising income inequality? Probably not. It more likely owes to the shift from manufacturing to service employment and to the erosion of unions in the private sector.

**Membership in civic organizations**

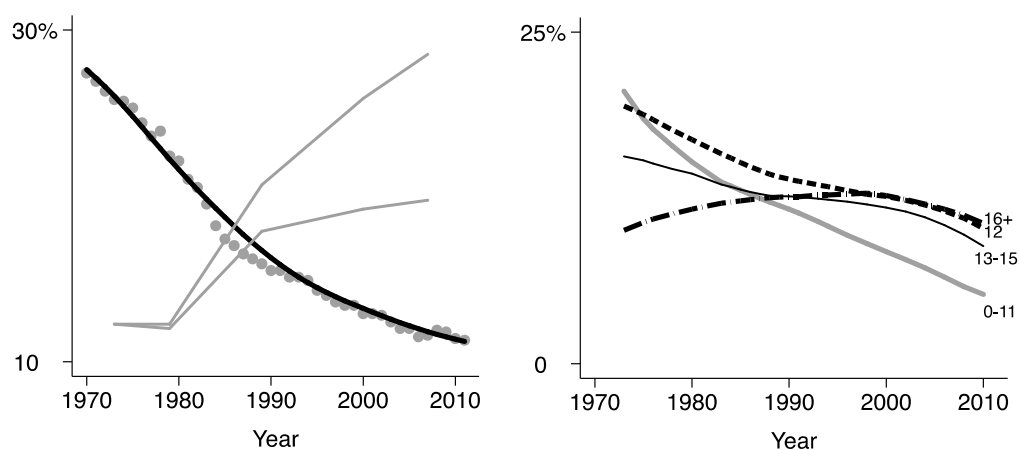
There are various measures of membership in civic organizations. Robert Putnam (2000, figure 8) calculated average membership in 32 national chapter-based associations. This dropped steadily between 1970 and 2000 (the last year of data). Robert Anderson and colleagues (2006) used time



diary data to calculate extent of participation in civic associations. This too dropped steadily between 1975 and the late 1990s.

While the overall pattern of change in these indicators is roughly consistent with the trend in income inequality, the timing does not square well. Putnam's measure actually begins declining around 1960 (not shown here), and the Anderson and colleagues measure's decline begins in the late 1970s. In both cases this precedes the rise in income inequality.

**Figure 4.2.2 Union density**



First chart: The dark line is a loess curve. Data source: OECD. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves. Data source: General Social Survey, variable union.

### 4.3 Trust in Others and in Institutions

To the extent rising inequality is viewed as a failure in the performance of government, it may reduce confidence in key governmental institutions. Since 1972 the General Social Survey has regularly asked the following question about the legislative, executive, and judicial branches of government: "I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all?"

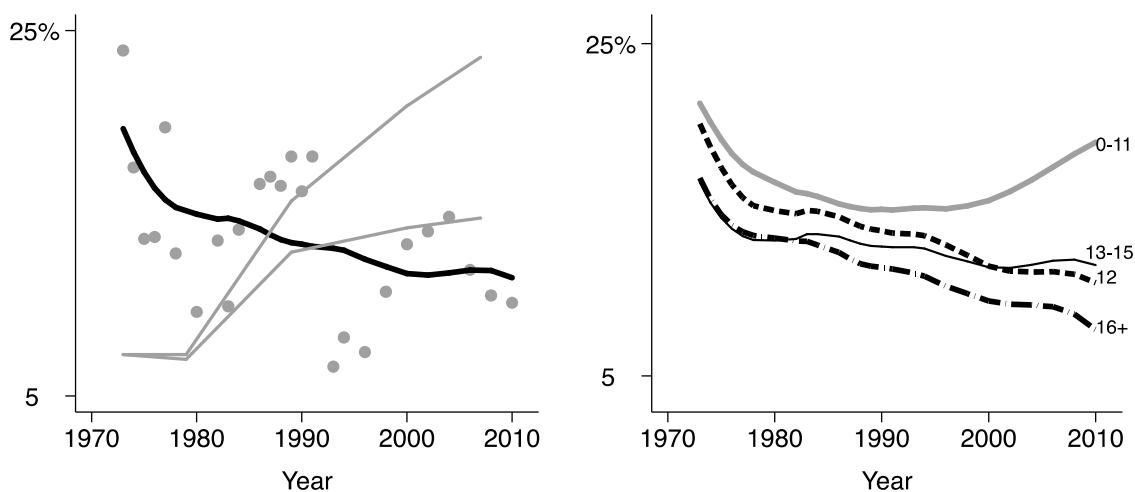
To the extent it increases people's perceptions of separation or social distance in the country, income inequality may reduce general trust. The GSS also has asked respondents whether they feel "most people can be trusted" or "you can't be too careful in life."

**Trust in the legislature**

The share of American adults saying they have “a great deal” of confidence in the U.S. Congress has always been low; at its high point during these years it was just 24 percent. The over-time trend is shown in the first chart in figure 4.3.1. The share dropped sharply in the 1970s, reaching just 10 percent in 1980. Since then it has moved up and down depending on the state of the economy and on events such as the September 11, 2001 terrorist attacks. Given that the bulk of the rise in income inequality in the United States has occurred since the 1970s, it is difficult to see any impact of changes in income inequality on trust in the national legislature.

The second chart in figure 4.3.1 shows the social gradient by education. Here we see the emergence of a “reverse gradient,” with less-educated Americans having the most confidence and the gap widening over time, particularly since the mid-1990s. It isn’t clear why this happened, but it does not seem consistent with a hypothesis that focuses on the impact of rising income inequality.

**Figure 4.3.1 Confidence in the legislature**



Percent saying they have a great deal of confidence in the legislature. Question: “I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in Congress.” Data source: General Social Survey, variable conlegis. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

**Trust in the executive**

The share of Americans saying they have a great deal of confidence in the executive branch of the federal government has varied between 10 percent and 30 percent since the early 1970s, with movement corresponding more to the business cycle than to the upward secular trend in income inequality. This is shown in the first chart in figure 4.3.2.

The second chart shows the social gradient by education. There is no indication of a systematic gradient; the best- and least-educated have tended to have the greatest confidence in the president.

**Trust in the legal system**

The GSS question here is specifically about the Supreme Court, rather than the courts or judicial system overall. The share expressing “a great deal” of support is shown in the first chart in figure 4.3.3. We see no shift over time.

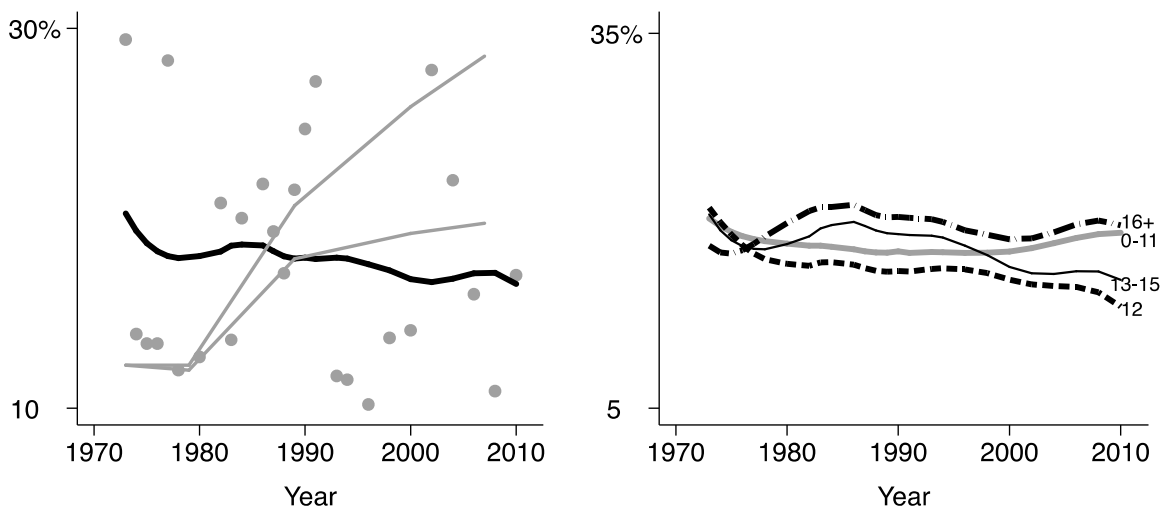
The social gradient by education is shown in the second chart. Once more we see no clear gradient, nor a pattern over time consistent with the shift in income inequality.

**Trust in other people**

As the first chart in figure 4.3.4 indicates, in the early 1970s more than 45 percent of American adults agreed that most people can be trusted. Since then this share dropped steadily. Although this trend is broadly similar to that of income inequality, the fact that the decline in trust began in the 1970s calls into question the direction of causality. Robert Putnam and Anant Thaker (2010) argue that the causality runs from social capital/trust to income inequality.

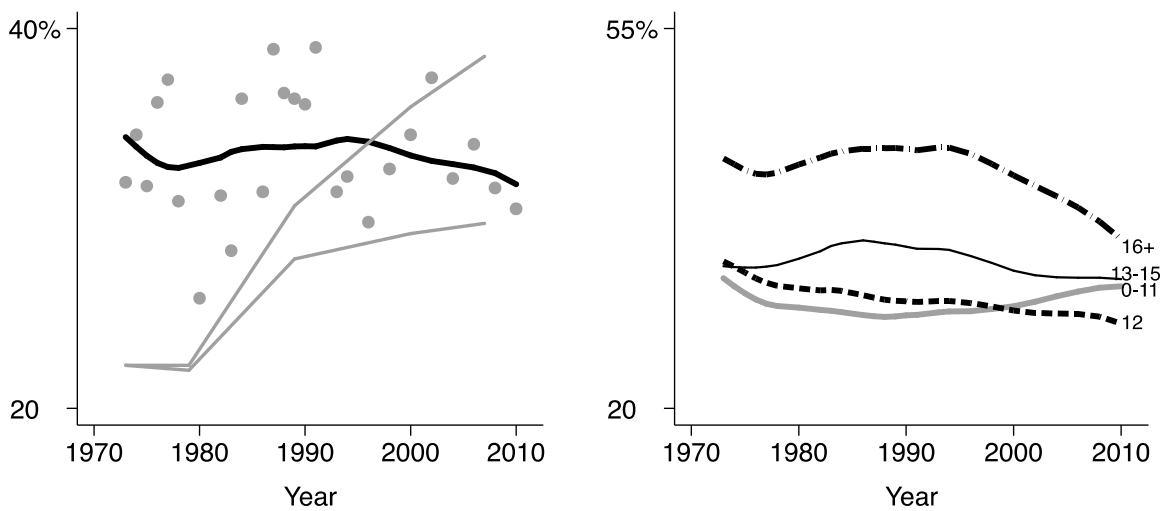
There is a sharp social gradient by education, as shown in the second chart in figure 4.3.4. But it does not appear to have widened over time.

Figure 4.3.2 Confidence in the executive

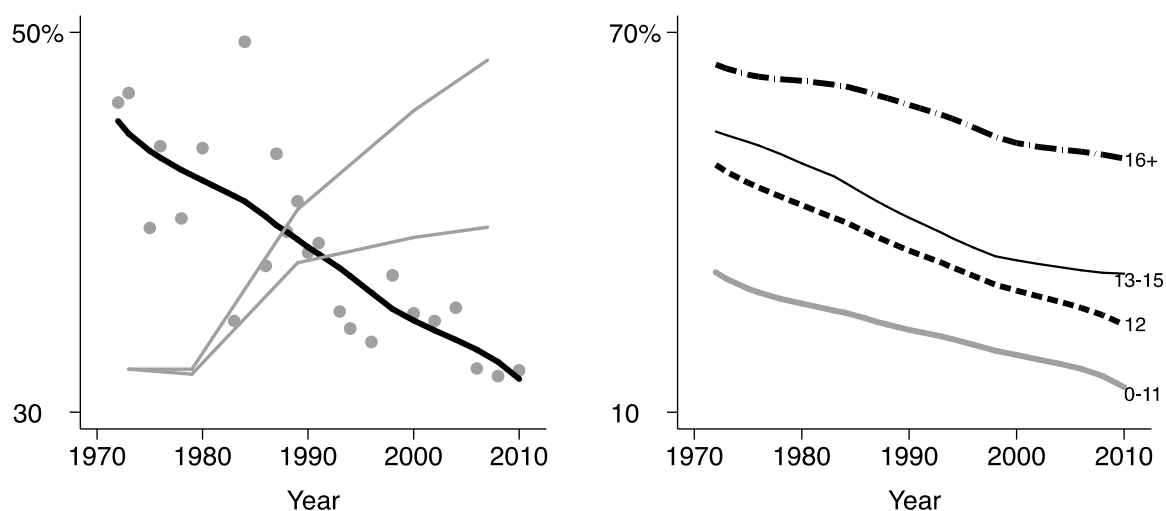


Percent saying they have a great deal of confidence in the executive. Question: "I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in the executive branch of the federal government." Data source: General Social Survey, variable confed. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

Figure 4.3.3 Confidence in the courts



Percent saying they have a great deal of confidence in the Supreme Court. Question: "I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in the U.S. Supreme Court." Data source: General Social Survey, variable conjudge. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

**Figure 4.3.4 Trust in others**

Percent saying most people can be trusted. Question: “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in life?” Response options: can trust, cannot trust, depends. Data source: General Social Survey, variable trust. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

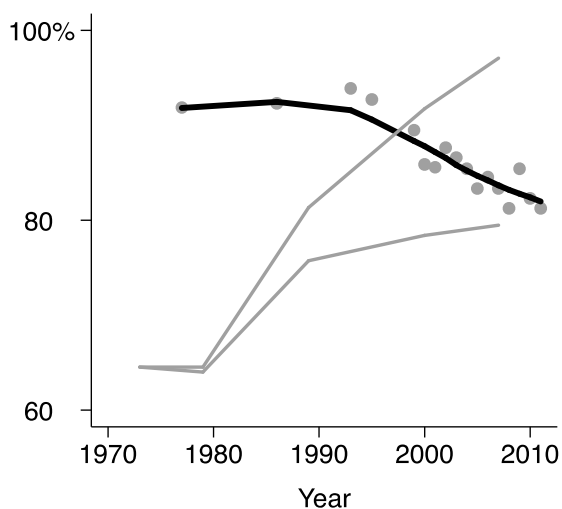
#### 4.4 Political Values and Legitimacy

With a rise in income inequality, we may expect to observe an increase in selfishness and intolerance. This might result from financial pressures on those in the middle or at the bottom or due to a reduced sense of societal cohesion and harmony.

##### **Percent agreeing no further immigrants to be allowed to country**

Figure 4.4.1 shows data from Gallup polls on the share of Americans who would prefer to keep immigration at its current level or reduce it (this does not necessarily mean stop all further immigration). The share actually decreased somewhat beginning in the 1990s and continuing in the 2000s. This is not what we would expect given the rise in income inequality.

**Figure 4.4.1 Percent saying no further immigrants should be allowed**

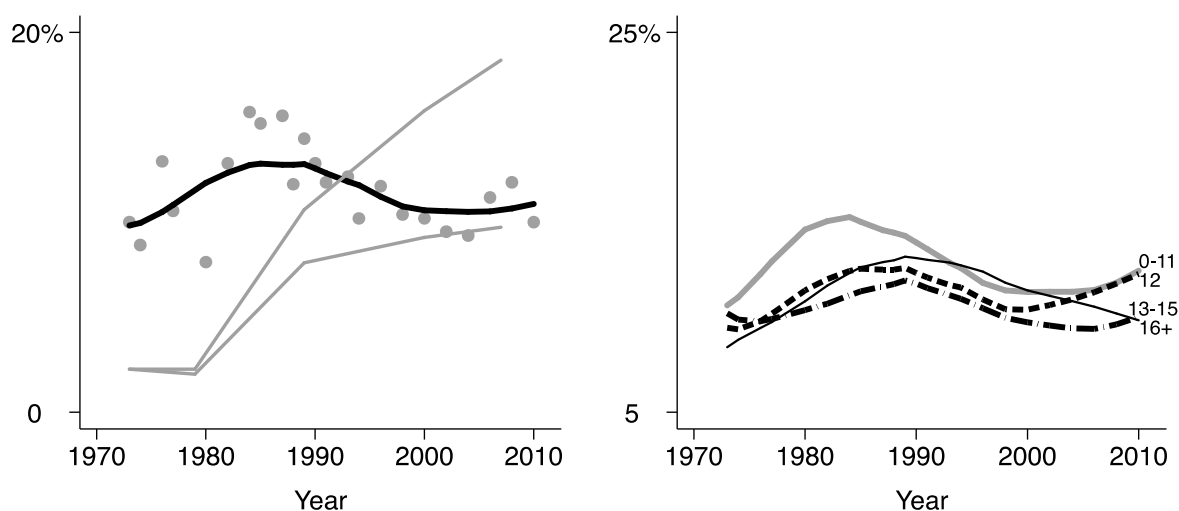


Share responding present level or decreased. Question: “Thinking now about immigrants—that is, people who come from other countries to live here in the United States. In your view, should immigration be kept at its present level, increased, or decreased?” Data source: Gallup. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1 percent; the line that rises less does not (see figure 3.1.1 for sources).

**Percent agreeing that getting ahead in society depends on luck/family**

The first chart in figure 4.4.2 shows the share of Americans saying they believe getting ahead is mainly a result of luck or help from others rather than from hard work. This share did not change over the period for which data are available.

The second chart in figure 4.4.2 shows the social gradient by education. There was no noticeable shift during the period of rising income inequality.

**Figure 4.4.2 Percent saying people get ahead mainly due to lucky breaks or help from others**

Question: “Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?” Response options: hard work, both equally, luck or help, other. Data source: General Social Survey, variable *getahead*. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1 percent; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

#### 4.5 Values about Social Policy and Welfare State

A generation of public opinion research, using both standard survey findings and more in-depth qualitative investigation, suggests the following: Most Americans support capitalism and business. Many believe hard work, rather than luck or help from others, is the key to success. Many feel they have opportunity to get ahead. Many believe income inequality is too high and that high inequality is not necessary for the country’s prosperity. At a general level, many are sceptical about government’s ability to help. There is limited support for enhanced redistribution as a remedy for high inequality. Yet Americans do support increased government spending on programs perceived to enhance opportunity and economic security.

Figures 4.5.1 through 4.5.4 show trends in the share of Americans who believe income differences between rich and poor are too large, in the share who believe government ought to reduce income differences between rich and poor, in the share who believe the rich are paying too little in taxes, and in the share who think the government is spending too little on the poor.

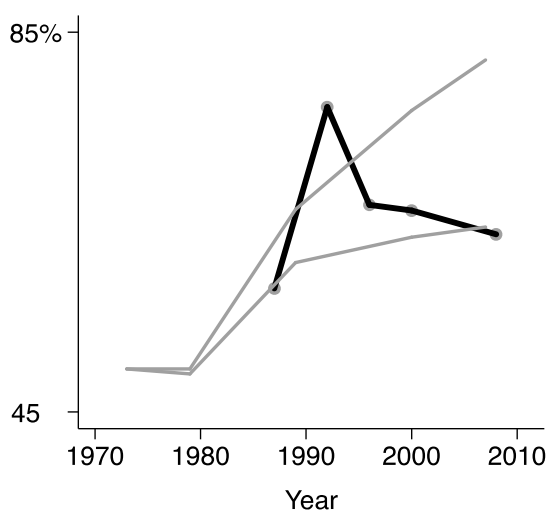
There is a growing literature on public opinion responses to the rise in income inequality in the United States (e.g., Bartels, 2008; McCall and Kenworthy, 2009; Page and Jacobs, 2009; McCall, 2012). The thrust of the conclusion is that Americans do appear to have noticed that income

inequality has been rising, even before the Occupy Wall Street movement brought the issue to the forefront. But there has been little or no increase in support among Americans for programs that directly address income inequality—for instance by increasing taxes on the well-off or by increasing transfers to the poor. Indeed, the share saying the rich pay too little in taxes has tended to decrease rather than increase (figure 4.5.3). Instead, the rise in inequality seems to have increased Americans’ support for programs perceived as boosting opportunity and economic security, such as education and health care.

One curiosity is the rise in the early 1990s in the share of Americans strongly agreeing or agreeing that income differences are too large. This is in figure 4.5.1. This appears to have been the product of growing media attention to sharply increasing CEO pay during these years, coupled with the Clinton presidential campaign’s emphasis on the issue (McCall, 2012).

We have data on the social gradient by education for two of the four indicators shown in figures 4.5.1–4.5.4. Interestingly, they tell very different stories. We see an unexpected narrowing of the gradient for the share agreeing that the government ought to reduce income differences between the rich and the poor. The gradient for the share saying the country is spending too little on assistance to the poor widened, which is what we might expect during a period of sharply rising income inequality. But the widening was quite minor.

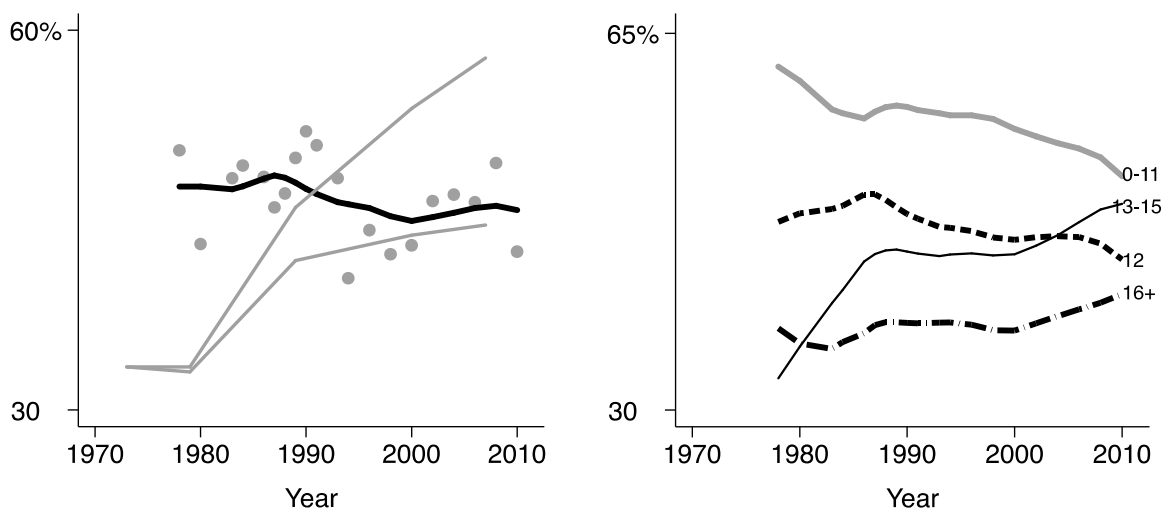
**Figure 4.5.1 Percent strongly agreeing or agreeing that income differences are too large**



Question: “Differences in income in America are too large. Do you agree or disagree?” Response options: agree strongly, agree, neither, disagree, disagree strongly. Data source: General Social Survey, variable incgap. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

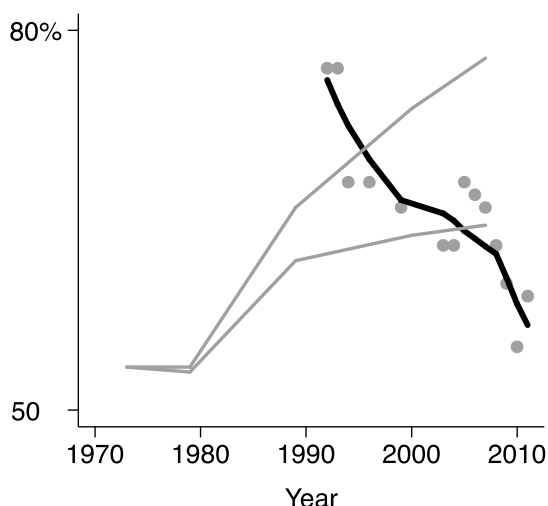


**Figure 4.5.2 Percent agreeing that the government ought to reduce income differences between the rich and the poor**



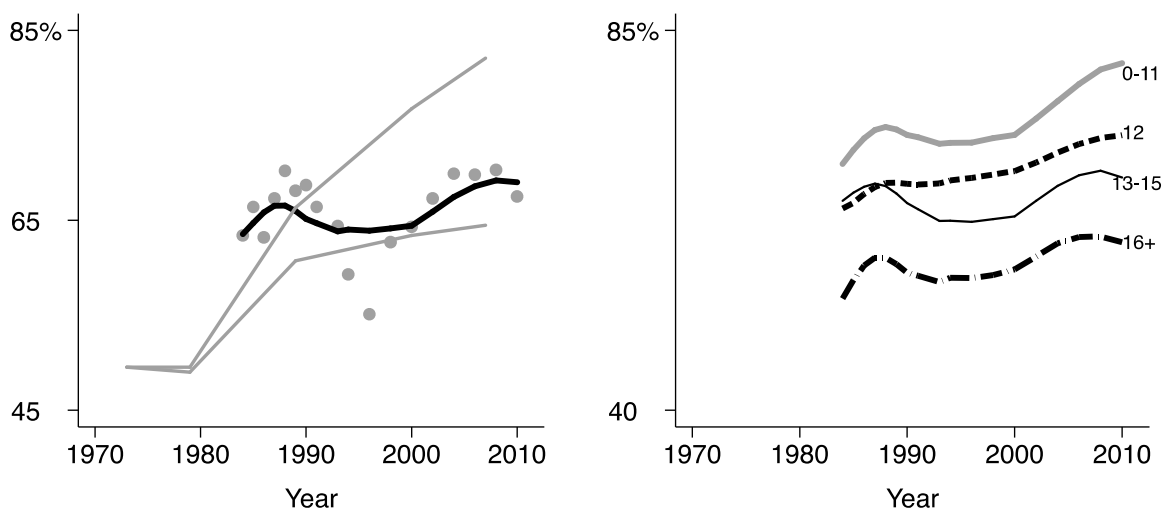
Share choosing 1, 2, or 3 on a 7-point scale. Question: “Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel?” Data source: General Social Survey, variable eqwlth. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

**Figure 4.5.3 Percent saying upper-income people are paying too little in federal taxes**



Question: “As I read off some different groups, please tell me if you think they are paying their fair share in federal taxes, paying too much, or paying too little. Upper-income people.” Data source: Gallup. The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1 percent; the line that rises less does not (see figure 3.1.1 for sources).

Figure 4.5.4 Percent saying the country is spending too little on assistance to the poor



Question: “We are faced with many problems in this country, none of which can be solved easily or inexpensively. I’m going to name some of these problems, and for each one I’d like you to tell me whether you think we’re spending too much money on it, too little money, or about the right amount. Assistance to the poor.” Data source: General Social Survey, variable natfarey. First chart: The dark line is a loess curve. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources). Second chart: Social gradient by education. The line labels (0-11, 12, 13-15, 16+) refer to years of schooling completed. The lines are loess curves.

#### 4.6 Conclusion

For the political and cultural outcomes we have considered in this chapter, there appears to be limited support for the hypothesis of an adverse impact of rising income inequality on average levels of outcomes. Nor is there indication of an association between rising income inequality and widening social gradients by education.

In the United States two additional hypotheses about adverse effects of income inequality have been advanced. One is that it has increased polarization between the two political parties. The other is that it has enhanced the political influence of the rich.

Party polarization refers to the fact that elected Republican legislators have moved to the right on key economic issues while Democratic legislators have moved to the left. Here the timing is a bit of a problem. According to the authoritative study of party polarization in the U.S., *Polarized America*, by Nolan McCarty, Keith Poole, and Howard Rosenthal, “In both chambers [the House and the Senate], the Republicans became more moderate until the 1960s and then moved in a sharply conservative direction in the 1970s. The pattern for the Democrats is almost exactly the opposite. Consequently, the two party means [average party positions] moved closer together during the twentieth century

until the 1970s and then moved apart” (McCarty, Poole, and Rosenthal, p. 27). But income inequality between the top 1 percent and the bottom 99 percent didn’t begin increasing until the 1980s.

What of inequality of political influence? Money clearly matters in American politics. It can boost the election chances of a particular candidate, and it can get donors or lobbyists a hearing with an elected representative (Jacobs et al., 2004). With the richest getting a larger and larger share of the country’s income, it is sensible to hypothesize that they would have greater success in swaying policy makers to support their preferences.

Here too, though, supportive evidence is lacking. The most direct evidence comes from studies by Larry Bartels and Martin Gilens (Bartels, 2008; Gilens, 2012). Bartels examined the association between senators’ votes on proposed policy changes and the opinions of people in the lower third, middle third, and upper third of the income distribution. He found that voting correlated much more closely with the views of those with higher incomes. Bartels’ analysis covered the period from 1989 to 1994. Gilens extended Bartels’ analysis by examining both the Senate and the House of Representatives and by covering the presidencies of Lyndon Johnson, Ronald Reagan, Bill Clinton, and George W. Bush. His finding echoed that of Bartels.

What we need to know, however, is whether this pattern of unequal influence has increased as income inequality has risen. According to Gilens’ findings, the association between affluence and influence was weak during the Johnson presidency, strong during the presidencies of Reagan and Clinton, and relatively weak during the presidency of George W. Bush. This is not what the inequality hypothesis predicts, though there may be some confounding factors, such as the September 11, 2001 terrorist attacks, that skew the pattern during the Bush years.

This is by no means a full and complete test of the inequality hypothesis. After all, the well-to-do may exert their influence mainly by keeping proposed reforms from ever coming to a vote and by behind-the-scenes shaping of legislation that does pass. It’s quite possible that their growing income share has enhanced their ability to pull these kinds of levers. But if this has in fact happened, it has yet to be effectively documented.

In their recent book *Winner-Take-All Politics*, Jacob Hacker and Paul Pierson (2010) detail a litany of policy initiatives since the mid-1970s that in their view have had a significant influence—some because they were passed, others because they were blocked—on the degree of income inequality in the United States and on the living standards of ordinary Americans. But there is no indication in their account of a steady increase in the tendency for policy to favor the rich.

One final point on income inequality and unequal political influence: The influence of money in American politics occurs mainly via lobbying rather than campaign contributions, and lobbying is

funded primarily by companies and other organizations rather than by individuals. The amount of money spent on lobbying has increased exponentially in the past several decades (Center for Responsive Politics). But much of that increase, if not all of it, might have occurred in the absence of a rise in income inequality.

Political and cultural impacts: summary chart						
	1970s	1980s	1990s	2000-07	2008-11	Figure #
Income inequality	→	↗	↗	↗	↗	3.1.1
Voter turnout	↘	→	→	↗		4.2.1
Union membership	↘	↘	↘	↘	→	4.2.2
Membership in civic organizations	↘	↘	↘			
Confidence in the legislature	↘	↘	→	→	→	4.3.1
Confidence in the executive	→	→	→	→	↗	4.3.2
Confidence in the courts	→	→	→	→	→	4.3.3
Trust in others	↘	↘	↘	↘	→	4.3.4
Allow no more immigrants		→	↘	↘	→	4.4.1
Get ahead due to luck or help	↗	→	↘	→	↘	4.4.2
Income differences are too large		↗	→	→		4.5.1
Government should reduce income diffs		→	↘	→	↘	4.5.2
Top paying too little in taxes			↘	→	↘	4.5.3
Too little spending on the poor		→	→	→		4.5.4

## 5. Effectiveness of policies in combating inequality

We begin with some background information on public social expenditures, government revenues, and the tax mix (section 5.1). We then draw three principal conclusions about the role and effectiveness of policies in combating inequality (sections 5.2–5.4).

### 5.1 Public Social Expenditures, Government Revenues, and the Tax Mix

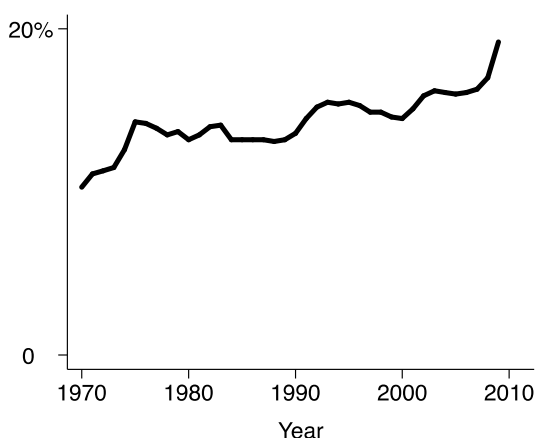
Relative to other affluent nations, the United States spends a small share of its GDP on public social programs. Its overall spending on social programs is average, but a significant share consists of private expenditures, particularly by employers for pensions and health insurance (Hacker, 2002; Garfinkel, Rainwater, and Smeeding, 2010).

Figure 5.1 shows that expenditures rose between 1970 and 2007 from about 10 percent of GDP to 16 percent. A good bit of this rise was due in public health care spending. In the great recession they then shot up, due to the drop in GDP, the rise in spending on automatic stabilizers such as unemployment compensation, and increases in the generosity of programs included in the 2009 Recovery Act (Burtless and Gordon, 2011).

Figure 5.2 shows the trend in total government revenues as a share of GDP. This consists mainly of taxes but also includes some fees and other revenue sources. There has been little change over time.

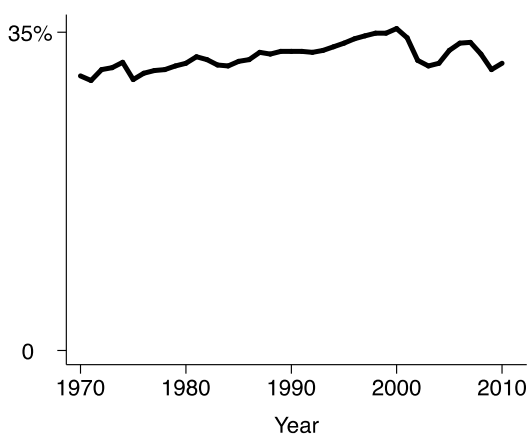
Figure 5.3 shows that taxes on income and profits are the chief sources of tax revenues in the United States. The next largest source is taxes on payroll. The United States stands out among affluent countries in its limited use of consumption taxes (Kenworthy, 2011).

Figure 5.1 Public social expenditures



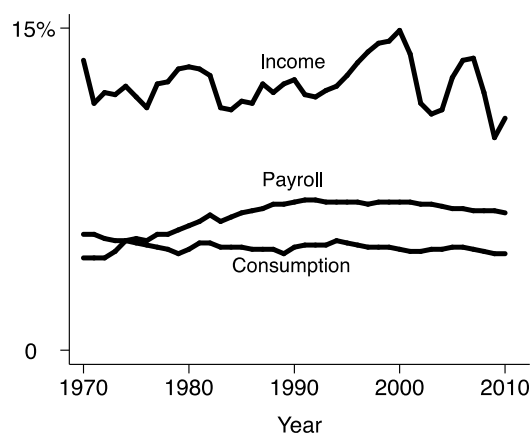
Public social expenditures as a share of GDP. Data source: OECD social expenditures database.

Figure 5.2 Government revenues



General government revenues as a share of GDP. Includes taxes and other sources of revenue. Data source: OECD.

Figure 5.3 The tax mix



Government revenues as a share of GDP for the three principal types of taxes. Data source: OECD revenue statistics database.

## 5.2 Did Rising Income Inequality Elicit a Response by Policy Makers?

In the United States, there is little to no evidence that policy makers have taken action specifically intended to mitigate or reverse or compensate for the rise in income inequality. Prior to the emergence of the Occupy Wall Street movement in 2011, policymakers and journalists hardly ever made reference to the issue of income inequality, though concerns about very high CEO pay occasionally have received some attention (McCall, 2012). It is therefore unlikely that any changes in tax and/or transfer programs were aimed to any significant degree at addressing the growth of income inequality *per se*.

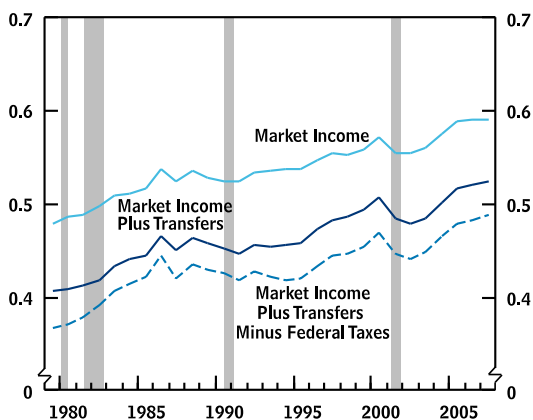
One exception is that in 1993 the newly-elected Clinton administration changed the tax rules for executive compensation, capping the amount that could be deducted at \$1 million unless it was “performance-based.” Ironically, this attempt to slow the rise in high-end incomes had exactly the opposite effect. Corporate accountants quickly figured out ways to classify pay above the threshold as performance-based (Epstein and Javers, 2006). Perhaps more important, the change encouraged firms to accelerate the shift toward compensation via stock options, which were the chief source of skyrocketing income for a number of American CEOs in the 1990s and 2000s (Jarque, 2008; Weinstein, 2009).

## 5.3 Did Policy Changes Help to Offset the Rise in Market Inequality?

Nor have actual changes in tax or transfer policy made any headway at stemming the rise in inequality. The easiest way to see this is via calculations by the Congressional Budget Office (CBO). Figure 5.4 shows the CBO’s estimate of income inequality (Gini) for pretransfer-pretax income and for posttransfer-posttax income from 1979 to 2007. Both rise at roughly the same pace; there was no closing of the gap.

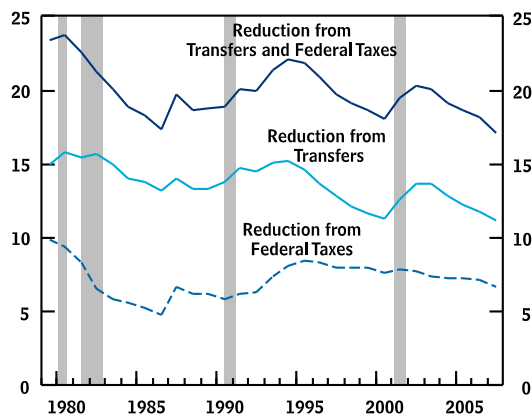
Figure 5.5 shows this in another way—inequality reduction (percentage difference in Gini) from government transfers, federal taxes, and the two combined. Inequality reduction decreased slightly in percentage terms over this period (in absolute terms it was flat).

**Figure 5.4 Pretransfer-pretax income inequality, posttransfer-pretax income inequality, and posttransfer-posttax income inequality**



Gini coefficients. Source: Congressional Budget Office (2011a).

**Figure 5.5 Contribution of government transfers and federal government taxes to reduction of income inequality**



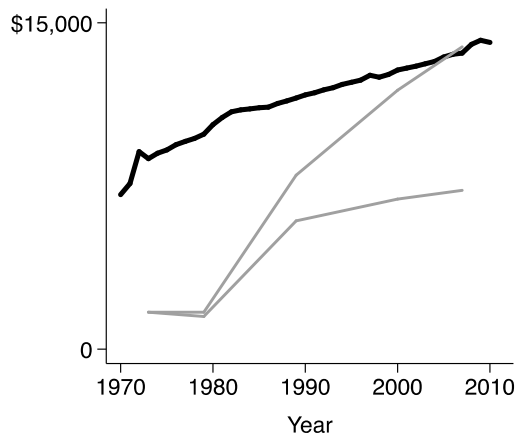
Percentage reduction in the Gini coefficient for income inequality. Source: Congressional Budget Office (2011a).

Redistribution achieved via federal taxes decreased as a result of the 1981 Reagan income tax reform, which substantially lowered the top marginal tax rate. This was partly offset by a 1993 reform. The other two major tax reforms during these decades, in 1986 and 2001/03, produced little change in the redistributive impact of taxation.

Broadly speaking, government transfers merely kept up with inflation, rather than with growth of the economy (Kenworthy, 2011). Hence benefit recipients, who tend to be in the lower part of the income distribution, fell further behind those who the high end whose market incomes were rising. Figures 5.6 to 5.15 show trends in benefit levels and in coverage for five representative programs: Social Security (public pensions), the Earned Income Tax Credit, social assistance (AFDC until 1996, then TANF), Supplemental Nutritional Assistance (“food stamps”), and disability payments. Benefit levels for Social Security, the EITC, and disability rose in real terms. The benefit level for SNAP was flat through the period. The benefit level for America’s main social assistance program, AFDC-TANF, declined steadily; coverage too declined after the mid-1990s.

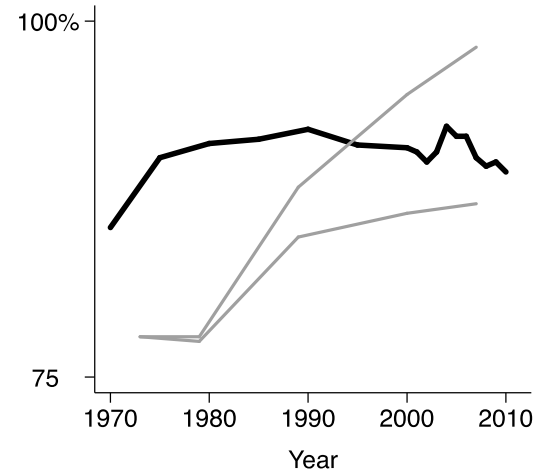


**Figure 5.6 Social Security benefit level**



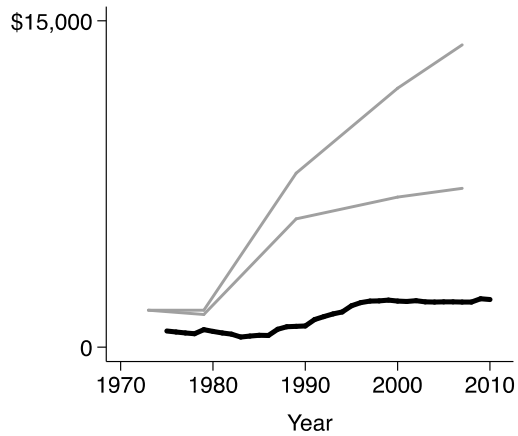
Average annual Social Security benefit for retired workers. Inflation adjustment is via the CPI-U-RS. Data source: Social Security Administration, Annual Statistical Supplement to the Social Security Bulletin, 2011, table 3.C4. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.7 Social Security coverage**



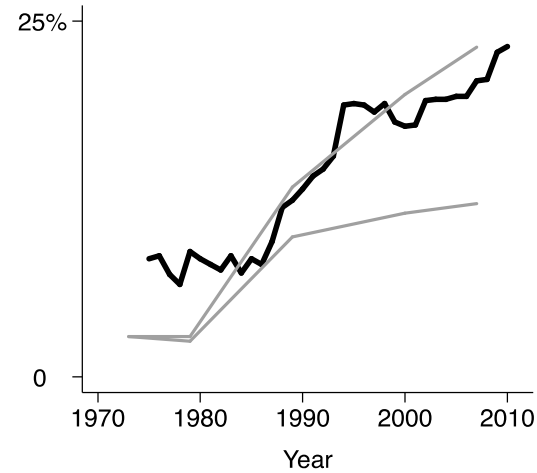
Social Security recipients as a share of persons age 65 or older. Data source: Social Security Administration, Annual Statistical Supplement to the Social Security Bulletin, 2011, table 3.C5. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.8 Earned Income Tax Credit benefit level**



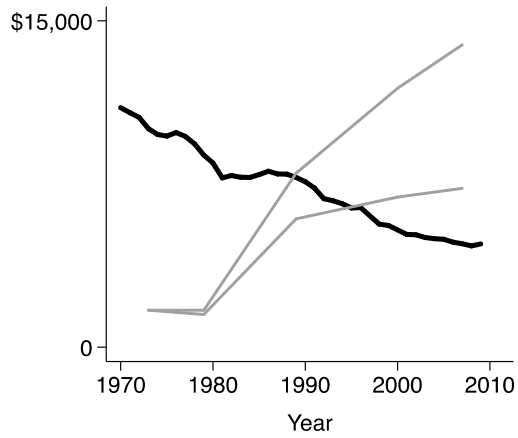
Average EITC benefit per recipient household. Includes federal EITC payments only; does not include state EITC supplements. Inflation adjustment is via the CPI-U-RS. Data source: Tax Policy Center, [www.taxpolicycenter.org](http://www.taxpolicycenter.org). The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.9 Earned Income Tax Credit coverage**



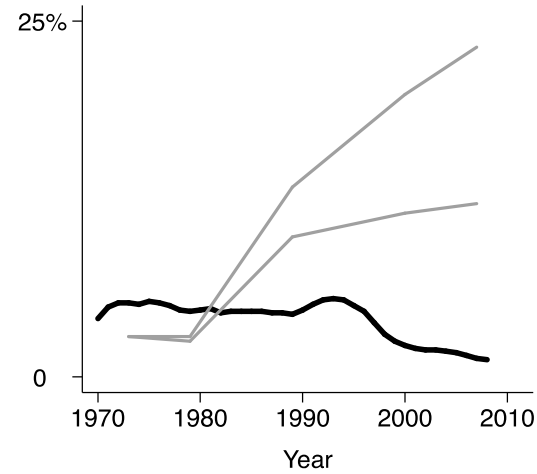
EITC recipients (persons) as a share of the population. Number of recipient families multiplied by average U.S. household size. Data sources: Tax Policy Center; U.S. Census Bureau. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

Figure 5.10 AFDC-TANF (social assistance) benefit level



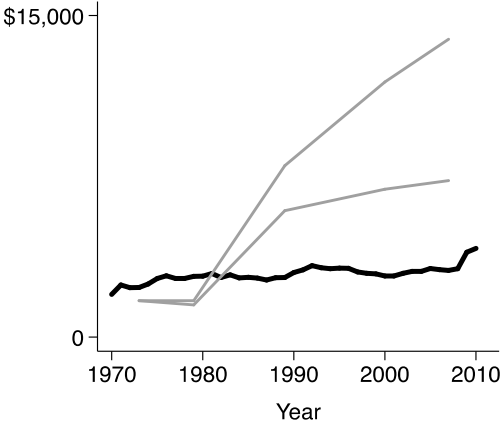
Average AFDC-TANF benefit per recipient household. Inflation-adjustment is via the CPI-U-RS. AFDC = Aid to Families with Dependent Children, 1970-96. TANF = Temporary Assistance for Needy Families, 1997ff. Data source: Social Security Administration, Annual Statistical Supplement to the Social Security Bulletin and [www.acf.hhs.gov/programs/ofa/character/index.html](http://www.acf.hhs.gov/programs/ofa/character/index.html), table 41. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

Figure 5.11 AFDC-TANF (social assistance) coverage



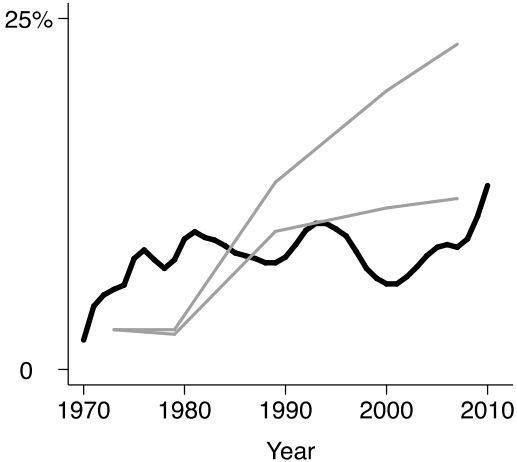
AFDC-TANF recipients (persons) as a share of the population. AFDC = Aid to Families with Dependent Children, 1970-96. TANF = Temporary Assistance for Needy Families, 1997ff. Data sources: House Ways and Means Committee, 2008 Green Book; U.S. Department of Health and Human Services, [www.acf.hhs.gov/programs/ofa/data-reports/caseload/caseload\\_recent.html](http://www.acf.hhs.gov/programs/ofa/data-reports/caseload/caseload_recent.html). The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.12 Supplemental Nutritional Assistance Program (“food stamp”) benefit level**



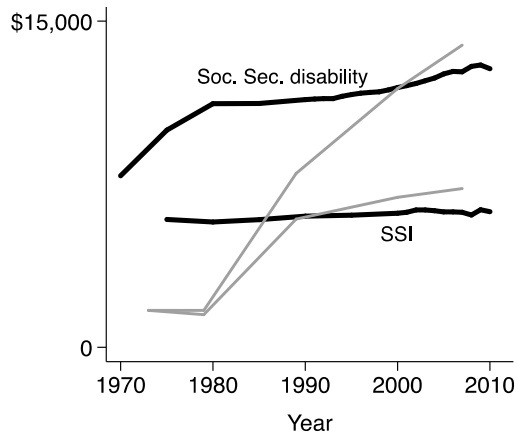
Average SNAP benefit per recipient household. Calculated as average benefit per person multiplied by average household size. Inflation adjustment is via the CPI-U-RS. Data source: U.S. Department of Agriculture, [www.fns.usda.gov/pd/SNAPsummary.htm](http://www.fns.usda.gov/pd/SNAPsummary.htm). The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.13 Supplemental Nutritional Assistance Program (“food stamp”) coverage**



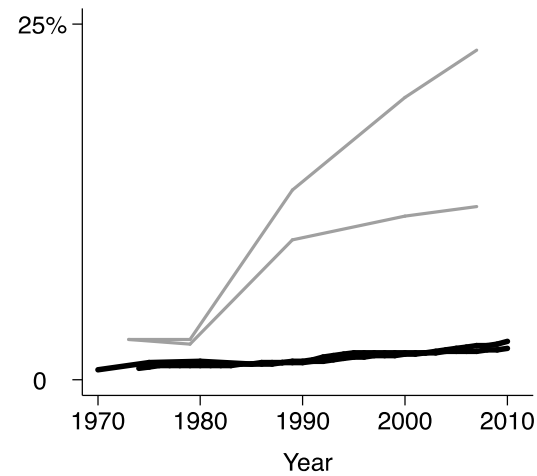
SNAP recipients (persons) as a share of the population. Data sources: U.S. Department of Agriculture; U.S. Census Bureau. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.14 Disability payment benefit level**



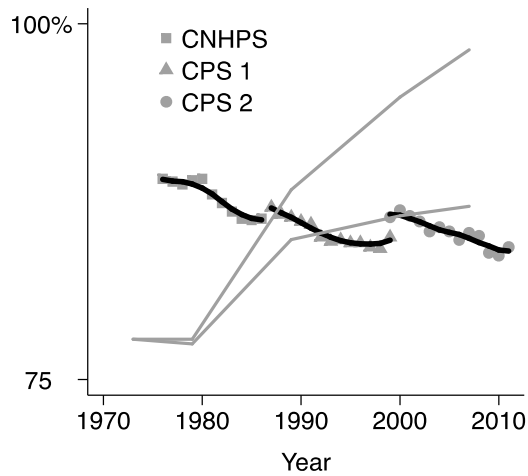
Average Social Security benefit for blind or disabled workers (“Social Security disability”) and average Supplemental Security Income (SSI) benefit. Inflation-adjustment is via the CPI-U-RS. Data source: Social Security Administration, Annual Statistical Supplement to the Social Security Bulletin, 2011, tables 5.E2 and 7.A5. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.15 Disability payment coverage**



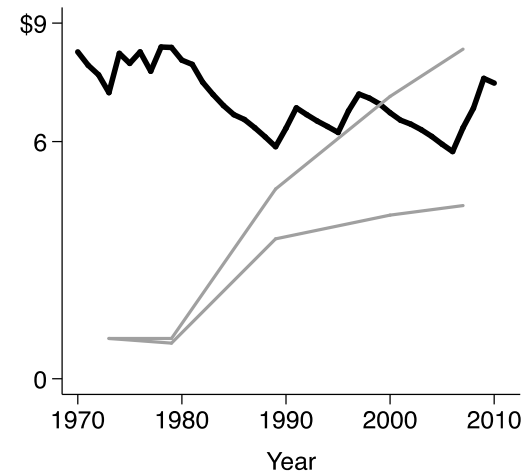
Social Security benefits for blind or disabled workers recipients as a share of the population; Supplemental Security Income (SSI) recipients as a share of the population. Data source: Social Security Administration, Annual Statistical Supplement to the Social Security Bulletin, 2008, tables 5.D3 and 7.A9. The grey lines are two measures of income inequality (Gini’s) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

Figure 5.16 Health insurance coverage



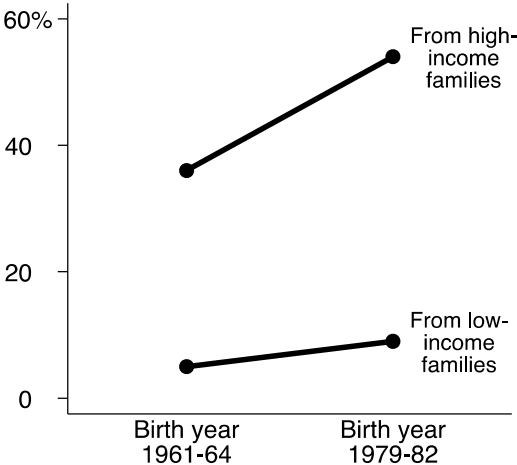
The lines are loess curves. Data sources: CNHPS is from Marc Miringoff and Margue-Luisa Miringoff, *The Social Health of the Nation*, Oxford University Press, 1999, p. 198, using Center for National Health Program Studies data. CPS 1 and CPS 2 are from Census Bureau, *Income, Poverty, and Health Insurance Coverage in the United States: 2010*, table C-1, using Current Population Survey data. The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

Figure 5.17 Statutory minimum wage



Federal statutory hourly minimum wage. Inflation-adjustment is via the CPI-U-RS. Data source: Mishel et al (2012, figure 4AD). The grey lines are two measures of income inequality (Gini's) in business-cycle peak years (set equal to one another in the early 1970s). The inequality line that rises more includes the top 1%; the line that rises less does not (see figure 3.1.1 for sources).

**Figure 5.18 College completion among persons from low-income and high-income families**



College completion: four or more years of college. Low-income family: the person’s family income during childhood was in the lowest quarter of the income distribution. High-income family: income during childhood was in the highest quarter. Data source: Bailey and Dynarski, 2011, figure 6.3, using National Longitudinal Survey of Youth data.

Government-funded health insurance expanded somewhat through this period. Part of this owes to population aging, which results in a larger share of the population being eligible for Medicare. Another part was due to expansion of access to Medicaid in the 1980s and then again in the late 1990s (S-CHIP). If fully implemented, the 2010 Affordable Care Act will further increase access to Medicaid. Up to this point, however, these expansions have been insufficient to offset declining health coverage from employers. As a result, the share of Americans without health insurance increased, albeit modestly, during this period of rising income inequality, as shown in figure 5.16.

The minimum wage in the United States is a statutory one, determined by the government rather than collective bargaining. Figure 5.17 shows that despite the steady rise in income inequality in the 1980s, 1990s, and 2000s, the minimum wage was allowed to fall in real terms in the 1980s and has remained essentially flat since then.

Finally, government has failed to respond adequately to the rise in the price of university education. In part because of the increase in college cost, the gap in college graduation rates between children from high-income families and those from low-income families has widened sharply in the past generation, as shown in figure 5.18.

#### **5.4 Did Policy Changes Affect the Rise in Market Income Inequality Itself?**

Not only did policy changes do little to stem the rise of market income inequality in the United States; they may have been one of the key contributors to that rise. The large and sustained increase in inequality of pretransfer-pretax income has multiple causes, from technological shifts to heightened globalization and domestic competition to altered corporate governance structures to the emergence of winner-take-all markets to weakened unions and more. Jacob Hacker and Paul Pierson (2010) suggest that government policy was among the key contributors to these and other changes that produced the run-up in inequality.

They call particular attention to three aspects of government policy. The first is American labor law, which has made it difficult for unions to survive in the modern economy. In the 1980s and 2000s enforcement of labor law also weakened considerably. The second is financial deregulation, which occurred steadily through the 1980s and 1990s. This facilitated the stunning rise in pay for Wall Street traders and analysts. The third is a failure to require expensing of stock options during much of the period of surging CEO pay in the 1980s and 1990s.



## 5.5 Conclusions

In the past three decades inequality of pretransfer-pretax income in the United States—already quite high relative to other affluent longstanding democratic nations—increased sharply. We find no indication of action by U.S. policy makers aimed at ameliorating or reversing this rise. Consequently, redistribution achieved via tax and transfer programs did not increase; instead, it decreased somewhat. Finally, it is worth emphasizing that policy very likely had a hand in contributing to the rise in inequality of pretransfer-pretax income.

## 6. Summary and Conclusion: The Current Status and Future of Inequality in America

In the 1970s the United States had one of the most unequal (possibly the most unequal) income distributions among the world's rich nations. In the ensuing decades it has become even more unequal, and the pace of growth of inequality has been faster than almost anywhere else. If we exclude the top 1 percent, as do the data for other countries in this project, income inequality rose rapidly in the 1980s and slowly in the 1990s and 2000s. If we include the top 1 percent, it rose rapidly in all three decades.

The causes of America's high level and rapid growth in income inequality since the 1970s are multiple: weak and weakening unions, stagnant educational attainment, a surge in globalization, an increase in competition in mainly domestic industries, skill-biased technological change, a shift in corporate governance toward emphasis on "shareholder value" and short-run profits, growing use of pay-for-performance, an increase in low-skilled immigration, a stall in the real value of the statutory minimum wage, deregulation (particularly in finance), growing use of stock options to reward CEOs coupled with a sharp run-up in stock values, the spread of winner-take-all markets in various industries, and reductions in effective tax rates for households at the top. There is no single culprit. Indeed, there is little agreement among scholars on even the top handful of causes, save labor market inequality which forms the majority of market incomes in the United States. But then many of these same arguments can be made about the causes of labor market inequality

What have been the social and political impacts? We hesitate to ascribe causality based on observation of trends in a single country. Instead, we call attention to outcomes in which the timing of change appears to be consistent with what we would expect if rising inequality did have a causal effect. In some cases the trends are correlated and in others not. But, again, causation is hard to establish for such wide ranging topics

What might we expect for the future of income inequality in the United States? We see no strong reason to expect a reversal or even a slowing of the upward trend that characterizes the past few decades. The drivers of that trend are many, and they look likely to continue. Economic shocks or changes in institutions and policies might intervene. But that hasn't happened to this point. Some hoped that the mid-to-late 1990s, when real wages began to grow in the middle and below, would mark the end of inequality's rise. But that didn't happen. Others viewed the 2008–11 economic crisis

as the harbinger of profound shifts that might include a return to a more even distribution of the proceeds of economic growth. But after a brief pause, income inequality has returned to its upward path.

In figure 6.1 we include a final summary chart of economic political, cultural and social trends. As mentioned above, and as shown in panel A of figure 6.1, almost all of the economic variables show an upward trend despite their already high levels. Most often, economic outliers return to the pack, but United States inequality is an ever increasing outlier. This suggests that indeed the United States is different from other rich nations, especially the EU nations.

The next two panels include selected political, cultural, and social impacts. Again, as in social surveys such as the GSS, the United States is an important outlier. We do not trust one another, nor the governments we elect. We do not think income differences are too large and there is no strong opinion that the government can reign in income inequality. Most social impacts, save the rise in single parenthood, and the rising prison population, do not conform with rising inequality. And inequality would have been higher still if the prison population were counted in the inequality figures (Pettit, 2012).

Perhaps the most damning indicator of rising inequality is falling intergenerational mobility. America is not a country which is terribly fixated on overall 'outcome' inequality, be it wealth, consumption or income inequality. Poverty is often blamed on the lack of initiative of the poor rather than on social malaise. And individual effort, self-reliance, and the importance of the work ethic are widely seen as the ways to get ahead in the United States. But the United States is also widely supportive of the principle of equal opportunity. Increasingly people are finding links between declining opportunity and inequality, especially for the middle class. How this sharp contrast between inequality of outcome or results, and inequality of opportunity plays itself out is likely the most important social question before our country today.

**Figure 6.1: Economic, political, cultural, and social impacts: A final summary chart**

A. Economic Impacts	1970s	1980s	1990s	2000-07	2008-11	Figure #
Income inequality	→	↗	↗	↗	↗	3.1.1
Wage inequality		↗	↗	↗	↗	2.14
Consumption inequality		↗	↗	↗	↗	2.14
Wealth inequality		→	→	→	↗	Table 2.1
Relative poverty	→	↗	→	↗	↗	3.1.2
Absolute incomes of the poor		→	↗	→	↘	3.1.3
B. Political and Cultural Impacts	1970s	1980s	1990s	2000-07	2008-11	Figure #
Union membership	↘	↘	↘	↘	→	4.2.2
Confidence in the executive	→	→	→	→	↗	4.3.2
Confidence in the courts	→	→	→	→	→	4.3.3
Trust in others	↘	↘	↘	↘	→	4.3.4
Income differences are too large		↗	→	→		4.5.1
Government should reduce income diffs		→	↘	→	↘	4.5.2
Top paying too little in taxes			↘	→	↘	4.5.3
C. Social Impacts	1970s	1980s	1990s	2000-07	2008-11	Figure #
Fertility	↘	→	→	→	↘	3.5.1
Marriage	↘	↘	↘	→	↘	3.5.2
Divorce	↗	↘	↘	↘		3.5.3
Lone parenthood	↗	↗	↗	↗		3.5.4
Life expectancy	↗	↗	↗	↗		3.6.1
Self-reported health	↗	↗	→	↘	↘	3.6.2
Obesity	→	↗	↗	↗		3.6.3
Violent crime	↗	→	↘	↘	↘	3.8.1
Prison population	↗	↗	↗	↗		3.8.3
Happiness	→	→	↘	↘	↘	3.9.1
Intergenerational mobility		↘	↘	↘		

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## Appendix—Income and Wealth Definitions

### Income

1. **Census Money Income** (Figures 2.2, 2.4A, 2.5A, 2.9, 2.10, 2.11, 2.12, and 2.17) is defined as income received on a regular basis (exclusive of certain money receipts such as capital gains) before payments for personal income taxes, social security, union dues, Medicare deductions, and other items.
2. **Net Equivalized Income (NEI)** (Figures 2.2, 2.4B, 2.5B, 2.6, 2.9, and 2.12) starts with Census ‘money income’ and then, 1) adds transfer income not included in ‘money income’ (food stamps benefits, and refundable tax credits, including the EITC and the child tax credit, 2) subtracts taxes (state and federal income taxes, the employee share of social insurance (FICA), taxes (with taxes and refundable credits estimated using the NBER TAXSIM programme)), and 3) adjusting for differences in household size using an equivalence scale, dividing net income by the square root of household size.
3. **CBO Before-tax income or money income** (Figure 2.3) is analogous to the Census concept—the sum of cash market income and government transfers—but gross of taxes and includes the value of a larger set of transfers, including in kind benefits.
4. **CBO Market income** (Figure 2.3) is pre-tax and transfer income and has the following components:
  - a. Labor income lowering components: federal unemployment insurance payroll taxes, and the share of corporate income taxes borne by workers.
  - b. Business income components: a larger set of transfers, including in kind benefits, capital gains realized from the sale of assets, increases in the value of assets that have not been realized through sales are not included in the Congressional Budget Office’s measure of market income.
  - c. Capital income (excluding capital gains) includes sale of assets, exempt interest, dividends paid by corporations (but not dividends from corporations, which are considered part of business income), positive rental income, and the share of corporate income taxes borne by owners of capital.
5. **CBO After-tax (comprehensive) income** (Figures 2.3, 2.7, and 2.8) is the sum of market income and government transfers, minus federal tax liabilities. It includes all government transfers: cash payments from Social Security, unemployment insurance, Supplemental

Security Income, Temporary Assistance for Needy Families (and its predecessor, Aid to Families with Dependent Children), veterans' programs, workers' compensation, and state and local government assistance programs. It also includes the value of in kind benefits, such as Supplemental Nutrition Assistance Program vouchers (formerly known as food stamps), school lunches and breakfasts, housing assistance, energy assistance, and benefits provided by Medicare, Medicaid, and the Children's Health Insurance Program. (The value of health insurance is measured on the basis of the Census Bureau's estimates of fungible value and the average cost to the government of providing such insurance).

Note on CBO ranking: Income categories are defined by ranking all people by their income adjusted for household size—that is, divided by the square root of a household's size. (A household consists of the people who share a housing unit, regardless of their relationships.) Quintiles, or fifths, contain equal numbers of people, as do percentiles, or hundredths. Households with negative income (business or investment losses larger than other income) are excluded from the lowest income category but are included in totals.

6. **SCF Income** (Table 2.2, Figure 2.21) is defined by the Federal Reserve Board as household income for previous calendar year as the following: wages, self-employment and business income, taxable and tax-exempt interest, dividends, realized capital gains, food stamps and other support programmes provided by the government, pension income and withdrawals from retirement accounts, Social Security income, alimony and other support payments, and miscellaneous sources of income. See Smeeding and Thompson (2011) for more on this measure.
7. **MCI Income** (Figures 2.8, 2.19) is SCF income as defined above 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) + imputed flows to stocks, bonds, annuities, and trusts + imputed flows to quasi-liquid retirement accounts (401(k), IRA, etc.) + imputed flow to primary residence + imputed flow to other residences and investment real estate, transaction accounts, CDs and whole life insurance + imputed flow to other assets and businesses + imputed flow to vehicle wealth - imputed interest flow for remaining debt (after adjusting for negative incomes). See Smeeding and Thompson (2011) for more on this measure.
8. **IRS pretax income** (Figure 2.21) includes the elements of income subject to U.S. income tax, including capital gains. It is roughly comparable to CBO market income. The income sharing unit is the income tax unit and it has no adjustments for family size. It is most useful for capturing the top end of the pre-tax income distribution and less useful for overall inequality measures.

Note: in the other figures on social, political, and cultural impacts, we use NEI (definition 2 above) and CBO comprehensive post tax and transfer income (definition 5 above).

**Wealth** (Assets, net worth, and liabilities) (Tables 2.1, 2.2)

1. **Total assets** are defined as the sum of: (1) the gross value of owner-occupied housing; (2) other real estate owned by the household; (3) cash and demand deposits; (4) time and savings deposits, certificates of deposit, and money market accounts; (5) government bonds, corporate bonds, foreign bonds, and other financial securities; (6) the cash surrender value of life insurance plans; (7) the cash surrender value of pension plans, including IRAs, Keogh, and 401(k) plans; (8) corporate stock and mutual funds; (9) net equity in unincorporated businesses; and (10) equity in trust funds.
2. **Total liabilities** are the sum of: (1) mortgage debt; (2) consumer debt, including auto loans; and (3) other debt. From Wolff (2012).