Median Income and Income Inequality: From 2000 and Beyond

by Richard V. Burkhauser, Jeff Larrimore
In *Diversity and Disparities: America Enters a New Century*, edited by John Logan, 105–138. New York, NY: Russell Sage Foundation, 2014.

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Econ 350, Spring 2022

Heckman 3/6/2022

- The first decade of the twenty-first century was a turbulent economic period for the average American.
- Based on Current Population Survey (CPS) data, in 2000 median household income hit a record high, but fell for the next four years in the aftermath of the 2001 recession.
- By the end of 2007, even after three years of growth, median income was still below its 2000 peak.
- When the Great Recession hit in 2007, median income fell by a total of 6.78
 percent over the next three years—a percentage drop greater than in any
 previous recession since the CPS began annual collection of this information in
 the 1960s.

- Consequently, the household income of the median American was lower in 2010 than in 2000, both because median income did not grow over the business cycle of 2000–2007 and because it then fell by a record amount over the three years of the Great Recession.
- Furthermore, an increasing number of policymakers, considering research based on Internal Revenue Service (IRS) income tax data, argued that while the income of the average American was stagnating, U.S. income inequality was rapidly growing.

- This chapter poses four questions about income trends:
 - 1. Are the incomes of the middle class stagnating?
 - 2. Is income inequality between the rich and the poor growing?
 - 3. What has been the impact of economic changes (for example, employment, earnings, transfer payments) on median incomes and inequality?
 - 4. In the future, as our population ages and grows more ethnically and racially diverse, will those demographic shifts increase inequality and slow median income growth?

- The vast majority of research on trends in median income and income inequality in the United States is based on two data sources—the CPS and the Internal Revenue Service's Statistics of Income (SOI) tax return data.
- Only the CPS can be used to consistently measure changes in median income,
 so we use CPS data to estimate trends in median income.
- However, the CPS did not begin collecting this data annually for households until the 1960s.
- The discrepancies in findings using these two data sets matter.

- We reconcile their seemingly contradictory results, argue that the CPS is capable of capturing trends in income inequality, use the CPS to measure changes not only in median income but also in income inequality in the 2000s, and compare these changes to changes in previous decades.
- We then focus on the demographic changes (in age, racial composition, and marital status) and economic changes (in employment and earnings, nonlabor income, transfer payments, and so on) behind these trends.
- Finally, looking ahead, the Baby Boom generation will increasingly age into retirement, and the Hispanic population will continue to grow.
- We predict that, unless we reduce the persistent income gap between older and younger households and between white and minority households, these two demographic changes will drag down median income over the next two decades.

Data

- We base our analysis on data from the unrestricted public use March Current Population Survey, a nationally representative survey of approximately 200,000 individuals conducted by the U.S. Census Bureau.
- We focus on the pretax, size-adjusted, household income of persons, including labor and nonlabor earnings as well as in-cash government transfers.
- We adjust all income for inflation using the Consumer Price Index Research Series Using Current Methods (CPI-U-RS) to capture income trends in real dollar terms.

Overview of the March CPS and Corrections to Capture Top Incomes

- To protect the confidentiality of high-income respondents and to prevent the random sampling of them from adding volatility to income estimates, the Census Bureau "top-codes" each of the twenty-four income sources.
- The top-code thresholds vary by source and year.
- To overcome these problems, we use cell means from Larrimore and his colleagues (2008) that provide information on incomes above the top-code threshold.
- Additionally, the data show an artificial increase in inequality between 1992 and 1993 owing to changes in census data collection procedures.
- We removed this artificial spike.

Comparing IRS and CPS Data

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- Some researchers who are focused on inequality instead use tax return data provided by the IRS Statistics of Income.
- Those researchers have recently observed faster inequality growth than has been observed by those using the March CPS.
- For example, Emmanuel Saez observes that from 2000 to 2010 the share of income going to the top 1 percent of the income distribution, excluding capital gains, rose by 5.6 percent (from 16.49 percentage points to 17.42 percentage points).
- In contrast, Carmen DeNavas-Walt, Bernadette Proctor, and Jessica Smith (2011) observe that when looking at the Gini coefficient, income inequality rose by just 1.5 percent (from 0.462 to 0.469) in the CPS data over the same time period.
- These differences are even greater when looking at the earlier 1990s period.

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- A common explanation for these differences is that deficiencies in one or both data sets restrict their ability to capture true income trends.
- Some researchers argue against using both the restricted-access and public use
 CPS data to measure income trends.
- On the other hand, while IRS-based research avoids recall bias, respondents, particularly high-income earners, have a financial incentive to underreport income or to classify income in ways that minimize their taxes (for example, classifying income as either wage earnings or business profits) and result in an appearance of lower incomes.
- Hence, changes in tax laws can lead researchers who use tax-based data to conflate increases in income now subject to taxation with an increase in income.

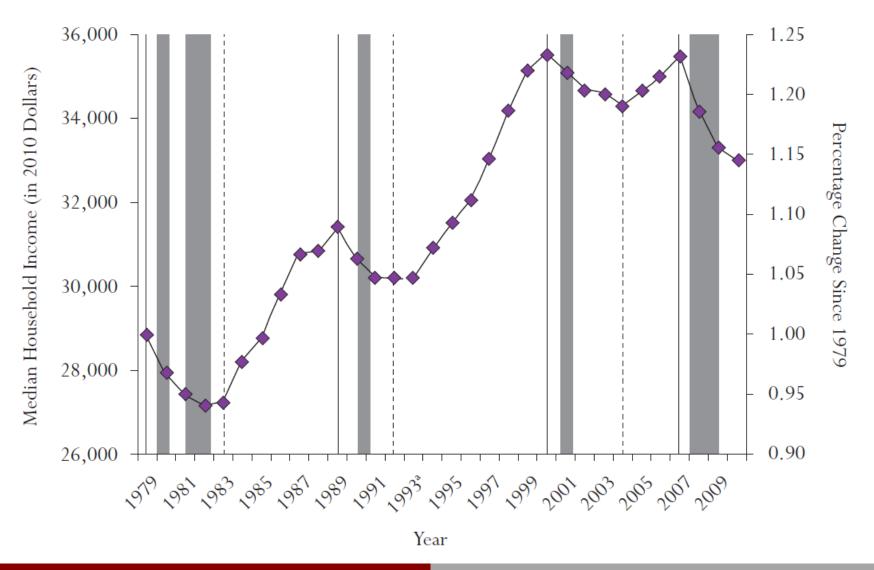
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- These data deficiencies in both data sets cannot be ignored.
- But Burkhauser, Feng, Jenkins, and Larrimore (2012) show that the differences in results between users have more to do with differences in their methodologies for measuring income and inequality than with data inconsistencies in one or both data sets.
- In particular, they highlight three major differences: the focus on household income, the definition of income, and differing measures of inequality.
- They observe that outside of the top 1 percent of the income distribution, the two data sets provide remarkably consistent results.
- Even within the top 1 percent, the results are largely consistent across the two data sets when the top-coding of census data is addressed.

Trends in Median Income and Income Inequality

- Although we focus on income and inequality trends over the past decade,
 Figure 4.1 is extended back to 1979 to provide context for the more recent results.
- The left axis denotes median income in constant dollars; the right axis normalizes 1979 to 1 to denote its percentage change since 1979.
- The peaks of each business cycle (1979, 1989, 2000, and 2007) are denoted by solid vertical lines; troughs (1983, 1992, and 2004) are denoted by dashed vertical lines.

Figure 4.1. Trends in Median Size-Adjusted Household Income, 1979–2010



- Although median income is sensitive to business-cycle variations (cyclical changes), historically median income has risen when measured at equivalent points in the business cycle.
- The 2000s were particularly tumultuous for those in the middle class: over a seven-year business cycle, the middle class saw little change in their median income.
- Figure 4.2 shows trends in income inequality (specifically, the trends in size-adjusted, household, pretax, post-transfer cash income, excluding capital gains) using three common measures: the Gini coefficient, the 90/10 ratio, and the top 5 percent income share.

Figure 4.2. Trends in the Distribution of Size-Adjusted Household Income, 1979–2010

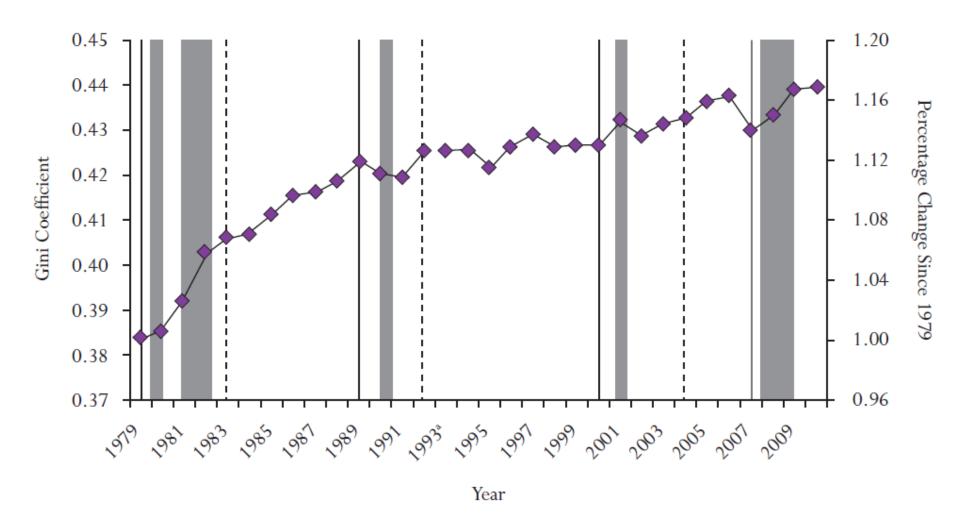


Figure 4.2. Trends in the Distribution of Size-Adjusted Household Income, 1979–2010, Cont'd

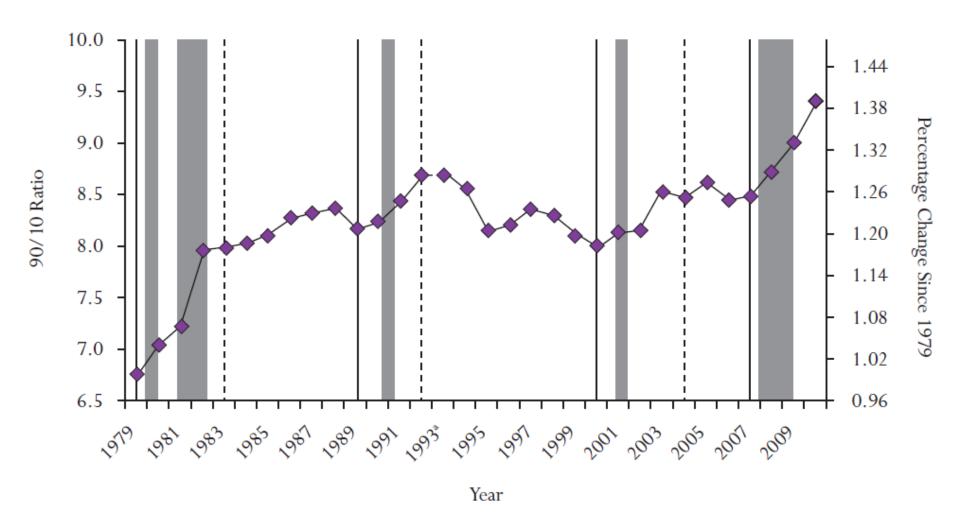
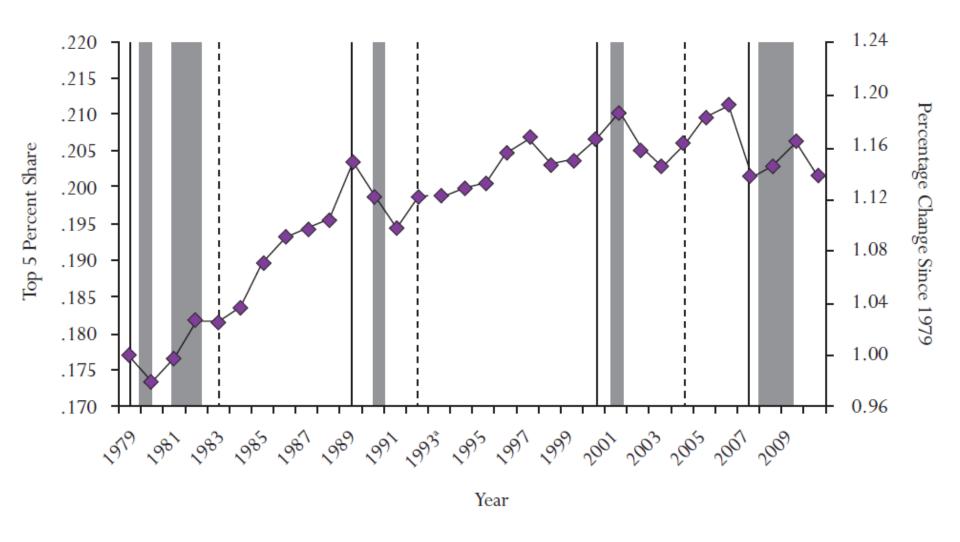


Figure 4.2. Trends in the Distribution of Size-Adjusted Household Income, 1979–2010, Cont'd



- Regardless of the inequality measure, several facts emerge.
- The level of inequality in 2010 was substantially above that observed three decades ago in 1979.
- However, while inequality is currently at or near record highs in all three series, using each of these three inequality measures, inequality growth was fastest in the 1979–1989 business cycle before it slowed dramatically or reversed over the subsequent two business cycles through 2007.
- The growth in inequality during the Great Recession came primarily at the lower end of the distribution.
- While the top earners (the top 5 percent of household incomes) saw their income decline along with the rest of the population, the poor suffered the most.

Our Method of Accounting For Shifts in Median Income and Income Inequality

- Policymakers and analysts should also understand the factors behind these trends.
- To isolate those factors, we use a shift-share analysis.
- We separately estimate the degree to which changes in demographic and economic factors over the full peak-to-peak business-cycle years (2000–2007) and the peak-to-trough recession years (2007–2010) account for the changes in median income and income inequality reported in figure 4.1 and figure 4.2 (top graph).
- We then compare these trends to those over similar business cycles and peakto-trough recession years of the 1980s and 1990s.

- Our shift-share approach allows the demographic composition (age, race, ethnicity, and marital status) and the sources of income of our population to change, one factor at a time, thus separately accounting for changes in income and income inequality.
- The shift in the share of each racial group alone accounts for the change in income that we measure.

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- Once we account for demographic factors, we focus on economic factors.
- We first separately consider the employment and earnings of male and female heads of household and their spouses.
- We then consider the labor earnings of other household members, the returns from private nonlabor income sources, and the benefits from public transfer programs.
- We use a two-step procedure to determine the impact of changes in the distribution of these sources on median income or income inequality.
- This procedure, by construction, holds the rank-correlation of income across income sources constant over time.

Decomposing Median Income Trends from 2000 to 2007

Table 4.1. Factors Accounting for Changes in Median Size-Adjusted Household Income During Each Business Cycle Since 1979 (Average Change per Year)

	1979–1989	1989–2000	2000–2007
Percentage change in median income	0.87	1.11	-0.02
Change accounted for by:			
Age	-0.00	0.05	0.13
Race and ethnicity	-0.14	-0.15	-0.29
Marriage	-0.01	-0.03	-0.12
Male-head employment	-0.05	0.12	-0.10
Male-head earnings	-0.02	0.31	0.20
Female-head employment	0.31	0.24	-0.01
Female-head earnings	0.37	0.33	0.22
Spouse correlation	0.02	0.01	0.09
Earnings of others	0.09	0.12	-0.06
Earnings of others correlation	-0.04	0.01	-0.05
Private nonlabor income	0.42	0.00	-0.05
Private nonlabor correlation	-0.11	0.01	-0.02
Public transfers	0.01	0.07	0.02
Public transfers correlation	0.01	0.03	0.01

Source: Authors' calculations using CPS data.

- Although demography is not destiny and income trends within demographic groups can change, age, race, ethnicity, and marital status have historically been key predictors of U.S. income.
- This continues to be the case.
- Mean income rises with age, peaks around age fifty-five, and declines as more and more people retire.
- Hence, an upward shift in the share of younger or older people relative to those of working age reduces the growth of median income in the population over time.

- Similarly, the gap in mean size-adjusted household income between whites (who have relatively higher incomes) and blacks and Hispanics (who have relatively lower incomes) is persistent across the last three business cycles.
- Hence, an upward shift in the share of blacks and Hispanics relative to whites reduces the growth of median income in the population.
- Similarly, a gap exists between those living in married households and those in unmarried households: an upward shift in the latter also reduces the growth of median income in the population.
- Without a concomitant reduction in the income gaps with working-age Americans, whites, and those living in married households, the growth in median income slows.
- These demographic changes provide an underlying baseline for the median income trends shown in Figure 4.1 and slowed the pace of median income growth over each of our three business cycles (Table 4.1).

- One possible cause of the persistent white-Hispanic income gap is that low-skilled Hispanics are migrating to the United States for higher-paying jobs.
- When they succeed, they raise their own income, but they may well be driving down the U.S. median income, other things being equal.
- Another force behind the persistent gap, however, may be an underinvestment in the education and training of Hispanics born in the United States.

- Declining rates of marriage also drag down median income, since married households report higher incomes than unmarried ones.
- The decreased share of Americans living in married households accounted for a 0.12-percentage-point-per-year decline in median income in 2000–2007 (Table 4.1, row 4).
- Overall, demographic factors accounted for a 0.28-percentage-point-per-year slowdown in median income in 2000–2007 (from 0.13 to 0.29 to 0.12), nearly twice the slowdown they accounted for in each of the previous two business cycles.

Changes in the Employment and Earnings of Men and Women

- Although the long-term demographic changes reported here provide an important baseline, economic factors play a much more important role in accounting for changes in median income and income inequality within business cycles.
- These economic factors also account for the bulk of the change in median income across business cycles (Table 4.1, remainder of rows).
- Changes in women's employment (0.31 percentage points per year) and earnings (0.37 percentage points per year) combined (0.68 percentage points per year) emerged as the most important factor accounting for increasing median income over the 1979–1989 business cycle (table 4.1, rows 7 and 8).
- In contrast, the employment and labor earnings of men (rows 5 and 6) combined accounted for a decline of 0.07 percentage points per year of median income.

Table 4.2. Employment and Earnings (in 2010 Dollars) of Household Heads and Their Spouses, by Gender, During Each Business Cycle Since 1979

	Male Household Heads				Female Household Heads			
	Employed Full-Time	Mean Full-Time Earnings	Employed Part-Time	Mean Part-Time Earnings	Employed Full-Time	Mean Full-Time Earnings	Employed Part-Time	Mean Part-Time Earnings
1979	63.42%	\$55,459	19.36%	\$26,687	26.99%	\$30,374	29.59%	\$11,429
1989	62.39	\$59,487	17.77	\$26,811	33.92	\$36,196	27.01	\$14,246
Change	-1.03	\$4,028	-1.59	\$124	6.93	\$5,822	-2.58	\$2,817
Percentage change		7.26		0.47		19.17		24.65
1989	62.39	\$59,487	17.77	\$26,811	33.92	\$36,196	27.01	\$14,246
2000	64.60	\$68,345	14.20	\$31,132	40.35	\$42,352	23.81	\$18,778
Change	2.21	\$8,858	-3.57	\$4,321	6.43	\$6,156	-3.20	\$4,532
Percentage change		14.89		16.12		17.01		31.81
2000	64.60	\$68,345	14.20	\$31,132	40.35	\$42,352	23.81	\$18,778
2007	62.76	\$66,485	14.62	\$33,290	40.95	\$45,690	21.84	\$20,196
Change	-1.84	(\$1,860)	0.42	\$2,158	0.60	\$3,338	-1.97	\$1,418
Percentage change		-2.72		6.93		7.88		7.55

Source: Authors' calculations using CPS data.

- Women augmented their households' income by entering the labor force.
- Over the 1980s and 1990s, the employment and earnings of women were the primary drivers of the growth in median household income.
- Now that more women are working and the rate of increase has slowed, what will replace these drivers?
- This presents a challenge.

Changes to All Other Sources of Income

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- The three remaining sources of household income are the earnings of other household members who are not household heads or their spouses, private nonlabor earnings, and public transfers.
- In all cases, the data represent the changing correlation of that source to all previously analyzed income sources.

- The discussion thus far has focused only on women and men who are household heads or the spouses of household heads, but the earnings of other household members matter as well.
- The earnings of other household members then accounted for a slightly larger 0.12-percentage-point-per-year increase in median income over 1989–2000.
- The small growth in the earnings of other household members and these increases together with the concomitant growth of public transfers (0.07 percentage points per year) help account for some of the 1.11 percent annual growth in median income over this period.
- Likewise, the declines in the early 2000s in both the labor earnings of others and private nonlabor earnings further explain why the 2000–2007 business cycle was the first full business cycle since at least the 1970s when median income fell (–0.02 percent per year) in the United States.

Decomposing Median Income Trends in the Wake of the Great Recession

- The first-row values in Table 4.3 report the declines in the median household, size-adjusted, pretax, post-transfer cash income of persons in the first three years of each economic downturn since 1979.
- Since these are consistent time periods, the results are for the entire threeyear period rather than the average annual change.
- Consistent with the severity of the Great Recession, the median income decline over this period surpasses any of the three previous recessions.
- Table 4.3 (remaining rows) delineates the separate factors behind this decline, comparing their importance to earlier recessions.

Table 4.3. Factors Accounting for Changes in Median Size-Adjusted Household Income During the First Three Years of the Last Four Economic Downturns

	1979–1982	1989–1992	2000–2003	2007–2010
Percentage change in median income	-5.79	-3.96	-2.59	-6.97
Change accounted for by:				
Age	0.14	-0.04	0.40	0.04
Race and ethnicity	-0.34	-0.33	-0.96	-0.94
Marriage	-0.23	-0.43	-0.35	-0.28
Male-head employment	-2.31	-1.40	-1.24	-2.90
Male-head earnings	-3.39	-1.55	0.56	-1.45
Female-head employment	0.57	0.72	-0.77	-1.13
Female-head earnings	0.22	0.57	1.05	0.27
Spouse correlation	-0.03	0.15	0.16	-0.30
Earnings of others	-1.61	-1.45	-0.95	-0.88
Earnings of others correlation	0.02	-0.15	-0.01	-0.05
Private nonlabor income	1.12	-1.15	-0.87	-0.92
Private nonlabor correlation	-0.52	0.14	0.17	0.36
Public transfers	0.44	0.62	0.31	1.25
Public transfers correlation	0.14	0.28	-0.02	0.02

Source: Authors' calculations using CPS data.

- Comparing the Great Recession to the double-dip recession in the early 1980s reveals that the Great Recession differs in the relative importance of men's employment and earnings declines.
- Over the first three years of the early 1980s recession, declines in earnings among men accounted for more of the decline in median income than did their declines in employment.
- In contrast, during the Great Recession declines in male employment were twice as important as declines in labor earnings in accounting for declines in the earnings of those men still working.
- In short, unemployment increases were more important than reductions in earnings, even for the median of the income distribution.

- One potential explanation for this relative decline in the importance of earnings over the Great Recession is inflation.
- Over 2007–2010, inflation was at historic lows (1.6 percent annually based on the CPI-U-RS), while over 1979–1982 inflation was very high (9.4 percent annually based on the CPI-U-RS).
- Since nominal wages rarely fall, in periods of low inflation, firms are more likely to lay off workers than to reduce wages.
- In contrast, during periods of high inflation, when real wages can fall more easily, firms may more easily cut real wages.

- A second important story in the Great Recession is women. Their combined employment and earnings accounted for increases in median income over the first three years of the three previous recessions (Table 4.3, rows 7 and 8).
- This was not the case during the Great Recession.
- Although the earnings growth of women continued to account for a small increase in median income, the decline in their employment more than offset that increase.
- Thus, in 2007–2010 female employment fell and accounted for a 1.13-percentage-point decline in median income (Table 4.3, row 7), a reversal from 1979–1982.

- Although labor earnings receive more attention during recessions, nonlabor income (such as interest or dividends) and public transfers (for example, unemployment insurance [UI], social security, or cash welfare) are important components of many households' income.
- As such, changes to these sources also can account for changes in median income during recessions.

- This increase in public transfers during the Great Recession offset the declines in private-sector income to a much greater extent than had been seen in earlier recessions (Table 4.3, row 14).
- While changes to public transfer programs during the recession years 1979–1982 offset declines in median income by 0.44 percentage points (or 7.6 percent of the total change), public transfers mitigated median income declines by 1.25 percentage points (or 17.9 percent of the total change) in the 2007–2010 period.
- Thus, at least over the first three years of the Great Recession, the increase in public transfers—especially the growth and extension of UI benefits beyond that seen in previous recessions and the automatically triggered eligibility for means-tested transfer programs—mitigated the recessionary fall in median income.

- Overall, in this recession median income fell more as a result of declining employment (of both men and women) than seen in earlier recessions, and less as a result of the falling earnings of those who remained employed.
- Additionally, falling nonlabor income from declines in interest rates contributed to median income declines in a way that was not present in the early 1980s.
- Indeed, had it not been for growth in public transfers that exceeded that seen in earlier recessions, median income might have fallen even further.

Decomposing Inequality Trends from 2000 to 2007

- Median income growth is the key to understanding the plight of "average Americans"—those at the middle of the income distribution.
- However, the evenness (or unevenness) of the distribution of incomes is also important.
- We undertake a similar analysis, decomposing the factors accounting for trends in income inequality in the United States.
- Here we measure average changes in income inequality over the last three business cycles using the Gini coefficient.
- The values reported in Table 4.4 (row 1) come from this income inequality series (first reported in figure 4.2, top graph).
- Inequality grew in all three business cycles, but substantially faster during the 1980s business cycle than thereafter.

Table 4.4. Factors Accounting for Changes in the Gini Coefficient of Size-Adjusted Household Income During Each Business Cycle Since 1979 (Average Change per Year)

	1979–1989	1989–2000	2000–2007
Percentage change in the Gini coefficient	0.97	0.08	0.10
Change accounted for by:			
Age	-0.01	0.03	0.02
Race and ethnicity	0.06	0.05	0.07
Marriage	0.08	0.02	0.05
Male-head employment	0.03	-0.04	0.03
Male-head earnings	0.65	0.27	-0.26
Female-head employment	-0.15	-0.17	0.03
Female-head earnings	0.09	0.02	0.09
Spouse correlation	0.14	0.00	-0.02
Earnings of others	-0.01	-0.08	0.05
Earnings of others correlation	0.03	-0.02	-0.02
Private nonlabor income	-0.09	0.06	0.05
Private nonlabor correlation	0.08	-0.02	-0.00
Public transfers	0.01	-0.04	-0.01
Public transfers correlation	0.06	0.00	0.01

Source: Authors' calculations using CPS data.

- Although the small contribution to inequality growth accounted for by demographic trends is relatively constant across the three business cycles, the remaining factors reported in Table 4.4 are much less so.
- In particular, in the 1980s business cycle, growth in the earnings inequality of male heads and spouses was by far the most important factor accounting for the rapid growth in income inequality—0.65 percentage points per year (row 6).
- In the 1990s, while the inequality growth accounted for by the labor earnings inequality of male heads and spouses slowed to 0.27 percentage points per year, it was once again the single most important factor accounting for the
- growth in income inequality.
- If not for other factors accounting for inequality declines in the 1990s, inequality growth would have been much faster.

- In contrast, while the earnings inequality of men was again the most important factor (0.26 percentage points per year) in the 2000s, it was declining during this period, not increasing, as it had done in the earlier periods.
- Hence, the contribution of the earnings inequality of male heads and spouses was offsetting the increase in income inequality in the early 2000s.
- To the extent that household income inequality grew in the beginning of the twenty-first century, it did not come from a rise in the earnings inequality of men.
- The opposite is the case with respect to the employment of women.
- Thus, in the 2000s working women accounted for a net increase in income inequality, rather than the net decrease they accounted for in the 1980s and 1990s.

- As was the case with median income trends, the discussion thus far has
 assumed that the rank-correlation across income sources remains unchanged:
 in short, high-earning men continue to marry low-earning women (and vice
 versa) at the same rate at the end of each business cycle as at the beginning.
- However, spouses' earnings have increased in correlation since the 1970s, which in turn increases the concentration of income in fewer households, since high-earning men and women are now more likely to marry each other.
- Just as the inequality trends accounted for by the earnings of men and the employment of women have changed dramatically since 1979, the trends accounted for by the correlation of the earnings of heads and spouses have changed as well.

- In the 1980s, male and female earnings became more correlated and accounted for a 0.14-percentage-point-per-year growth in income inequality (Table 4.4, row 9).
- In the 1990s, this increase in the correlation between spouses' earnings slowed and accounted for no further inequality growth.
- And in the 2000s business cycle, the effect reversed directions and spouses' earnings became less correlated.
- This, in turn, accounted for declines in inequality.
- Thus, just as the earnings inequality growth of male heads and spouses accounted for rising inequality in the 1980s but now account for falling inequality, the same is true for changes in the earnings correlations among household heads.

- Of course, other income sources have also influenced income inequality, although not to the same extent as the labor earnings of male and female heads and spouses and their correlations (Table 4.4, remaining rows).
- For example, public transfers are likely to be more consequential over business-cycle downturn years.
- However, we still observe that in the 2000s business cycle, the increases in the inequality of nonlabor income, which includes interest and dividend income, did account for small further increases in inequality.

- In many respects, the volatility of the factors accounting for inequality growth over the past thirty years is remarkable.
- In the 1980s, a perfect storm of increases in the labor earnings inequality of men and women and their correlations accounted for 0.88 percentage points of the total inequality growth of 0.97 percentage points per year.
- By the 2000s, income inequality growth was a relatively slow 0.10 percentage points per year, in large part because of the decrease in the labor earnings inequality of men and women and the reversal in spousal earnings correlations.

The Impact of Demographic Changes on Future Income Distribution Trends

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- We use our same shift-share analysis to develop baseline median income and income inequality trends for the coming decades based on these demographic projections, again assuming that the income distributions within each group remain unchanged (Table 4.5).
- The statistics foretell our society's Sisyphean challenge: if we are unable to close the income gaps between retired and working-age Americans and between blacks/Hispanics and whites, how will we increase median income and reduce inequality in the coming decades?

Table 4.5. Projection from Demographic Trends in Age and Race of Median Income and Income Inequality—Average Annual Changes from 2007 Through 2050

		Average Annual Median Income Change Accounted for by:		Average Annual Gini Coefficient Change Accounted for by:	
	Age	Racial Composition	Age	Racial Composition	
1979–1989	0.00	-0.14	-0.01	0.06	
1989-2000	0.05	-0.15	0.03	0.05	
2000-2007	0.13	-0.29	0.02	0.07	
2007-2020	-0.09	-0.34	0.02	0.06	
2020-2030	-0.17	-0.35	0.02	0.05	
2020-2040	-0.02	-0.18	0.00	0.03	
2040-2050	0.00	-0.24	0.00	0.03	

Source: Authors' calculations using CPS data.

- These demographic trends also will exacerbate income inequality, but to a lesser extent (Table 4.5, remaining columns).
- The increasing shares of retirees, blacks, and Hispanics are projected to moderately increase income inequality over the coming decades.
- Unlike our projections for median income, however, there is no marked difference in their impacts relative to the previous decades.
- This is partially because retirement-age persons, while having a low median income, are unlikely to be destitute, given Social Security and Supplemental Security Income (SSI).
- Thus, the increase in the retirement-age population does not have the same adverse effect on inequality as it does on median income, since few retirement-age persons are at the extreme lower tail of the distribution.

Conclusion

- The first decade of the twenty-first century was a turbulent economic time for the average American.
- For the first full business cycle since at least the 1970s, median income fell slightly between 2000 and 2007, and fell even more during the Great Recession.
- At the same time, the growth of income inequality, though it has slowed, remains at record-high levels.

- Using a shift-share analysis, we have shown that the increased employment and earnings of women was the single most important factor accounting for rising median income over the business cycles of the 1980s and 1990s.
- Although their earnings accounted for some increase in median income over the 2000s, for the first time their employment accounted for a small decline in median income.
- This, together with a much larger decline in the employment of men, primarily accounted for the stagnation in median income over the 2000s business cycle relative to its more robust growth over the 1980s and 1990s cycles.

- The Great Recession spurred a larger decline in median income than any of the previous three recessions, including the double-dip recession of the early 1980s.
- When we focused only on the changes in our factors during economic downturns, the fall in the employment and earnings of men is the most important factor behind the downturn in median income in all our periods of analysis.

- But the relative importance of men's employment and earnings differed in the 2000s.
- Unlike the last major recession (the double-dip recession of the early 1980s), the drop in employment, not the drop in earnings, was more important.
- In addition, women, instead of increasing their employment, as they did during the double-dip recession, retreated, accounting for a further decline in median income.
- The dramatic increase in public transfers, however, partially offset declines in median income during the Great Recession.

- Similarly, looking at income inequality trends, the 2000s business cycle is the first since the 1970s when increases in the employment of women did not mitigate increases in income inequality.
- Over the 1980s and 1990s, the earnings of men accounted for rapid income inequality growth, but the earnings of women partially counterbalanced these increases.
- In the 2000s business cycle, this did not happen.
- Instead, the employment of women (along with the earnings of other household members) actually accounted for an increase in income inequality.
- This effect of women's employment, combined with increased inequality from demographic changes, has more than offset the major decline in inequality accounted for by changing male earnings patterns.

- Looking forward, since retirees as well as blacks and Hispanics have consistently had lower incomes than working-age adults and whites, projected increases in their population shares will increase inequality and reduce median income unless these income gaps close.
- Over the next two decades, median incomes within each of these groups will have to increase by over half a percent per year just to keep up with the demographic changes.
- Alternatively, policies that reduce the income gap between minorities and whites and encourage older workers to delay retirement could overcome these demographic headwinds.

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