“A Century of Difference” Working Paper
THE SURVEY RESEARCH CENTER
University of California, Berkeley
2538 Channing Way
Berkeley, CA 94720-5100
----
http://ucdata.berkeley.edu/rsfcensus
510-643-6874
510-643-8292

DIFFERENCES AMONG AMERICANS IN LIVING STANDARDS ACROSS THE TWENTIETH CENTURY*

Claude S. Fischer and Michael Hout
University of California, Berkeley

(Draft: 26 August 2002**)**

by
Claude Fischer
(fischer1@uclink4.berkeley.edu)

and

Michael Hout
(MikeHout@uclink4.berkeley.edu)

Survey Research Center
University of California, Berkeley

Notes:
(1) This draft working paper will be developed into a chapter of a book in progress commissioned by the Russell Sage Foundation. *Please do not quote or cite before consulting with the authors.* But comments are certainly welcome.
(2) The research reported here is supported by a grant from the Russell Sage Foundation to the “Century of Difference” project. Other working papers can be found at the web site above.
(3) *American Sociological Association Disclaimer:* Copyright 2002 Claude S. Fischer and Michael Hout. All rights reserved. This paper is for the reader's personal use only. This paper may not be quoted, reproduced, distributed, transmitted or retransmitted, performed, displayed, downloaded, or adapted in any medium for any purpose, including, without limitation, teaching purposes, without the Authors’ express written permission. Permission requests should be directed to *mikehout@uclink.berkeley.edu*

CENTURY OF DIFFERENCE PROJECT

University of California, Berkeley

SRC

PHONE: (510) 643-6874
FAX: (510) 643-8292
website: http://ucdata.berkeley.edu/rsfcensus

Survey Research Center
2538 Channing Way
Berkeley, CA 94720-5100

Working Paper: Comments Welcome

26 August 2002

DIFFERENCES AMONG AMERICANS IN LIVING STANDARDS ACROSS THE TWENTIETH CENTURY[1]

Claude S. Fischer and Michael Hout

University of California, Berkeley

Americans have long been loath to describe themselves in terms of class. Compared to the British, for example, Americans are far less likely to say that their society is composed of "haves" and "have nots."[2] In many respects, American culture is notably egalitarian; for centuries, foreign visitors have remarked on how little deference "common folk" give to "their social betters" here. They also used to note the political equality among citizens in a former era when the United States was exceptionally democratic. But egalitarian style and universal rights coexist with profound differences in economic resources. Americans are and have always been

---

[1] This working paper will become a chapter of a book on trends in Americans diversity during the twentieth century, funded by the Russell Sage Foundation. We thank Jon Stiles and Stephanie Mudge for their excellent and indispensable research assistance, and the rest of the project team – Emily Beller, Shannon Gleeson, Caroline Hanley, Jenn Sherman, and Gretchen Stockmayer – for their comments and suggestions. The U.C. Survey Research Center also provided financial support.

[2] For example, in 1988, Gallup asked national samples of Americans and Britons: "Do you yourself think that [America/Britain] is divided into haves and have-nots, or don't you?" Twenty-six percent of Americans and 73 percent of Britons said "yes, divided" (Gallup Report #275 [August], p. 8).

divided economically. Indeed, America in 2000 was the most economically divided nation in the developed world – it had the widest spread in wealth.[3]

These divisions not only challenge the self-image of Americans as egalitarian, they have further consequences. Research shows that nations and communities with relatively wide disparities in material standards of living tend also to have relatively high rates of social problems, civic alienation, and discontent.[4]

In this paper, we examine differences in Americans' standards of living in 2000 and how differences evolved over the twentieth century, especially since World War II. We describe how Americans in 2000 were separated by their material circumstances and how those distinctions compare to ones earlier in the twentieth century, taking into account people's annual incomes, financial assets, consumption, and subjective assessments of their wealth. For each of these dimensions, we first contrast the well-being of better-off to less well-off Americans. Second, we distinguish the living standards of people of different ages, ancestries, educational levels, and locations. Over most of the century, economic divisions among Americans narrowed considerably in both these ways – affluent and indigent became less distinct, as did Americans of different regions and races. But that the convergence stalled and then reversed in roughly the last three decades, widening the economic differences among Americans, most notably dividing by levels of education.

Economic Differences in 2000

Rich and poor Americans have little personal contact with one another. British travel writer Jonathan Rabin captured it in his depiction of the "air people" and street people of New York.[5] The air people live high above the street in condos guarded by doormen and work in offices similarly elevated and guarded. The street people do not necessarily live on the street – just the most hard-pressed are homeless – but they live in buildings that require them to walk in,

---

[3] The distinctiveness of the United States is well-known. A recent report is Gottschalk and Smeeding, "Empirical Evidence on Income Inequality in Industrialized Countries."

[4] See, e.g., Williams and Collins, "US Socioeconomic and Racial Differences in Health;" Hagan and Peterson, *Crime and Inequality*; Harper and Steffensmeier, "The Differing Effects of Economic Inequality and Black and White Rates of Violence;" Muller, "Democracy, Economic Development, and Income Inequality;" Hagerty, "Social Comparisons of Income;" and Fischer et al., *Inequality by Design*.

walk up, and be wary. They work exposed to the street too, in construction, maintenance, and service jobs. Air people meet street people in the theater district when the well-dressed and well-coiffed exit from shows that they have paid perhaps hundreds of dollars to see and search out the taxis and limousines that will carry them back to their homes in the air. On the sidewalk, they must work their way past panhandlers pleading for the "spare change" they need to afford a bed for the night. These face-to-face encounters of people from the two ends of the income distribution are rare and perhaps melodramatic, but they highlight the reality of differences in living standards across all of America, not only in New York.

Just how varied were those living standards in 2000? There are three ways to directly assess living standards: by income, wealth, and consumption.[6]

Consider, first, *annual income*: In 2000, the one-fifth of American households with the highest income averaged about $140,000 each before taxes; the one-fifth right in the middle averaged $42,000; and the lowest-income one-fifth averaged about $10,000 each. Another calculation reveals that the American household at exactly the 80 th percentile of income had twice as much as did the household right at the 50th and that one turn had about twice as much income as the household at exactly the 20th percentile of income. (The gap is, of course, many times wider at the extremes.[7]) Are these large or small differences? By international standards, large: The United States in the 1990s had easily the widest income gaps of any advanced Western society.[8]

---

[5] Jonathan Rabin, *Hunting Mr. Heartbreak*.

[6] Our income data come largely from the IPUMS (Ruggles, et al., *Integrated Public Use Microdata Series*) for the years before 1998 and the Census Bureau's Current Population Survey for 1998. Wealth and consumption spending data are largely from the Consumer Expenditure Survey (Harris and John Sabelhaus, *Consumer Expenditure Survey Family-Level Extracts*). Consumer goods data again come largely from the IPUMS.

[7] For example, the household at the 95th percentile had an income in 2000 about 14 times that of the household at the 10th percentile (DeNavas and Cleveland, "Money Income in the United States: 2000").

[8] The Luxembourg Income Study regularly tracks and compares income distributions in many nations. In its latest tabulations, the United States was substantially more unequal than other nations. For example, its ratio of the 80th to the 20th percentile in disposable income was, in 1997, 3.0 for the United States, 2.8 for the U.K. (1995), 2.4 for Canada (1997), 2.2 for France, and 2.1 for Germany (1994) (Luxembourg Income Study. 2001. "Income Inequality Measures." http://lisweb.ceps.lu/keyfigures/ineqtable.htm, accessed 9 October 2001). Even taking into account differences in living costs, the American variation is greater than that elsewhere; indeed, while American affluent and middle-class have more buying power than families elsewhere, those with below-average incomes have less buying power than comparable families in most other advanced nations (Gottschalk and Smeeding. "Empirical Evidence on Income Inequality in Industrialized Countries;" Smeeding and Rainwater, "Comparing Living

Inequality of *accumulated wealth* – assets, such as savings, stocks, pensions, and value of their homes, minus debts – was even greater. In 1998, the wealthiest one-fifth of families had an average net worth of over $1.1 million; the middle one-fifth owned, on average, $61,000 in assets; and the least wealthy *two*-fifths of American families were worth $1,000. Calculated another way, the richest twenty percent of families owned 83% of all the family wealth in the country (the richest one percent of families alone owned 38%), while the poorest forty percent of families owned 0.2% of the national wealth. And, as with income, wealth inequality was greater in the United States than in Europe.[9] If dollar value of public services such as health insurance, child care, and higher education are added in to a broader calculation of "wealth," the United States would be even more exceptional.

Yet another way to think about standard of living is in terms of *consumer goods*. Most Americans of whatever income level had an arsenal of products: By 1999, nearly all American households had full kitchen facilities and color televisions sets; 90% had a car or truck. Other goods appeared more often in affluent than in modest homes, but were still common. For example, in 1997, 93% of households with incomes over $50,000 had clothes washers but so did 64% of those with incomes under $25,000; 84% of the former had stereo equipment but so did 55% of the latter. Wider gaps show up on other items, such as central air conditioning – 62% of the affluent versus 34% of the modest – and dishwashers – 78% of the former versus 29% of the latter.[10] For some researchers, the near-universality of basic household goods such as refrigerators and cars demonstrates that differences in how well Americans live are not as wide as differences among them in income or wealth.[11]

In the end, people's material standards of living include, beyond money, wealth, and goods, something about the quality of life, indicated perhaps by longevity, health, and security. At the end of the century, Americans differed notably in these respects as well. For example, people in households earning under $10,000 suffered about 28 days per year of disability,

---

Standards Across Nations.") For a general discussion of American inequality in historical and cross-national context, see Fischer et al., *Inequality by Design*.

[9] Wolff, Edward N. 2000. "Recent Trends in Wealth Ownership"; Keister and Moller, "Wealth Inequality in the United States;" Spilerman, "Wealth and Stratification Processes."

[10] Numbers drawn and calculated from tables 1209, 1220, and 1221 of the *Statistical Abstract of the United States 2000*.

compared to 10 for those with $35,000 or more; and 17% of children were reported to be living in "food insecure" homes.[12] In the late 1990s, 66% of urban Americans with family incomes under $15,000 reported that there were places in their neighborhoods they were afraid to walk at night, but only 42% of those with incomes over $60,000 felt that way.[13] And once again, it appears that there is more variation among Americans on these quality of living standards than among citizens of other western nations.[14]

Income

The twentieth century was – with the exception of the 1930s – one of prodigious economic advancement. While working fewer hours, Americans easily quadrupled their real earnings.[15] But the pace of improvement varied for different groups of Americans. There were periods when the have-nots quickly closed the gap with the haves and periods when they fell further behind. The historical record on income variations in the twentieth century is patchy up to about 1960 – there is some evidence on wages, some on total household income, some on capital gains, some on taxes paid – and its interpretation debated. Nonetheless, the general trend is clear. Grossly summarized, the variation in family income and wealth narrowed through the first two-thirds of the century; differences closed sharply around World War I, around World War II, and then closed slowly for a decade or so afterwards. (Wars tend to contract incomes because they lead to wage controls, higher taxes, and concessions to organized labor; other political events, such as programs for income security or health services, also shape these differences.) The net result was notably more constricted ranges in income and wealth among Americans in the 1960s than in the 1900s.[16] In the last third of the century, however, those gaps clearly widened. How

---

[11] Cox and Alm, *Myths of Rich and Poor.*

[12] Numbers drawn from tables 177, 211, and 233 of the *Statistical Abstract of the United States 2000*, which note that "Food secure means that a household had access at all times to enough food for an active healthy life, with no need for recourse to emergency food sources or other extraordinary coping behaviors to meet their basic food needs."

[13] Calculated from the General Social Survey "Fear" item for 1998 and 2000. This comparison includes only respondents living in metropolitan areas. Overall, the percentages are 49% and 30%.

[14] *The World Health Report 2000* calculated an index of "equality of child survival" based on local-area variability. The United States ranked 32nd in the world.

[15] Lebergott, *The Americans: An Economic Record*, and Cox and Alm, "Time Well Spent," provide overviews.

[16] Key references include Williamson and Lindert, *American Inequality;* Soltow, "Wealth and Income Distribution;" Lebergott, *The American Economy;* Wolff, *Top Heavy;* Piketty, Thomas, and Emmanuel Saez, "Income Inequality in the United States, 1913-1998;" Goldin and Katz, "Decreasing (and Then Increasing)

much they widened, why, and to what effect has been fiercely argued. We will turn to a few of these debates after reviewing the trends of the last half-century, the era subsequent to the major narrowing of income differences.

Family Incomes 1950 to 2000. We start with the total income provided by all the related members living in a household.[17] (In another working paper, we describe the trends in individuals' job earnings.[18]) Then, we take inflation into account by correcting for the cost of living in each year, so that all the numbers are in 1999 dollars. Because we are interested in people's standards of living, we also adjust the income figures for the size of the family. Since at least the popularity of the book Cheaper by the Dozen (1948), we've known that the financial demands on families do not increase unit-by-unit as the size of the family increases; two children are not twice as expensive as one child, for example. A common way to measure the effect of income on well-being is to divide dollars by the square root of the number of household members.[19] The result, the adjusted family income, is a number for each American representing the living-standard value of his or her family's annual income. Figure 1, Panel A, displays how that number has changed for the median American – that is, the American at the 50th percentile of adjusted family income (the heavy, middle line) – and how it has changed for the relatively affluent, the American at the 80th percentile (top line), and the relatively moneyless, the American at the 20th percentile of adjusted family income (bottom line).[20]

-- Figure 1 about here --

A couple of facts are quickly apparent from Panel A. The median American's adjusted family income grew rapidly from 1950 to 1980, but did not grow much afterwards. And, the gaps

---

Inequality in America;" Plotnick et al., "The Twentieth-Century Record of Inequality and Poverty in the United States."

[17] We exclude those living in group quarters and unrelated individuals sharing a household with a family. For a household of only non-relatives, the head is included as a resident of a one-person household.

[18] Michael Hout and Claude S. Fischer, "Work and Wages in the Twentieth Century."

[19] Researchers have found that this is a simple, yet relatively accurate, way to take into account the fact that returns to scale exist in family needs. See Atkinson et al., *Income Distributions*; Smeeding, "Changing Income Inequality."

[20] Many analyses of inequality look at the 90th versus 10th percentile comparisons. Jon Stiles (of our project) found, however, that there is a difference between the decennial census and the Current Population Survey data in 90/10 results , originating in the fact that the CPS found proportionally more respondents at the very low income levels. The 80/20 results are consistent across sources.

among the three levels of income seemed to have widened. But, at this point, we must pause for a question of procedure: Did those gaps really widen? How should we measure their width? One simple way to assess them is the difference in adjusted dollars, as displayed in Panel B. In 1950, the American at the 80th percentile had an adjusted family income (expressed in 1999 dollars) about $12,500 more than the American at the 20th percentile; that difference increased continuously so that by 1998 the gap was almost $34,000 (also in 1999 dollars). The *gap* grew almost three-fold in the half-century. (Put in other terms, in 1949 an American at the 20th percentile and his or her family would have had to work an additional 1,300 hours in a production manufacturing job to close the gap; to do so would have required an additional 2,400 hours of work in 1998.[21]) But scholars who compare incomes rarely if ever measure it as a gap, as an *arithmetic difference* in dollars. Instead, the conventional procedure is, for a few reasons, to measure incomes and their differences *proportionally*, as *ratios*, as shown in Panels C and D.[22] By this measure, income variations first narrowed to about 1970 and then widened to roughly where they had been in 1950 (Panel D). In 1950, an American at the 80th percentile received $4.00 for every dollar that the 20th-percentile American received in adjusted family income; in 1970, the ratio ha dropped to almost $3.00 on the dollar; and in 1998, it was back up to almost $4.00 on the dollar.

The key rationale for assessing the differences, such as these between the 20th and 80th percentile Americans, in such ratio terms is psychological: the more dollars someone has, the less each new dollar "means." A thousand-dollar raise to someone earning $100,000 means less – psychologically and practically – than that it does to someone with a $10,000 income; it may mean only 1/10 as much perhaps to the wealthier than to the poorer person. The rationale for ratio comparisons is also based on the assumption that humans judge fairness as a ratio; we see

---

[21] Virtually all that increase in the work-hour gap occurred between 1970 and 1990. These calculations are based on average hourly earnings for all employees in manufacturing. The 1950 to 1970 figures are drawn from annual earnings in manufacturing (reported in U. S. Bureau of the Census. *Historical Statistics*, p. 166), divided by 2,000 annual hours, and the 1980 through 1998 figures are drawn from weekly earnings in manufacturing (reported in the 2002 *Statistical Abstract*, table 682) divided by 40 weekly hours. The intermediate estimates are 1960: 1,260; 1970: 1,310; 1980: 1,700; 1990: 2,200.

[22] Comparisons based on the ratio of one income to another lead to different conclusions than do comparisons based on arithmetic differences. We discuss these issues in Appendix A.

people's desserts as "just desserts" when they are rewarded proportionally to their efforts.[23] In this paper, we adopt the conventional approach, measuring differences in dollar income and wealth as proportions.[24] Where this decision makes a difference in our conclusion, we will point it out.

Proportionally, then, the difference between the affluent and the near-poor narrowed for 20 or 25 years – because the latter's incomes grew proportionally faster than affluent Americans' incomes. From the mid-1970s onward, the two groups diverged as most Americans lost spending power while the affluent gained.[25] This is displayed in Figure 1, Panel D. From1949 to 1969, Americans near the bottom increased their incomes faster than Americans near the top; from 1969 to 1998, it was the reverse. Among native-born Americans only, the reversal begins in the 1960s.[26] Why family incomes diverged in the last quarter-century is a matter of heated debate in the academic journals and even in the general press. Some point to the influx of low-paid immigrants at the lower end of the wage distribution, but that describes some of the change and does not explain it. (Why does the economy attract and keep such workers? Why are they paid so little?) Furthermore, even native-born Americans experienced a narrowing and then a widening of income differences.[27] Most of the answer lies in men's earnings: in the later decades

[23] On declining marginal returns to income, see, e.g., Diener, "Individualism and Income;" Argyle, "Causes and Correlates of Happiness;" Frey and Stutter, *Happiness and Economics*; and Frank, *Luxury Fever*, Ch. 5. Key sources on measuring equality seem to take declining returns for granted – e.g., Sen, *On Economic Inequality* (p. 28): "It is possible to argue that the impact [of a transfer from someone with more money to someone with less] should be greater if the transfer takes place at a lower income level, and a transfer from a person with an income of £1,000 to one with £900 should be greater than a similar transfer from a man with £1,000,100 to one with £1,000,000." On how lay people judge these matters, see, e.g., Jasso, "On the Justice of Earnings;" and Rainwater, *What Money Buys*.

[24] Later, when we look at measures of consumption as ratios or probabilities (e.g., the proportion who own a car), we use differences in ratios rather than ratios of ratios.

[25] Some ways of adjusting incomes for prices suggest that the incomes of all but the poorest Americans actually increased – if we adjusted as, say, Cox and Alm do in *Myths of Rich and Poor*, we would revise that statement to read "most Americans made modest gains while the affluent's incomes rose at record rates."

[26] In the first period, adjusted family income increased 2.5 fold for the 20th percentile, 2.1 times for the 50th percentile and 2 times for the 80th percentile; in the second period, the rates were 1.1, 1.2, and 1.4 respectively. Annual data show that the reversal started in the mid-1970s, although for the native-born alone, probably a few years earlier (see following note).

[27] To 1970, there was little difference between native-born and foreign-born in median adjusted family incomes or in the 80/20 ratios for each group. (For children, the reference is to the nativity of the head of household.) Starting in 1970, probably as a result of heavy Latin immigration, foreign-born income falls behind. Among the native-born alone, the 80/20 ratio actually starts rising again in the 1960s.

high-earning males substantially extended their advantage over low-earning ones. Several factors may have contributed to the growing earnings differential. The consensus among labor economists is that the growth of the computerized knowledge economy and the demise of heavy industry increased demand for technical and professional skills and decreased demand for manually skilled workers.[28] This led employers to engage in costly bidding wars for people who had the skills they needed while people who possessed manual skills were demoted to jobs usually filled by unskilled workers or forced into early retirement. There are enough problems and puzzles with this argument to leave room for other explanations as well.[29] Labor unions lost bargaining power in wage negotiations (and membership), the minimum wage fell relative to prices (with a cascading effect on the whole wage distribution), and companies moved their plants to other states and other countries in the hope of paying less for labor.[30] Finally, changes in corporate governance and executive compensation redistributed earnings toward the top of corporate ladders.[31] Beyond men's earnings, changes in family structure and living arrangements compounded wage trends. More women went farther in school, married men with high educations, and increasingly took on well-paying jobs; these couples moved farther ahead of other couples or singles. Also, wealthy families rode the stock market upward in the 1990s.[32] The data we have refers to incomes before taxes, so they reflect neither the tax breaks that the wealthy received in the 1980s nor the credits the poor got (through the earned income tax credit) in 1996.

	1950	1960	1970	1980	1990	2000
Median Adjusted Family Income						
Among the Native-Born.............….	$ 9,600	14,700	20,400	24,200	25,600	
Among the Foreign Born....………	$10,600	15,500	19,300	20,300	21,500	
Ratio of 80th to 20th Percentile Adjusted Family Income						
Among the Native-Born.......……...	$3.88	3.40	3.64	3.82	4.26	
Among the Foreign-Born...……......	$3.97	3.30	3.11	3.26	3.56	

[28] For example, Danziger and Gottschalk, *America Unequal*.

[29] For example, Card and DiNardo, "Skill-biased Technological Change."

[30] DiNardo, Fontin, and Lemieux, "Labor Market Institutions" address the first two points, Card and Freeman, "Small Differences" and Fligstein, *Architecture of Markets,* discuss the third.

[31] Fligstein, *Architecture of Markets.*

[32] For example, Lichter, "Poverty and Inequality Among Children." Campbell and Allen, "Identifying Shifts in Policy Regimes;" Kenworthy, "Do Social-Welfare Policies Reduce Poverty?;" Chevan and Stokes. "Growth in Family Income Inequality;" Karoly and Burtless. "Demographic Change, Risings Earnings Inequality."

Whatever the explanations, it is clear that Americans at the end of the twentieth century were more divided by income than they had been for a generation and also that this increasing divergence reversed at least two generations' worth of convergence. (The same is true, we will see later, with regard to family wealth.) But not all kinds of Americans were equally affected by this increasing variation in incomes.

Income differences among the elderly continued to *narrow* after 1970, just as they had before 1970; low-income seniors continued to catch up with high-income seniors. In contrast, younger Americans, notably those in families with children, experienced the sharpest reversal – income differences narrowed before 1970 but sharply widened after 1970; low- and modest-income young families fell further behind high-income young ones. (The different histories are displayed in Figure 2, which shows the 80/20 ratios for the elderly and for children.) Elderly Americans may have been protected from the labor market forces that divided wage-earners, by government programs, notably Social Security, which more than kept up with the cost of living, and by Medicare, which secured many of their health expenses.[33]

-- Figure 2 about here --

Differences Among Groups. One story is about the economic division between affluent and less well-off Americans; another story is about economic divisions between social groups. The first story concerns the overall economic spread, the second concerns differences among groups which contribute to that whole. As we have seen, Americans as a whole became less divided by income in the third quarter of the 20th century and then more divided by income afterwards. We shall now consider the disparities *between* major social groups of Americans – disparities based on education, gender, racial ancestry, age, foreign or native birth, and region.

We start with education. Distinctions by education are important, because they may lie behind the recent widening of income gaps.[34] Figure 3 shows the median adjusted family income for Americans by their level of education (for children, by the education of the head of

[33] Some economists and policy makers have criticized the formula used to adjust seniors' social security checks for inflation – saying that the formula exaggerates inflation's effects. Our inflation adjustor is the "research series;" if the Social Security Administration used it instead of the formula they do, Social Security benefits would not have risen as fast and inequality among seniors might have increased during the years of greatest inflation (1974-75 and 1977-81).

household). It shows dramatic changes, especially since 1980, as college graduates did increasingly well and those with less than a B.A. stagnated or fell behind. From 1950 to 1980, the median person in all three groups with less than a college degree stayed about a constant distance behind the median college graduate. Recasting the dollar amounts in Figure 3 as ratios, we see that, prior to 1970, college graduates took home $1.30 for every dollar that went to those with some college, about $1.50 for every dollar of income by the high school graduates, and about $2.05 for every dollar of income by the high school dropouts. After 1980, they all fell significantly further behind; by the late 1990s college graduates took home $1.50 for every dollar going to a person with some college, $1.80 for every dollar of income for high school graduates, and almost $3.10 for every dollar going to a high school dropout.[35]

-- Figure 3 about here --

After 1980, college graduates opened up a yawning financial gap between themselves and other Americans. But that is not the whole story. Even among Americans of the same educational attainment, say, within the group of college graduates, the difference between the 20th percentile person and the 80th percentile person broadened after 1970.[36] One characteristic of the poorly-educated needs to be kept in mind: Over the period, an increasingly high proportion of poorly educated men had been in jail and carried felony records, making their chances of well-paid employment quite slim.[37]

---

[34] Bruan, "Multiple Measures," reports that variation in states' levels of educational accomplishment is the strongest predictor of variation among states in income.

[35] Dollars and cents quoted in the text here and throughout this chapter are rounded to the nearest nickel. The specific figures for the ratio of the median college-graduate's adjusted family income to the median of each other educational group are:

Ratio of Median Grad. to...	1949	1959	1969	1979	1989	1997
Less than H.S. Graduation…......	$2.12	$1.96	$2.04	$2.11	$2.78	$3.12
High School Graduate…………..	1.43	1.45	1.50	1.43	1.75	1.82
Some College……………………	1.25	1.25	1.30	1.28	1.43	1.49

[36] Among college graduates, the 80th percentile's advantage over the 20th percentile increased from $2.44 in 1970 to $2.86 in 1998. Similar increases occurred among college dropouts and high school graduates. For high school dropouts, there was little net change, but a generally wider range throughout the half-century – about $4.00 for the 80th percentile person on the dollar of the 20th percentile person.

[37] By one estimate, in 1999, about 15% of white men, aged 30 to 34, who had dropped out of high school had ever been imprisoned, and about *60 percent* of similar black men had ever been imprisoned. Their chances of quality jobs, especially for black men, were slim. See Western and Petit, "Beyond Crime and Punishment."

As income differences by education have widened, differences by other traits have narrowed. Figure 4 shows what happened to the incomes of whites and blacks. Although, arithmetically, the median white's advantage over the median African American grew (from about $6,000 to about $10,000), proportionally the racial disparity shrunk considerably. In 1950, the median European American had an adjusted family income of $2.40 for each dollar that the median African American had; the $2.40 decreased fairly steadily to $1.60 by 1998.[38] In particular, lower-income blacks cut the difference between themselves and lower-income whites. Over the half-century, low-income blacks made the most rapid advance between the two major racial groups, coming closest to closing the gap with whites.[39] By 1997, the 80th percentile African American made $1.20 for every dollar made by the median white, exactly reversing their relative positions of 1949. Hispanics, however, fell farther behind whites (data not shown), consistent with the fact that the foreign-born fell increasingly behind the native-born.[40]

Southerners rapidly caught up with Americans from other regions between 1950 and 1980. In 1950, non-Southerners received about $1.70 for each dollar Southerners received; by 1980, the gap shrank to about $1.15. (Even as an arithmetic difference, the gap had narrowed.[41]) After 1980, there was little net change in the relative position of Southerners.[42] Looking at

---

[38] The ratio of median adjusted family income of whites to that of blacks and others was:

Ratio of Euro-American to...	1950	1960	1970	1980	1990	1998
African American	$2.38	$2.17	$1.85	$1.72	$1.67	$1.61
Other	1.96	1.30	1.16	1.14	1.08	1.02

"Others" gained even more ground, as their disparity relative to whites fell from $1.96 to $1.02, but that change is hard to interpret, given that who the "others" were changed after 1965, especially with a strong influx of middle-class families from Asia.

[39] Between 1950 and 1998, the adjusted family income of the 20th percentile black increased 470%; other blacks' income increased about 380% and all levels of whites increased about 265%.

[40] The conclusion about Hispanics is not based on the adjusted data but on median family incomes collected by the Current Population Survey and reported in Bureau of the Census, *Statistical Abstract 2000*, CD-Rom edition, table 743. Between 1972 and 1999, the median non-Hispanic white family's inflation-adjusted income rose 23 percent, while that of the Hispanic family rose 3 percent, with a rise in the advantage of non-Hispanics over Hispanics from $1.40 to $1.70. Adjusting for family size might mute this widening gap some, but not enough to negate the point. As to the foreign-born: In 1949, the median native-born American's adjusted family income was 90 cents per dollar of the foreign-born's (who was likely be an older European-American); by 1990, the median native-born's income was $1.20 to that of the (now increasingly likely to be Latin or Asian) foreign-born's dollar.

[41] In 1950, the median Southerner received $4400 less than others (than the average of the medians of the other regions); in 1980, it was $3600; and in 1998, it was $3300.

[42] In 1998, the median Northeasterner earned $1.20 on the Southerner's dollar. The West fell notably behind the Northeast and Midwest after 1980, most likely in connection to the inflow of low-income immigrants. The median incomes are below:

income variation *within* regions yields a dramatic contrast: Between 1950 and 1970, both low- and moderate-income Southerners made dramatic gains on high-income Southerners. Low-income Southerners brought in an additional 12¢ more relative to high-income Southerners over those 20 years; nowhere else did that 20th-percentile to 80th percentile ratio shrink by more than a nickel. *Thus, most of the convergence between lower- and higher-income Americans in the immediate post-war era was due to rapid advances by Southerners of modest income.*[43] After 1970, the South, as well as the other regions, experienced a re-opening of the income gaps.[44]

The story of rural Americans is similar to that of Southerners.[45] In 1950, Americans living in places outside metropolitan areas were far less well-off than the most affluent group, suburbanites (defined as those living in metropolitan areas but outside the central cities). Suburbanites made $1.75 for every dollar made by non-metropolitan Americans in 1949; the disparity was 25¢ less in 1998. And, as in the case of Southerners, the most dramatic change occurred before 1970, when the incomes of the poorest non-metropolitan Americans rose far more rapidly than that of any other group. At the same time, however, the incomes of people living in America's center cities fell rapidly behind. In 1949, suburbanites made $1.10 for every dollar center-city residents made; that disparity rose after 1960 to reach $1.40 in 1998. In other words, in 1949, Americans living in metropolitan areas, be it the center or the outskirts, were relatively similar in income and far more affluent than non-metropolitan Americans. In 1998, center-city residents and non-metropolitan residents were about equally affluent and behind suburbanites.[46]

Medians...	1950	1960	1970	1980	1990	1998
Northeast……..	$11,100	$16,600	$22,300	$24,800	$29,700	$28,000
Midwest………	$10,600	$15,400	$21,200	$25,200	$25,600	$27,000
South………….	$ 6,600	$11,200	$17,000	$21,400	$23,100	$23,400
West…………..	$11,400	$16,600	$21,700	$25,000	$26,600	$25,000

[43] Another way to view this change is this: Between 1950 and 1970, the 20th, 50th, and 80th percentile in each region roughly doubled in income, except in the South, where the 50th percentile increased 2.5 times and the 20th percentile increased 3.3 times.

[44] The Southern 20th percentile lost 9¢ to the 80th; other regions had declines of 5 to 11¢.

[45] Analysis of non-metropolitan, center-city, and suburban differences is complicated by missing data for many cases after 1980 (because of census confidentiality rules). Nevertheless, the general trends are strong enough to be reliable.

[46] The median income figures are:

The income increases in the South and in rural America together with impoverishment in the center city can be explained both by economic changes and migration. As American industry has moved out of the big urban centers in the north and into the surrounding countryside and to the South, good jobs and incomes have moved as well. But the migration of individual Americans is probably as or more important. Especially before 1970, low-income Americans left the rural south for the center-cities of the North; well-to-do Americans in the center cities moved – or saw their children move – to the suburbs. These relocations, as well as economic improvements in previously depressed regions, encouraged the changing geography of incomes.

Conclusion. In the third quarter of the twentieth century, as through most of the first fifty years, income differences among Americans shrank: lower-income people started closing the gap with higher-income people, blacks with whites, Southerners with Northerners, and rural Americans with urban folk. In the last quarter of the century, however, differences widened between very well-off and less well-off Americans. Income differences by educational accomplishment widened substantially in that period. The increasing importance of a college degree probably explains much of the widening spread in Americans workers' earnings. Other changes, from more single-parent families to new migration patterns to restrained minimum wage policies, also contributed to a widening dispersion of income among Americans in the last quarter of the century.[47] The lines that divided the well-to-do and those of modest income shifted: By 2000 black versus white, South versus North, rural versus urban, and older versus younger adult[48] all mattered less in determining income than they had in the mid-century or earlied, while education mattered considerably more.

	1950	1960	1970	1980	1990	1998
non-metropolitan	$7,600	$12,300	$17,100	$19,900	$20,100	$20,500
metropolitan center city	12,100	15,900	20,200	22,100	23,000	21,500
metro outside center city	13,300	17,800	24,000	27,300	31,700	30,000

[47] See, e.g., Karoly and Burtless, "Demographic Change, Risings Earnings Inequality;" Hout, Arum, and Voss, "The Political Economy of Inequality in the Age of Extremes."

[48] In 1949, Americans 65 years old and older had a median adjusted family income of 55¢ on the dollar of the 30-to-44-year-old; by 1998, seniors were up to 68¢ on the 30-to-44 year old's dollar.

Wealth

Wealth, although tied closely to income, is a different dimension of affluence. Many Americans with low annual incomes have considerable wealth – for example, retirees with homes, pensions, and stocks – and many Americans with high incomes have little wealth – for example, self-employed professionals or entrepreneurs who are having a good year but are carrying large debts. Differences among Americans in wealth do not simply mirror differences in income. Moreover, variations in wealth have their own consequences.[49]

A person's wealth, or "net worth," is composed of his or her assets – a home, savings accounts, stock portfolios, bonds, insurance, pensions plans, and the like that can be cashed out – minus their debts, such as mortgages and consumer loans. Researchers differ about whether to include *potential* assets, such as future social security and pension pay-outs, and possessions such as appliances and furniture. Edward Wolff, a leading scholar, focuses only on those assets that can be easily converted to money at lose to their real value to the owner.[50] We follow his lead. Also, some items that compose wealth are simultaneously major consumer items, such as houses and cars. They play a double role: people both "consume" them and hold them for possible cash or collateral value. In the next section, we will look at consumer goods; here, our focus is on the liquid or potentially liquid assets people hold.

Such liquid assets are important above and beyond than annual incomes. Most of the critical moments in people's lives depend on their assets or their parents' assets, more than on their incomes: going to college or to post-graduate studies, paying for life ceremonies from weddings to funerals, buying a house, living decently during the lean early years of a career, coping with periods of unemployment, covering medical emergencies, launching children onto their own career paths, and retirement. We can assume that people's sense of financial security rests at least as much on their assets as on their pay checks. Looking at wealth can tell a different story about the diversity of living standards in America than does looking at income. For example, we saw that blacks had made great progress in catching up to whites in annual income; but there remains a much larger racial divide in terms of wealth. In 1997, the median white

---

[49] Keister, *Wealth in America*, reports a correlation of .25 between wealth and income when income from investments is excluded. We discuss the independent role of wealth below.

[50] Wolff, "Recent Trends in Wealth Ownership, 1983-1998." See also Davies and Shorroks, "The Distribution of Wealth."

brought home $1.60 in income for every dollar the median black brought home; but in 1995, the median white family had *$8.30* of net worth for every dollar the median black family had in net worth. (The net worth comparison, excluding the equity in homes, is $33 to $1.) The racial divide looks much starker when measured as wealth than as income. If it were not for the fact that data on people's incomes are much easier to obtain than are data on people's wealth, social scientists might have studied the latter much more. Unfortunately, our evidence about wealth is limited to relatively recent data on assets.[51]

Differences between rich and poor are also much greater in wealth than in income. In 1998, the American at the 80th percentile of income had an adjusted family income of $4.00 to the dollar of the American at the 20th percentile. But the American household at the 80th percentile of wealth had effectively an *infinite* net worth relative to that of the 20th percentile household because the least wealthy one-fifth of Americans had fewer assets than debts -- that is, one would have to divide by zero or a negative number to estimate the differnce . Even compared to the *median* family, the 80th percentile's wealth advantage stands out; the household at the 80th percentile had $6.70 on the 50th percentile's dollar of wealth (compared to an annual income ratio of $1.80 to one).[52]

Why are the differences in wealth so much wider than the differences in annual income? A major reason is that income differences can accumulate year after year as high-earning families put savings into assets that earn money and appreciate over time, while low-earning families make so little that their debts compound over time. High interest rates typically amplify financial assets while inflation wears away the buying power of wages. Gifts and bequests from parents to children allow this process of compound growth to stretch over generations, not just over one lifetime. By one informed estimate, about 40% of wealth accumulation is the result of

---

[51] On the importance of wealth compared to income, see, e.g., Conley, *Being Black, Living in the Red*; Estimate of black net worth: Wolff, "Racial Wealth Disparities," table 7 See also Keister, *Wealth in America*; and Spilerman, "Wealth and Stratification Processes."

[52] Wolff, "Recent Trends," notes that in 1998, 18% of households had zero or negative net worth. The 80/50 ratio is interpolated from table 2. Another way to assess the difference is to ask what proportion of all the national income or wealth is held by what proportion of the population. In 1998, the top 20% of American households took in 56% of the national income, but held 83% of the nation's wealth. (The top 5% of American households received 31% of all the income, but held 59% of all the wealth.)

inheritances or inter-vivos gifts.[53] Wealthy parents also help their children in other ways up the ladder to affluence, such as buying them a good education. Beyond these major components, families' decisions about how to save and invest, their financial skills, the number of earners they have, how long those earners have worked, and other personal traits contribute to variations in wealth – as well, certainly, as good or bad luck.

Wealth at the End of the Century. In 1998, the median American household was "worth" $61,000; without its home equity, the median household was worth $18,000. But the median, as we just noted, hides tremendous variation. At the top, American households ranking between the 80th and 90th percentiles were worth an average of over $340,000, those in the top *one* percent, over $10 million. At the lower end, 18 percent of American households had zero net worth or were in the red (and setting aside equity in houses, 26 percent were at or below zero).[54]

We can look somewhat more closely at specific aspects of Americans' portfolios, drawing on the annual Consumer Expenditure Survey.[55] The average American's wealth is largely tied up in his or her house. In 1998, the average person lived in an owner-occupied home that was worth about $62,000. But there was quite a range of values. At the bottom were the roughly one-third of Americans who were not homeowners and therefore had no home equity. Near the top, at the 80th percentile, Americans had houses worth about $315,000.. The household at the 80th percentile of the home equity distribution had $2.27 for every dollar of the *median* household and infinite, of course, compared to the equity-less 20th percentile.[56]

---

[53] Forty percent: Davies and Shorroks, "The Distribution of Wealth." Keister's analysis of the determinants of net assets among Americans in their 30s, "Family Background and the Racial Wealth Gap," shows that, holding constant all sorts of personal and family characteristics, parents' incomes and receiving an inheritance significantly increased respondents' wealth. Conley, "Capital for College," shows that parental assets, net of their income and other factors, improved their children's chances of attending and graduating college. See, also, Keister, *Wealth in America.*

[54] Wolff, "Recent Trends," tables 1 and 3.

[55] The Consumer Expenditure Survey is a study conducted by the U.S. Bureau of Labor Statistics which asks respondents (about 5,000 each administration before 1999) to provide detailed information on their assets and their spending, using both detailed interviews and diaries as procedures (see http://www.bls.gov/cex/home.htm). The version of the data we used is drawn from extracts of the survey developed by the Congressional Budget Office and available from the National Bureau for Economic Research (Harris and Sabelhaus, *Consumer Expenditure Survey Family-Level Extracts*). Although the CES began in 1980, we start with 1984 in part because that is when the sample became national rather than urban only and in part because other procedural changes made pre-1984 data hard to compare with later data.

[56] The income figures here are slightly different than those discussed in the previous section, because they come from the CES survey.

The differences in *liquid* wealth were simply vast. The 20th-percentile saver in the United States in 1998 lived in a household with nothing in *savings* accounts; the average person had savings, adjusted for family size, of $7.34; and the 80th-percentile saver had an account with a size-adjusted $2,075. For funds in *checking* accounts, the family size-adjusted amounts were $0, $147, and $1,038. And the gaps in *stock* and *bond* assets were even greater than these as most Americans had none.

Family Wealth 1900 to 2000. Economic historians have creatively unearthed various sorts of evidence to track the distribution of wealth in earlier periods, including estate tax returns and wills. Most of this evidence records only the assets of considerable value; it is easier to track the assets of the richest ten percent of Americans than the assets (or debts) the poorest fifty percent held. Nonetheless, historians agree that the concentration of wealth declined from the 1910s to at least mid-century, dropping most sharply during wars and during the New Deal era.[57] Then, as with annual income, wealth differences widened in the last two decades of the century, primarily because stock values soared during that period, and so did the corresponding capital gains owners derived from selling stocks. At the other end of the scale, more Americans ran up larger debts in those same years as governments deregulated the home loan and credit card industries. The variations among Americans in wealth widened so much that, by one estimate, it was as gaping in 1990 as it had been on the eve of the American Revolution, in 1774.[58]

The wealth difference between black and white Americans has been of particular interest. Although that difference was notably wide in 2000, it had actually narrowed during the century, particularly after the 1950s. Racial differences in rates of home ownership, the major part of most families' wealth, shrunk as black male heads of households caught up some with whites. They were behind in ownership rates, by 27 points, 39 percent to 66 percent, in 1960, but by 20 points, 52percent to 72 percent, in 1980. The value of the black men's homes rose faster than the values of white homes. As we saw with income, while differences between the very well-off and

---

[57] See Shamas, "A New Look at Long-Term Trends in Wealth Inequality;" Soltow, "Wealth and Income Distribution;" Picketty and Saez, "Income Inequality;" Spilerman, "Wealth and Stratification Processes;" and Lindert, "Three Centuries of Inequality."

[58] Keister, *Wealth in America*; Spilerman, "Wealth and Stratification Processes;" Smith, "Why is Wealth Inequality Rising?;" Wolff, "Recent Trends." On debt, see especially, Sullivan et al., *The Fragile Middle Class*. 1774: Shammas, "A New Look."

the not so well-off grew in the last decades of the century, differences between whites and blacks narrowed.[59]

Figures 4 through 6 show what happened to a few important assets in the last decade-and-a-half of the century. The black lines show the median trend for Americans (adjusted for the sizes of their families -- and recall that the monetary scale is logged). *House values* for the average American dipped in the 1980s and then rebounded; *savings accounts* dropped sharply -- from a median of about $140 (adjusted) to a median of about $5; and the amounts in *checking accounts* declined modestly. All show a general widening of differences in wealth. The 80th percentile American homeowner's adjusted house value rose from about $3.10 on the 20th percentile American's dollar of adjusted house value circa 1985 to $3.70 around 1997; the 80th percentile American's adjusted savings grew from less than a 100:1 ratio of the *median* American's around 1985 to over a 400:1 ratio around 1997; and, whereas the 80th percentile's checking account was worth $6.40 to the *median* American's adjusted checking funds circa 1985, it was up to $7.70 by 1997.

-- Figures 4, 5, 6 about here --

Not shown in these figures are stocks and bonds. They are not shown because the median line would be a flat zero at the bottom. Between 1984 and 1998, both the 20th-percentile American and the median American had *no* adjusted stock and bond assets. The American at the 80th percentile of stock and bond ownership, however, saw the value of his or her portfolio increase dramatically, from $80 to $870, adjusted for inflation and family size. The wealthy gained so much on the stock market that they allowed their savings accounts to shrink substantially.[60] We now know that some of this wealth disappeared in the bear market of 2002, but the gain was sufficient to widen the wealth gap nonetheless.

Explanations for the expanding divisions among Americans by wealth focus largely on the rapid escalation in stock values and capital gains, a pace that outran house values which comprise most Americans' assets. But we see that the divergence in fortunes included other

---

[59] See Collins and Margo, "Race and Home Ownership, 1900 to 1990" (the independent effect of race dropped from 15 to 9 percentage points); Wolff, "Racial Disparities."

[60] Between 1980 and 1998, the real value of the 80th percentile's savings dropped by about half (CES). Smith, "Why is Wealth Inequality Rising?," estimates that each dollar in capital gains led Americans to reduce savings by 18¢.

assets, as well, even housing values. Family changes, such as fewer children among the affluent, contributed to these developments (the affluent had fewer household members with which to share the wealth), as did asset-friendly tax cuts in the 1980s, and the increase in consumer debt we mentioned earlier.[61]

Wealth difference between demographic groups also widened in the last decades. The closing of the black-white gap in home ownership stalled. In 1980, 70% of whites lived in owner-occupied homes versus 49% of blacks; in 2000, now 74% of whites were owners, but the proportion of blacks who were had slipped slightly to 48%.[62] The median value of white owners' homes (adjusted for inflation and family size) rose from under $1.50 on the dollar of the median black's value in the mid-1980s to over $1.50 in the late 1990s.[63] In both decades, the median black American had no savings, checking, or stock assets. Differences among age groups also widened: Both the housing equities and the savings of the median American over 44 pulled away from those of younger Americans.[64] Americans who came of age in the 1980s and after found that they fell financially behind the positions that their older siblings and their parents had at the same stage of life.[65] The lagging status of the young is all the more dramatic because it flies in the face of what happened to educational differences in wealth: they widened. (Since younger Americans are more educated, for that reason alone they should have done better than their parents and older siblings.) Between the mid-1980s and the late 1990s the median adjusted house value for high school graduates grew from about $1.20 per dollar of the median high school dropout's house value to about $1.40, and in turn, the adjusted value for the median college

---

[61] See, e.g., Smith, "Why is Wealth Inequality Rising?"; Wolff, "Recent Trends in Wealth Ownership, 1983-1998;" Keister and Moller, "Wealth Inequality in the United States."

[62] U.S. Bureau of the Census. 2002. Supplemental Survey Data Report. These numbers are a bit different than earlier ones reported, because those referred to households headed by blacks. See, also, Denton, "Housing as a Means."

[63] Calculated from the CES (three-year moving averages).

[64] For example, in the mid-1980s, the house of the median American 65 years old or over was worth about $1.10 to the dollar house value of the median American aged 30-to-44; in the late 1990s, that had risen to nearly $1.15. For savings, checking, and stocks, the holdings of the elderly are too marginal and fluctuate too much from year to year for similar calculations. But we can compare the savings of 30-to-44-year-olds with those of 45-to-64-year-olds. In the mid-1980s, the median older American had $0.95 in savings compared to the median younger one, but by the late 1990s, that was up to about $1.50. In checking accounts, however, the 30-to-44-year-olds gained by a couple of cents relative to the 45-to-64-year-olds. Generally, the older drew further away from the younger. (Source: CES, three-year moving averages.)

[65] E.g., Levy, *Dollars and Dreams*; Duncan and Smith, "The Rising Affluence of the Elderly."

graduate grew from about $1.50 per dollar of the high school graduate to about $1.60.[66] Similarly, the ratio of median college graduates' savings to median high school graduates' savings increased from about 12:1 about 1983 to over 200:1 in the late 1990s; the ratio for money in a checking account rose from 3:1 to 5:1. There is no point comparing the financial assets of high school graduates to high school dropouts; the median high school dropout had no savings or checking account.

In sum, the great narrowing of wealth differences through most of the twentieth century stalled and then reversed in the last decades of the century: The wealthier became even more wealthy compared to those of modest means and gaps opened further between black and white, old and young, and especially between different educational groups. Some of this divergence can be laid directly at the feet of the stock market boom, but the breadth of the development – from house values to the amounts in people's checking accounts – point to other sources, too, such as variations in income, consumer debt, family structure, and tax policies.

Consumption

We have described American economic diversity by looking at how much money Americans make in a given year and how much wealth they have accumulated over a lifetime, but critics of such research argue that the best way to assess people's standards of living is not by their pay stubs or bank accounts but by what they spend and what they have. Critics contend, for example, that many people under-report, accidentally or perhaps not, their incomes and their wealth. In a 1988 national survey of spending, those respondents who said they had incomes under $5,000 also reported, on average, spending over four times as much money as they said they earned. These discrepancies arise because some welfare recipients hide income, because middle-class families report themselves as less well-off than they are, and because some wealthy people overlook some of their sources of income.[67]

---

[66] These numbers are for (1) education re-coded to drop all cases coded as "no formal education" out of the sample because in 1987-88, the CES had treated missing data as zero years and lumped those cases with those who had not graduated high school; (2) urban residents only.

[67] 1988 survey: Brown, *American Standards of Living*, pp. 372, 461. On the validity issue, see also -- for the poor -- Edin and Lein, *Making Ends Meet*, and, more generally, the Census Bureau (http://www.bls.gov/csxfaqs.htm#q21).

Another reason to turn to consumption is that people commonly live above or below their immediate means; they base their spending on long-term calculations. A young professional couple may, for example, spend beyond their means early in their careers because they can reasonably anticipate rapid increases in earnings (and perhaps inheritances, too); a middle-aged couple may restrain their spending to ensure their long-term health care (or to leave an inheritance).[68]

Whether they are rationally distributing their purchases over time thinking wishfully about their future incomes, Americans borrow in ways that make differences in consumption smaller than differences in either income or wealth. Borrowing and saving mitigate the consequences of income and wealth differences in the short run. The poor borrow and the rich save, so Americans differ less in what they consume than in other aspects of their lives. And the differences are least in food consumption and greatest in recreational spending. But eventually the borrower must pay up, while the saver gets to realize the rewards of thrift. Some of the reckoning works itself out as part of the lifecycle. The youthful borrower uses credit to finance an education or a first home. With the passage of time and the accumulation of experience, the investments in education and property pay off and those people can get out of debt. But for others, borrowing is an act of hope or desperation. Their ship never comes in. They never get out of the red.[69]

Whether a particular person can expect to get out of debt or not depends on many factors besides just age. Education is key, as we have shown. So too is the performance of the economy as a whole; for example, it is easier to get out of debt if, as in the second half of the 1990s, incomes grow and interest rates stay low than if, as in the late 1970s, incomes stagnate and interest rates rise. The wealth of one's relatives seems to matter too. People who are the richest member of their extended family have a harder time than people who are typical of their

---

[68] For general discussions of income versus consumption, see, e.g., Slesnick, "Consumption, Needs and Inequality;" Federman et al., "What Does it Mean to be Poor?;" Jencks and Mayer, "Do Official Poverty Rates...;" Jorgenson, "Did We Lose the War on Poverty?;" Cox and Alm, *Myths of Rich and Poor*; and Cutler and Katz, "Rising Inequality?"

[69] Sullivan et al., *Fragile Middle Class*.

extended family in converting income into wealth because their relatives expect them to share their good fortune.[70]

Yet another reason for looking at spending is that the purchasing power of money has increased. For example, in 1909, the average worker in manufacturing had to labor a half-hour to afford a pound of bread and almost an hour to order a half-gallon of milk delivered; in 1970, his grandson needed five minutes to earn his bread and 12 minutes for the milk. Moreover, the quality of the bread and milk – freshness, cleanliness, and variety – improved considerably over the years. If we want to know how standards of living changed, goes the argument, we should look at what people buy and own.[71]

Year 2000. If we do, we see narrower differences than we saw for income. In 1998, Americans at the 80th percentile in income *made* about $4.00 on the dollar (adjusted for family size) compared to the 20th percentile earner; however, the American who *spent* at the 80th percentile bought only $2.50 of goods and services for each dollar that the 20th percentile American bought. Looking more closely at how Americans spent their money and drawing again on the Consumer Expenditure Survey, in Figure 7, we see that – adjusting for size of family – those near the bottom reported spending about $2,000 a year on food, those in the middle about $3,000, and those who spent a lot about $4,300.[72] The highest spent about $2.10 on the food dollar of the lowest. There is only so much one can spend on food and there is only so little one can get by on, so the differences there are not great. As we move to housing, then clothing, and finally recreation, however, we see that the differences in spending widen. The highest group spent over $5.25 on the dollar of the lowest when it came to recreation.

-- Figure 7 about here --

In the 1990s, twenty percent of American families reported failing to pay for some essential expense, such as a utility bill, rent, or a doctor's fee. About ten percent of American households reported some "insecurity" around having enough food and about four percent reported some hunger – and these counts do *not* include the homeless. There were also

---

[70] Goldstein and Warren, "Socioeconomic Reach and Heterogeneity in the Extended Family."

[71] Calculations of work time based on Bureau of the Census, *Historical Statistics*, pp. 170, 210, and 213.

[72] Again, we adjusted, dividing spending estimates by the square root of the family size. This might crudely be read as per-adult spending.

Americans at the other end, of course, those whose spending inspired 1990s books such as *Luxury Fever* and *The Overspent American.*[73]

Ownership of commodities is also more evenly spread than income or wealth. Almost all households in the late 1990s had, for example, a refrigerator, color television set, and motor vehicle. On other items, there was more variation. Three-fourths owned washing machines, half owned a dishwasher, and in 1997 about one-third had computers.[74] The best way to think about most of such goods is that their ownership follows a pattern of "diffusion." When a new item appears, such as television or computers, first only some people – usually those who are well-off or are *avant-garde* or both – get it. Then, because prices drop and familiarity increases, ownership spreads or "diffuses" across the population until virtually everyone has it. In this process, differences in ownership rates first widen and then narrow. We can see that in the example of computers. In 1984, when only ten percent of all Americans had computers at home, the gap in ownership between college graduates and high school graduates was a modest 13 points, 17 percent vs. 4 percent; in 2000, when more than half of all Americans had computers, college graduates were considerably more likely to have one than high school graduates, by 31 points, 78 percent vs. 47 percent. (Technical note: When we examined dollars of income, wealth, or spending, we adopted the economists' convention of using ratio measures. Here, the data are already expressed as ratios -- persons having a computer divided by all persons. It makes more sense to look at here at arithmetic differences.) Chances are that the future of computers will resemble that of telephones; as telephones became virtually universal, class differences became virtually negligible.[75]

Thus, what ownership of a good tells us about variations in standards of living depends on where that good is in its diffusion history. For the basic items – not only refrigerators and automobiles, but also indoor plumbing and television – there was considerable homogeniety in 2000. The wealthy may have driven BMWs and watched high-definition television, while the working class drove old Escorts and watched on 19-inch screens, but both groups had the

---

[73] Failing to pay: Bauman, "Extended Measures of Well-Being." Food insecurity and hunger: *Statistical Abstract 2000*, table 233.

[74] *Statistical Abstract 2002*, tables 1209, 1220, 1221.

[75] Computer data are from the Current Population Survey; telephone data from IPUMS.

commoditied. Skeptics on the question of persistent poverty hasten to point out that most of those who are defined by their *income* as poor do own such goods. Their critics respond that, socially and psychologically, poverty is a relative matter. The poor may have indoor plumbing, but if their children lack computers they remain socially disadvantaged. We'll return to these issues after looking at the historical trends.

Long-Term Trends. Consumption expanded dramatically – indeed, probably, at an historically incomparable scale – for all Americans between 1900 and 2000. But has that meant narrowing or widening differences in standards of living?

Consider, first, *spending* patterns. One way to assess changes in living conditions is by looking at how people apportion their spending. When people live on the margin, they spend most of their money on the basics and the most basic is food; when people do well, they spend some of their money on discretionary extras and one of the most discretionary is recreation. Therefore, trends in the proportion of people's spending that goes to recreation versus food indicate changes in standards of living.[76] Over the twentieth century, Americans spent less and less of each consumer dollar on food – half as much at the end than at the beginning – and more and more on recreation – twice as much. See Figure 8. (The figure draws on two different sources: occasional surveys which asked respondents how they spent their money and national economic data which track what products are bought and sold.[77]) A key driving force in the downward food line was, of course, the sharply dropping cost of food, as we noted earlier. Much of the money Americans saved on food, by the way, went to feeding the family car, which by the end of the century took about as much of the household budget as food did.

-- Figure 8 about here --

The same survey data also speak to class differences in spending patterns. Figure 9 shows the spending patterns broken down into three groups of urban white families: those headed by unskilled workers and laborers, by semi-skilled or skilled wage-earners, and by salaried

[76] Dora Costa, in "American Living Standards," develops an economic model for using recreational spending as a mark of living standards. We use a simpler procedure.

[77] The household survey numbers refer only to urban wage-earning and clerical families and are drawn from Jacobs and Shipp, "How Family Spending Has Changed." The national accounts data through 1955 are drawn from the U.S. Bureau of the Census, *Historical Statistics*, pp. 316-21, and Bureau of the Census, *Statistical Abstract* 2000

managers and professionals.[78] The question is whether the three groups' spending patterns – and, therefore, their standards of living – became more similar over the five surveys. The short answer is yes and no: class differences narrowed slightly from before to after World War II, but seemed to either stay the same or widen slightly by 1973 or 1988 – an echo of the trends for income and wealth differences.[79]

-- Figure 9 about here --

The Consumer Expenditure Survey, which we used in looking at wealth, provides detailed information on how Americans spent money over roughly the last 15 years of the twentieth century.[80] The proportions spent on food and recreation, which we use as indicators of standard of living, changed little over that short period. For example, the difference between the high spenders on recreation and the low spenders on recreation barely changed.[81] Black-white differences on food spending narrowed noticeably and on recreational spending narrowed marginally.[82] Differences by the education of the head of household stayed roughly the same. We can say that the long-term convergence of black and white living standards, as measured by spending, continued into the 1990s (the end of that decade was especially beneficial to blacks) and that class differences in standard of living that had widened after 1970 stayed about the same.

(CD-Rom edition), table 723. Although various details make each survey somewhat different than the others and make comparing the two types of data complex, the overall trend lines are clear.

[78] We took these definitions and the numbers from Brown, *American Standards of Living*. She does not report numbers of cases, but data from Fischer, *America Calling,* drawing on the same sources, suggests that there are about 2,000 observations on each combination of class and year.

[79] There are a few ways to see this. The basic numbers are shown in appendix table 1.

[80] A few notes on the use of the CES in this context: We use only data from 1984 on, even though data are available from 1980 on, because the data in the first few years are not comparable to later years. We also use only the urban sample of the CES to make the data more comparable to the long-term series presented immediately ahead of it.

[81] Around 1986, the 80th percentile (defined as the person in a household whose spending on recreation as a percentage of all spending was at the 80th percentile) spent 4.2 percent more on recreation than the 20th percentile (five-year-moving average); around 1996, the difference was 4.5 percent. Differences had not narrowed. In that sense, the century-long convergence was at least stalled.

[82] Whites' percentage of spending devoted to food stayed at about 13 percent from the mid-1980s to the mid-1990s; blacks' percentage dropped from 18.5 percent to 16 percent. Both groups' spending on recreation increased very slightly, leaving the difference the same.

Looking, second, at what Americans *owned* yields a conclusion consistent with our earlier findings. The single most critical "good" Americans have, which is also their single greatest asset, is a home. The proportion of American families who owned their own homes jumped up in the middle of the century. We see that again in Figure 10. A bit under half of American households owned their homes in the first part of the century; that jumped to over 60 percent by 1960 and stayed about there afterwards.[83] Other consumption items, however, followed a much more dramatic path. Having an inside toilet, a telephone, or an automobile was rare in 1900 and became nearly universal by 2000 (with a stall during the Depression for telephones and cars). The computer, introduced late in the century, is showing the same sort of diffusion pattern, albeit perhaps more rapid, as the earlier technologies.[84]

-- Figure 10 about here --

As noted earlier, when new products such as these begin to diffuse, differences in ownership widen and later shrink. This can be seen in comparing blacks' and whites' rates of product ownership. (While little historical data compares the consumption of Americans by education, occupation, or income, the nation has long gathered many statistics differentiated by race.) In 1890, 14 percent of whites and five percent of blacks had toilets – a 9 point difference; by 1940, the difference had widened as blacks lagged 37 points behind (63 percent versus 26 percent); by 2000, flush toilets were effectively universal, so the difference was about zero. In 1900, virtually no one had cars; 1935, about 60 percent of white families had cars, but only about 20 percent of black families did – a 40-point gap; in 1999, 95 percent of whites and 80 percent of blacks had vehicles, a 15-point gap.[85]

---

[83] Ownership is heavily conditioned by the age of the head of the household and by marital status. For Americans aged 45-64, the prime earning years, the historical trend line is the same except that it is shifted upward, with ownership rates leveling off at about 80% in the past third of the century. For married-couple households, the trend diverges after 1960; home ownership rates continue to increase, reaching 80% in 1990, compared to 66% for all households combined.

[84] These numbers and those below are drawn from census data (*Historical Statistics, Statistical Abstract 2000,* or 2000 numbers from the Census's Factfinder web site) and/or Lebergott, *The American Economy*, pp. 272, 289-90, with a few estimates calculated by interpolation or modeling (e.g., the early estimates for telephones is based on the number of telephones per household). The racial breakdowns are from pp. 99 and 290 of Lebergott. For more on the diffusion of the automobile and telephone, see Fischer, *America Calling*.

[85] The estimates are from the IPUMS, except for 1999, which is from the Annual Housing Survey (United States Bureau of the Census, *Annual Housing Survey*).

In the last few decades of the twentieth century, Americans became much more similar to one another in access to such goods. In 1960, rural residents, blacks, the poorly educated, and Southerners were notably less likely than other Americans to have full plumbing facilities in their homes; by 1990 the differences were gone. For example, in 1960 only 71 percent of Southerners, compared to 93 percent of Northeasterners, had full plumbing; in 1999, about 99 percent of both did. Unlike plumbing, telephone ownership did not become universal, but the differences among groups still shrank. For example, a roughly 30-point difference between whites and blacks and between college graduates and high school dropouts in having telephone service in 1960 became around a 10-point difference in 1990. Between 1960 and 1999, the black-white gap in automobile ownership shrank from 23 to 15 points; the gap between high school graduates and high school dropouts shrank from 9 to 4 points in 1990.[86]

At the dawn of the twenty-first century Americans shared a common standard of living with respect to these originally nineteenth- and early twentieth-century goods. Certainly, wealthier Americans had more bathrooms, newer cars, and so on, but almost everyone had the minimum. Even television, a mid-twentieth-century invention, was universal, meaning, for example, that almost everyone could share a common experience such as watching the Superbowl in color. But does this mean that standards of living had generally converged? Does it mean that the expansion of differences since about 1970 that we found in income and wealth is contradicted when we look at consumption of goods? Not necessarily.

Look, first, at the computer. Ownership of this late twentieth-century commodity increasingly *divided* Americans. Figure 11 shows the pattern by education. As ownership spread, it did so furthest and fastest among the more educated. A difference of 13 points in ownership in 1984 between college graduates and high school graduates grew to a 34 point difference in 1998. Similarly, ethnic differences widened in compuyer ownership; even regional differences widened

---

[86] These numbers come from the IPUMS data set and refer to *individuals* living in households with such facilities. The 1990 data are adjusted to reflect the counts of cars found in 1960, 1970 and 1980 data by subtracting out estimated "truck-only" households.

a small amount (not shown).[87] The case of the computer suggests that, as old goods lose their power to mark distinctions, new products emerge which provide those distinctions.[88]

-- Figure 11 about here --

Consider, second, home ownership, as displayed earlier in figure 10. Ownership rates stayed relatively flat, 44 to 48 percent, between 1900 and 1940, rose rapidly between 1940 and 1960 largely thanks to New Deal-era government assistance to young adults, and then stayed relatively flat again at about 66 percent. Even among people at their peak years for capital accumulation, those 45 to 64, ownership rates leveled off at about 80 percent. Ownership rates did *not* converge by social class and, indeed, widened somewhat in te latter decades. In 1960, for example, college graduates were 4 percentage points likelier to own their dwellings than high school graduates (72 percent versus 68 percent); in 2000, they were 5 points likelier (73 percent versus 68 percent).[89] There are a few key differences between owning homes and owning, say, televisions. For one, as we noted earlier, homes are simultaneously investment and consumption. As investment, their relative advantage varies. In the nineteenth and perhaps early part of the twentieth century, home ownership was a conservative investment strategy that working-class rather than middle-class families often pursued. For another, the real price of homes has not followed the price history for other commodities. Goods such as telephones and automobiles spread in great measure because their real costs declined; the same is true of manufactured goods generally. Housing, however, continues to rise in cost. For example, between 1983 and 1999, the cost of televisions declined by 45 percent, the cost of interstate telephone calls dropped by 28 percent, and the cost of new cars rose by 28 percent, but the cost of home ownership rose 88 percent. Between 1918 and 1988, Americans' spending on shelter (in constant dollars) roughly tripled.[90] With larger-package goods, such as homes, and perhaps also health care and higher

---

[87] Computer ownership data come from six supplements of the Current Population Survey.

[88] See discussion of consumption as comparative distinction in, for example, Douglas and Isherwood, *The World of Goods*; Raniwater, *What Money Buys*; Frank, *Luxury Fever*; and McCracken, *Culture and Consumption*.

[89] The 1960 numbers are from the IPUMS; the 2000 numbers from the Consumer Expenditure Survey web site.

[90] On the history of home owning, see, for example, Tobey et al, "Moving out and Settling In;" Tobey, *Technology as Freedom*, Ch. 4; Chevan,"The Growth of Home Ownership;" Harris, "Working-Class Home Ownership;" Luria, "Wealth Capital and Power;" Thernstrom, *The Other Bostonians*. The recent price changes are from table 770 of Bureau of the Census, *Statistical Abstract 2000* (CD-Rom version; the cost of home ownership is calculated as "rental equivalent" and does not include insurance). The 1918-88 comparison is from Brown, *American Standards of Living*, p. 455. Many have noted that, over the years, the size and quality of housing

education, costs do not decline much as a result of scale increases and, thus, ownership does not spread as much. The basics become more available to more people – basic shelter with heat and water, simple vaccines, community college – but the ante is always going up.

Consider, third, another entire dimension of the consumption standard of living. So far, we have measured it as *private* goods. But people's standards of living also include *public* goods. When they search for a new house, for example, would-be home buyers carefully weigh aspects of the neighborhood such as the local schools, traffic, and safety. Have Americans converged or diverged in these aspects of consumption? The Annual Housing Survey allows us to look at safety over the last quarter-century.[91] The AHS asked respondents a series of questions about neighborhood conditions, one of which was whether it had crime. "Yes" answers rose strongly from 17 percent in 1974 to a peak of 24 percent in 1991 and then dropped rapidly to 14 pecent in 1999 – roughly in tune with nationwide crime statistics. During the rise, black-white differences and city-suburban differences widened; during the dramatic decline in crime of the 1990s, racial and place differences stabilized, but educational differences *still* widened.[92] The General Social Survey asked a similar question: whether respondents felt that there was anywhere in their neighborhoods that they were afraid to walk. Between 1973 and 2000, the percentage who said "No" varied from a low of 52 to a high of 63, with little net change over the quarter-century. The

---

Americans could buy increased; in per-footage or per-amenity terms, housing may not have increased so much (e.g., Cox and Alm, "Time Well Spent").This point does not negate the comparison, however. First, the same is true for other commodities (e.g., the speed, safety, and comfort of automobiles has improved dramatically). Second, rising standards also raise the cost of a minimum "housing package" people can buy. Because of legal, market, and cultural "floors," buyers cannot realistically buy, say, two-room houses without running water, electricity, or standard ceilings heights.

[91] The Annual Housing Survey -- annual from 1973 to 1981 and biannual afterwards -- is conducted by the Bureau of the Census for HUD. It covers about 5,000 households in major metropolitan areas. Over four waves, 46 metropolitan areas are covered, with about a dozen in any given survey. Because of this sampling procedure and because of various changes in procedures, year-to-year and even decade-to-decade comparability is difficult. Only crude trends should be trusted.

[92] In 1974, blacks were 8 points likelier to say "Yes" than were whites (24 vs. 16 percent); the difference widened to 17 points in 1993 (39 vs. 22 percent), and stayed wide at 12 points in 1999 (24 vs. 12 percent). City-suburban differences were 11, 20, and 14 points in 1974, 1993, and 1999 respectively. In 1974, Americans in households headed by the highly educated more often reported crime than did those in households headed by the poorly educated (20 percent of the college graduate versus 16 percent of the high school dropout households), but by 1999, the differences had reversed and widened (17 percent of the high school dropout versus 11 percent of college graduate households). The AHS also asked respondents with children whether they thought their neighborhood schools were satisfactory. The rough trends -- rough because procedures changed over the years -- show little intergroup change, although *dis*satisfaction with schools increased faster among college graduates. The subjectivity of this item makes it harder to treat as a consumption "good."

results differed some from those of the Housing survey, but once again, educational groups seemed to diverge over the quarter-century in a similar way: High-school dropouts were slightly less likely to feel secure and high school graduates more likely.[93] The basic point to be drawn from this limited exercise is, again, that in this realm of "consumption," unlike mass-produced private goods, we do not observe a convergence of living standards in the last decades of the twentieth century.

Conclusion. We face, then, some complexity in trying to answer the question of whether Americans became more similar or more different in their standards of living. The evidence on consumption shows that over the century, more and more Americans shared in what is now seen as a "middle-American" lifestyle, with basic facilities, new appliances, and other goods that are part of the good life. That process seemed to continue to the end of the century. But in a broader sense, this economic convergence seemed to stall – as did the convergence of income and assets – in the last quarter or so of the twentieth century. The convergence after the 1960s did not include some basic goods, such as home ownership, or access to public goods, which showed continuing or growing class differences at the end of the century. And it stalled in the sense that much of consumption is relative; as some goods become universal (e.g., televisions), lines of division appear around newer goods (e.g., computers). Importantly, *how* Americans differed economically did change. Regional and, most notably, black-white differences narrowed, but differences by education generally widened.

Subjective Affluence

Ultimately, income, wealth, and consumption matter because having more of each presumably gives people "better" lives; the money provides, in the economists' language, the means to achieve "utility." Ironically, for all the attention given the careful tracking of dollars, the effect of dollars on utility is not well-established. Some scholars have studied the correlation between individuals' incomes and how "happy" or "satisfied" they report themselves being.

---

[93] We treated the "No" response to the question as a dichotomous dependent variable -- "no" meaning that respondents were *not* afraid. In answer X year X trait analyses of variance, interaction effects for gender, race, and place (non-metropolitan, suburban, center city) were significant at $p<.001$ and showed convergence across these categories. The same analysis for education yielded an interaction effect significant at $p=.013$. For those without a high school degree, "no" responses (i.e., "safe" responses) *declined* linearly a net 2.4 percent, showing increasing anxiety, while changing curvilinearly and largely converging for those with other educational credentials. (Dropping respondents under 25 years of age, those who may not have finished their educations, barely changes the patterns.)

While vaudevillian Sophie Tucker was no doubt right – "I've been rich and I've been poor. Believe me, honey, rich is better" – the relationship is not linear. It appears that, for people in well-off nations, going from no money to some money increases happiness; beyond that lots of money makes less difference in happiness. But the connection is not well understood. Why then not try to directly assess people's "utilities," their subjective sense of well-being, investigating whether their subjective well-being has diverged in recent decades the way their material well-being has? How people rate their well-being, when, for example, they answer questions about how happy they are, depends on many factors. For instance, married people, healthier ones, and those with more friends are more generally upbeat. Here, we focus on how Americans specifically felt about their *economic* well-being.[94]

In the last years of the 1990s boom, Americans were mixed in their feelings about their economic circumstances: 30 percent told the General Social Survey that they were satisfied with their families' financial situations, but 25 percent said they were not (the rest said they were "more or less" satisfied); similarly, 24 percent said that their financial situation was above average and slightly more – 28 percent – said it was below average.[95] The changes from the previous generation are telling. Figure 12 shows trends in how respondents compared their own families' financial standings to those they perceived as average. The proportion who said that their family's income was "average" declined by ten points. Increasingly, Americans rated their incomes as either below or above average. This subjective polarization since the 1970s matches the objective one we have tracked in this chapter. Closer analysis reveals that the increase in "below average" answers was sharper for respondents with low adjusted family incomes and the increase in "above average" answers was sharper for respondents with higher family incomes. By the late 1990s, the growing inequalities were palpable enough to register with the public as well as with researchers.[96]

---

[94] Tucker: 1945, quoted by *The Columbia World of Quotations,* 1996, at http://www.bartleby.com/66/16/61816.html. On happiness correlates, see earlier discussion in notes concerning the non-linearity of the connection between money and utility. See, also, Lane, *The Loss of Happiness*, for an extensive review – albeit somewhat overstated – of the evidence that money does not buy happiness.

[95] These are responses to the SATFIN and FINRELA items with the 1998 and 2000 samples combined.

[96] This elaboration is based on creating two dichotomous dependent variables out of the FINRELA question – answered either "below" or "far below" versus all responses, and answered either "above" or "far above" versus all other answers – and regressing them on year, relative adjusted family income, income-squared, control variables including the unemployment rate at the time of the interview, and interaction terms. (We measured "relative

-- Figure 12 about here --

A similar message comes from Americans' answers to the question of how satisfied they were with their families' financial situations. Overall, the proportion who said they were satisfied stayed at almost the same level: 31% in the early 1970s and 29% in the late 1990s. But there was a notable difference by income level: Those in the lowest three quartiles of adjusted family income became less likely to report satisfaction, while those in the highest quartile became more likely to do so (see Figure 13). The late 1990s boom mitigated the difference a little by boosting all groups' feelings of financial satisfaction, but the general trend is the separation of the affluent from the rest.[97]

-- Figure 13 about here --

Other signs suggest that Americans became increasingly aware of this growing division in standards of living since the 1970s. It is well-known that Americans are less concerned about disparate wealth than are people in other societies, that Americans care more about opportunities being open to all than whether economic outcomes are similar for all.[98] But when the Harris poll asked whether respondents they felt that "the rich get richer and the poor get poorer," the proportion saying "yes" rose from 1972 to the early 1990s and then declined. The Gallup poll asked if Americans thought of the nation "as divided into 'haves' and 'have-nots,' or don't you think of America that way?" Between 1988 and 1998, the proportion who said "yes" increased from 26% to 39%. Nonetheless, Americans, even when they say that these disparities are too great, tend to resist actions to redress the disparities. Nor did that change notably in latter

---

adjusted family income" by taking the category of family income reported by the respondent, assigning the respondent the median value of that category, dividing that number by the square root of household size, and then calculating the respondent's percentile rank on the resulting value for that year.) The results showed that saying that one's family's income was "below" average was a positive linear effect of year and a significant negative interaction effect of year X adjusted income squared. In other words, "below" answers became more common for most respondents, but more so for the less affluent. Saying "above average" was a positive interaction effect of year X adjusted income squared. "Above" answers only increased for quite affluent respondents.

[97] Regression analysis controlling for various covariates, including the unemployment rate at the time of the survey, shows that the interaction effect is robust. However, after controls, the satisfaction levels decline slightly for the well-off and decline sharply for the poorly-off. See also, Hout. "Money and Morale," for more intensive analysis of this and similar items.

[98] Sources on American ideas about economic equality include Hochschild, *What's Fair*, Rainwater, *What Money Buys*, Gans, *Middle American Individualism*, Smith, "Social Inequality in Cross-national Perspective," Kelley and Evans, "The Legitimation of Inequality," and Verba and Orren, *Equality in America.*

decades of the century.[99] For example, from 1978 through 2000, the General Social Survey asked adults to place themselves on a 7-point scale from supporting the position that "government should reduce income differences" (1) to supporting the position that it should not (7). The average position shifted slightly toward government action from 1978 to 1990 and then even further away from it afterward. This modest back-and-forth pattern was roughly the same for all income groups.[100] It appears that Americans saw the post-1970 divergence of economic fortunes as both a personal and national phenomenon (at least until the booming late 1990s), but they did so without drawing any political implications.

Finally we return to the observation that Americans care more about similar opportunities than similar outcomes.[101] We have few measures of peoples' sense of the quality or quantity of opportunity in the United States. However, since 1994 the General Social Survey has asked parents if they think that their children will have a better or worse standard of living than the respondent has when they reach his or her current age. Although the question attempts to get at parents' long-term optimism or pessimism, it appears from the results that people do not probe deeper than the current headlines about the economy. The percentage of American parents saying "better" or "much better" in response to this question shot up from 52 percent to 69 percent in just six years (see Figure 14). We suspect that this cheeriness did not persist into the recession of 2001 and stock market collapse of 2002. [102]

-- Figure 14 about here --

---

[99] Rich and poor: Harris Poll as reported in Ladd and Bowman, *Attitudes Toward Economic Inequality*, p.99, and Lexis-Nexis reports. Have-nots: Gallup Poll, "Social Audit: Haves and Have-Nots" (in 2000, the proportion saying yes was 38% -- Lexis -Nexis). On redress, see earlier citations, as well as Ladd and Bowman, *Attitudes*, *passim*.

[100] The GSS item is EQWLTH. The mean score (1= reduce, 7 =no action) was 3.8 in 1978-80, 3.5 in 1990-91, and 3.9 in 1998-2000. In an analysis of variance, with the dependent variable being giving a "1" or "2" reply, the year effect -- a rise and then a fall in favoring action -- and the income effect -- richer respondents were less interested in government action -- were significant, but the interaction effect was not.

[101] For example, Jencks et al., *Inequality*.

[102] The GSS item is KIDSOL. The change is statistically significant. We are not skeptical of the amount of change over time; the economy of the late 1990s was very good. What we cannot tell is how volatile this response is and so what the changes were before, or after, the late 1990s.

Conclusion

The economy at the end of the twentieth century was a major source of social division in the United States. Americans differed more from one another economically than socially or culturally. The cornucopia of America's productivity has distributed consumer goods widely, so that differences in consumption, while evident, are not as wide. Over most of the twentieth century, the least well-off in America – notably the rural, Southern, and black poor – made the greatest economic gains and contributed the most to narrowing differences. But, those differences widened noticeably in the last three decades of the century; even Americans' subjective sense of their economic well-being had diverged. In particular, the wealthy and the college-educated drew farther away from the rest. The two world wars, the Great Depression, and the New Deal welfare state had combined to substantially level economic distinctions by mid-century. But the new economy, the new family patterns, and the new politics that emerged in the 1970s re-widened economic difference.

Appendix A: Income Ratios or Income Differences?[103]

Different statistical measures of inequality in income differ in detail but all those resting on relative or proportional indicators, such as the Gini coefficient or the 90:10 ratio, show a trend toward a more equal distribution before 1970 and a steady trend toward a less equal one between 1970 and at least the middle 1990s.[104]

Standard sources on inequality almost all use some version of a ratio measure – such as the difference in logged dollars, or the proportion of total dollars garnered by each quintile, or some yet more complex measure, such as Gini or Theil coefficients – that essentially treats the comparison proportionally. Why they do so is not obvious. Our efforts to pin down the logic have not been fully successful. Different sources and different authorities provide different rationales.

For some, the preference for a ratio measure is based on the empirical observation that income and wealth data are right-skewed, or on research suggesting that there are declining marginal returns to additional dollars (see following footnote), or on the better fit of statistical models assuming proportionality. For some, it rests on the formal requirement that the inequality measures be "scale invariant" (not changing if all the measures are multiplied by a constant), or some other technical consideration.[105]

Amiel and Cowell introduce popular opinion to the issue. In questionnaires administered to 4,000 college students, largely in economics classes, from a few countries, they found that only about half clearly endorsed the notion of scale independence, i.e., proportionality.[106] Fewer endorsed translation independence. But many believed that evaluations of differences rest on the initial level of affluence. When incomes are low, absolute increases promote equality; when incomes are high, proportional ones do. (The students also failed to conform to other basic

---

[103] We thank Sheldon Danziger and Frank Levy for discussing these concerns with us.

[104] On household income measures, see Bureau of the Census, "Supplemental Income Inequality Tables," Table IE-6, www.census.gov, accessed 2001.

[105] For discussions along these lines, see, e.g., Sen, *On Economic Inequality*; Allison, "Measures of Inequality;" and Cowell, "Measurement of Inequality." One voice of dissent is Kelley and Klein, "Revolution," p. 80, n. 3. Cowell ("Measurement," pp. 121-2) considers two different ways of linking income growth to inequality. Under one conception, the same level of inequality would be sustained if parties all received the same *absolute* increase in income ("translation independence"); under the other if they received the same *proportional* increase in income ("scale independence"). But, Cowell essentially ignores the choice and pursues proportional models.

[106] Amiel and Cowell, *Thinking About Inequality.*

principles in economic models of inequality, a noteworthy problem considering that these were largely economics students.)

One modest contest between these two standards of comparison – arithmetic difference versus ratio – can be constructed by looking at trends in black and white family incomes. A difference measure – white median income minus black median income – shows that the income gap between blacks and whites widened between 1970 and 1998 (by 5 percent), while by a ratio measure – black median income divided by white median income – shows that the gap shrank (by 14%). How did African Americans' subjective evaluations of their position change? From 1972 through 2000, the General Social Survey asked respondents to rate their families' financial positions compared to the "average." Over those years, African American respondents became somewhat *more* positive about their financial situations. (The proportion saying that their families' situation was below average dropped from about 50% in the mid-1970s to about 40% at the end of the century, and the proportion saying above average grew from about 5% to over 10%.) If we assume that answers to this question capture economists' notion of "utility," then the perceptions of American blacks was more consistent with the ratio measure.

References

Allison, Paul. 1978. "Measures of Inequality." *American Sociological Review* 43 (December): 865-80.

Amiel, Y., and F. A. Cowell. 1999. *Thinking About Inequality: Personal Judgements and Income Distributions*. Cambridge: Cambridge University Press.

Argyle, Michael. 1999. "Causes and Correlates of Happiness." Pp. 353-73 in Daniel Kahneman, Ed Diener, and Norberto Schwartz (eds.), *Well-Being: The Foundations of Hedonic Psychology*. New York: Russell Sage Foundation, pp. 356-59.

Atkinson, Anthony B., Lee Rainwater, and Timothy Smeeding. 1995. *Income Distributions in OECD Countries: Evidence from the Luxembourg Income Study*. Washington DC: OECD Publications and Information Center

Bauman, Kurt J. 1999. "Extended Measures of Well-Being: Meeting Basic Needs." Current Population Reports P70-67 (June). Washington: United States Bureau of the Census.

Brown, Claire. 1994. *American Standards of Living, 1918-1988*. Cambridge, MA: Blackwell.

Bruan, Denny. 1988. "Multiple Measures of U.S. Income Inequality." *The Review of Economics and Statistics* 70 (April):398-405.

Campbell, John L., and Michael Patrick Allen. 2001. "Identifying Shifts in Policy Regimes: Cluster and Interrupted Time-Series Analyses of U.S. Income Taxes." *Social Science History* 25 (Summer):187-216.

Card, David, and Richard Freeman. 1994. "Small Differences that Matter." Pp. 180-222 in Richard Freeman (ed.), *Working Under Different Rules*. New York: Russell Sage Foundation.

Card, David, and John E. DiNardo. 2002. "Skill-biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles." NBER Working Paper #8769.

Chevan, Albert. 1989. "The Growth of Home Ownership: 1940-1980." *Demography* 26 (May): 249-66.

Chevan, Albert, and Randall Stokes. 2000. "Growth in Family Income Inequality, 1979-1990: Industrial Restructuring and Demographic Change." *Demography* 36 (August):365-80.

Conley, Dalton. 1999. *Being Black, Living in the Red: Race, Wealth, and Social Policy in America.* Berkeley: University of California Press.

Conley, Dalton. 2001. "Capital for College: Parental Assets and Postsecondary Schooling." *Sociology of Education* 74 (January):59-72.

Costa, Dora. 1999. "American Living Standards: Evidence from Recreational Expenditures." Working Paper No. 7148. Cambridge, MA: National Bureau for Economic Research.

Cowell, Frank A. 2000. "Measurement of Inequality." Pp. 87-166 in Anthony B. Atkinson and Francois Bourguignon (eds), *Handbook of Income Distribution*. Volume 1. New York: Elsevier.

Cox, W. Michael, and Richard Alm. 1997. "Time Well Spent: The Declining Real Cost of Living in America." Annual Report of the Federal Reserve Bank of Dallas. Dallas.

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

Cutler, David M., and Lawrence F. Katz. 1992. "Rising Inequality? Changes in the Distribution of Income and Consumption in the 1980's." *American Economic Review* 82 (May): 546-51.

Danzinger, Sheldon, and Peter Gottschalk. 1995. *America Unequal*. Cambridge, Mass.: Harvard University Press.

Danzinger, Sheldon, and Peter Gottschalk (eds.). 1994. *Uneven Tides: Rising Inequality in America*. New York: Russell Sage Foundation.

Davies, James B., and Anthony F. Shorroks. 2000. "The Distribution of Wealth." Pp. 605-75 in Anthony B. Atkinson and Francois Bourguignon (eds), *Handbook of Income Distribution*. Volume 1. New York: Elsevier.

DeNavas, Carmen, and Robert I. Cleveland, "Money Income in the United States: 2000." Current Population Reports P60-213. Washington: United States Bureau of the Census: Table C.

Denton, Nancy A. 2001. "Housing as a Means of Asset Accumulation: A Good Strategy for the Poor?" Pp. 222-66 in Thomas M. Shapiro and Edward N. Wolff (eds.), *Assets for the Poor*. New York: Russell Sage.

Diener, Ed. 1994. "Individualism and Income as Correlates of Subjective Well-Being across Cultures." Paper presented to International Sociological Association.

DiNardo, John E., Nicole Fortin, and Thomas Lemieux. "Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semi-Parametric Approach." *Econometrica* 64 (September 1996): 1001-1044.

Douglas, Mary, and Baron Isherwood. 1979 (1996). *The World of Goods: Towards and Anthropology of Consumption*. London: Routledge.

Duncan, Greg J., and Ken R. Smith. 1989. "The Rising Affluence of the Elderly: How Far, How Fair, How Frail?" *Annual Review of Sociology* 15:261-89.

Edin, Kathryn and Laura Lein. 1997. *Making Ends Meet : How Single Mothers Survive Welfare and Low-wage Work*. New York : Russell Sage Foundation, 1997.

Federman, Maya, Thesia I. Garner, Kathleen Short, W. Bowman Cutter IV, John Kiely, David Levine, Duane McDough, and Marilyn McMillen. 1996. "What Does it Mean to Be Poor in America?" *Monthly Labor Review* 119 (May).

Fischer, Claude S., Michael Hout, Martin Sanchez Jankowski, Samuel R. Lucas, Ann Swidler, and Kim Voss. 1996. *Inequality by Design: Cracking the Bell Curve Myth*. Princeton, NJ: Princeton University Press.

Fischer, Claude S. 1992. *America Calling: A Social History of the Telephone to 1940*. Berkeley: University of California Press.

Fligstein, Neil. 2001. *Architecture of Markets*. Princeton: Princeton University Press.

Frank, Robert H. 1999. *Luxury Fever: Why Money Fails to Satisfy in an Era of Excess*. New York: Free Press.

Frey, Bruno S., and Alois Stutter. 2002. *Happiness and Economics*. Princeton, NJ: Princeton University Press.

Galbraith, James K. 1998. *Created Unequal: The Crisis in American Pay*. New York: Free Press, 1998.

Gallup Poll. 1998. "Social Audit: Haves and Have Nots." The Gallup Organization. On-line: http: //www.gallup.com/ poll/ socialaudits/ have_havenot.asp (Accessed 15 May 2002.)

Gallup Poll. 1988. *Gallup Report #275* (August), p. 8.

Goldin, Claudia, and Lawrence F. Katz. 2001. "Decreasing (and Then Increasing) Inequality in America: A Tale of Two Half-Centuries." Pp. 37-82 in Finis Welch (ed.), *The Causes and Consequences of Increasing Inequality*. Chicago: University of Chicago Press.

Goldstein, Joshua R., and John Robert Warren. 2000. "Socioeconomic reach and heterogeneity in the

extended family: contours and consequences." *Social Science Research* 29 (September):382-402.

Gottschalk, Peter, and Timothy M. Smeeding. 2000. "Empirical Evidence on Income Inequality in Industrialized Countries." Pp. 261-307 in Anthony B. Atkinson and Francois Bourguignon (eds), *Handbook of Income Distribution*. Volume 1. New York: Elsevier.

Hagan, John, and Ruth D. Peterson (eds.). 1995. *Crime and Inequality.* Stanford, Ca.: Stanford University Press.

Hagerty, Michael. 2000. "Social Comparisons of Income in One's Community: Evidence from National Surveys of Income and Happiness." *Journal of Personality and Social Psychology* 78 (April):764-771.

Harper, Miles D., and Darrell Steffensmeier. 1992. "The Differing Effects of Economic Inequality and Black and White Rates of Violence," *Social Forces* 70 (June): 1035-54

Harris, Ed, and John Sabelhaus. 2000. *Consumer Expenditure Survey Family-Level Extracts -- 1980:1 - 1998:2 [Computer Files]* . Washington, DC: Congressional Budget Office, 2000. http://www.nber.org/data/ces_cbo.html

Harris, Richard. 1990. "Working-Class Home Ownership in the American Metropolis." *Journal of Urban History* 17 (November): 46-69.

Hout, Michael. 2002. "Money and Morale." Center for the Study of the New Inequalities Working Paper. April 2002. http://ucdata.berkeley.edu/rsfcensus.

Hout, Michael, Richard Arum, and Kim Voss. 1996. "The Political Economy of Inequality in the Age of Extremes." *Demography* 33 (November): 421-425.

Hout, Michael, and Claude S. Fischer. 2002. "Work and Wages in the Twentieth Century." Century of Difference Project Working Paper. August 2002. http://ucdata.berkeley.edu/rsfcensus.

Jacobs, Eva, and Stephanie Shipp. 1990. "How Family Spending Has Changed in the U.S." *Monthly Labor Review* 113 (March):20-27.

Jasso, Guillermina. 1978. "On the Justice of Earnings: A New Specification of the Justice Evaluation Function." *American Journal of Sociology* 83 (May):1398-1419.

Jencks, Christopher, and Susan E. Mayer. 1996. "Do Official Poverty Rates Provide Useful Information About Trends in Children's Economic Welfare?" Center for Urban Affairs, Northwestern University, May 30.

Jencks, Christopher, et al. 1972. *Inequality*. New York: Basic Books.

Jorgenson, Dale W. 1998. "Did We Lose the War on Poverty?" *Journal of Economic Perspectives* 12 (Winter):79-96.

Karoly, Lynn A., and Gary Burtless. 1995. "Demographic Change, Risings Earnings Inequality, and the Distribution of Well-Being, 1959-1989." *Demography* 32 (August):479-405.

Keister, Lisa A. 2000. *Wealth in America: Trends in Wealth Inequality*. New York: Cambridge University Press.

Keister, Lisa A. 2001. "Family Background and the Racial Wealth Gap: How Childhood Resources and Family Structure Contribute to Racial Inequality in Adult Wealth." Unpublished paper, Ohio State University, Department of Sociology.

Keister, Lisa A., and Stephanie Moller. 2000. "Wealth Inequality in the United States." *Annual Review of Sociology* 26:63-81.

Kelley, Jonathan, and Herbert S. Klein. 1977. "Revolution and the Rebirth of Inequality: A Theory of

Stratification in Postrevolutionary Society," *American Journal of Sociology* 83 (July): 78-99.

Kelley, Jonathan, and M. D. R. Evans. 1993. "The Legitimation of Inequality: Occupational Earnings in Nine Nations." *American Journal of Sociology* 99 (July): 75-125.

Kenworthy, Lane. 1999. "Do Social-Welfare Policies Reduce Poverty: A Cross-National Assessment." *Social Forces* 77(March):1119-39.

Ladd, Everett, and Karlyn H. Bowman. 1998. *Attitudes Toward Economic Inequality*. Washington, DC: American Enterprise Institute Press.

Lane, Robert E. 2000. *The Loss of Happiness in Market Democracies*. New Haven: Yale University Press.

Lebergott, Stanley. 1976, *The American Economy: Income, Wealth, and Want*. Princeton, NJ: Princeton University Press.

Lichter, Daniel T. 1997. "Poverty and Inequality Among Children." Annual Review of Sociology 23:121-45.

Luria, Daniel D. 1976."Wealth, Capital, and Power: The Social Meaning of Home Ownership." *Journal of Interdisciplinary History* 7 (Autumn): 261-282.

McCracken, Grant. 1990. *Culture and Consumption*. Bloomington, IN: Indiana University Press.

Muller, Edward N. 1998. "Democracy, Economic Development, and Income Inequality," *American Sociological Review* 53 (February):50-68.

Piketty, Thomas, and Emmanuel Saez. 2001. "Income Inequality in the United States, 1913-1998." Unpublished paper, ENS-CEPREMAP, Paris.

Plotnick, Robert D., Eugene Smolensky, Erik Evenhouse, and Siobhan Reilly. 2000. "The Twentieth-Century Record of Inequality and Poverty in the United States." Pp. 249-99 in Stanley L. Engerman and Robert E. Gallman (eds.), *The Cambridge Economic History of the United States*, vol. III. New York: Cambridge University Press.

Rainwater, Lee. 1974. *What Money Buys: Inequality and the Social Meanings of Income.* New York: Basic Books.

Ruggles, Steven, et al. 1997. *Integrated Public Use Microdata Series*: Version 2.0 [Computer Files] . Minneapolis: Historical Census Projects, University of Minnesota, 1997. http://www.ipums.org

Sen, Amartya. 1997. *On Economic Inequality*. Enlarged Edition. Oxford, Eng: Clarendon Press.

Shammas, Carole. 1993. "A New Look at Long-Term Trends in Wealth Inequality in the United States." *American Historical Review* 98 (April):412-31.

Slesnick, Daniel T. 1994. "Consumption, Needs and Inequality." *International Economic Review* 35(August):677-703.

Smeeding, Timothy M., and Lee Rainwater. 2001. "Comparing Living Standards Across Nations: Real Incomes at the Top, the Bottom, and the Middle." Luxembourg: Working Paper No. 266, Luxembourg Income Study, www.lis.lu

Smeeding, Timothy M. 2000. "Changing Income Inequality in OECD Countries: Updated Results from the Luxembourg Income Study (LIS)." Luxembourg: LIS Working Paper No. 252.

Smith, Tom W. 1990. "Social Inequality in Cross-national Perspective." Pp. 21-29 in Duane F. Alwin et al., *Attitudes to Inequality and the Role of Government*. Rijswijk: Sociaal en Cultureel Planbureua; Alphen aan des Rijn: Samsom, Netherlands.

Soltow, Lee. 1993. “Wealth and Income Distribution.” Pp. 1517-1531 in Mary Kupiec Cayton, Elliott J. Gorn, and Peter W. Williams (Eds.), *Encyclopedia of American Social History*. New York: Charles Scribner's Sons.

Spilerman, Seymour. 2000. “Wealth and Stratification Processes.” *Annual Review of Sociology* 26:497-24.

Sullivan, Teresa A., Elizabeth Warren, and Jay Lawrence Westbrook. 2000. *The Fragile Middle Class: Americans in Debt*. New Haven, CT: Yale University Press.

Thernstrom, Stephan. 1973. *The Other Bostonians: Poverty and Progress in the American Metropolis, 1880-1970*. Cambridge, Mass: Harvard University Press.

Tobey, Ronald, Charles Wetherell, and Jay Brigham. 1990. “Moving Out and Settling In: Residential Mobility, Home Owning, and the Public Enframing of Citizenship, 1921-1950.” *American Historical Review* 95 (December): 1395-1423.

Tobey, Ronald C. 1996. *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home*. Berkeley: University of California Press.

United States Bureau of the Census. 1973. *Historical Statistics of the United States*. Washington: USGPO.

United States Bureau of the Census. 2001. *Statistical Abstract of the United States 2000*. CD-Rom Edition. Washington: USGPO.

United States Bureau of the Census. 2001. *American Housing Survey, 1999: National Microdata* [Computer file]. Washington, DC: U.S. Dept. of Commerce, Bureau of the Census [producer], 2001. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2002.

Western, Bruce, and Becky Petit. 2002. “Beyond Crime and Punishment: Prisons and Inequality.” *Contexts* 1 (Fall):37-43.

Williams, David R., and Chiquita Collins. 1995. “US Socioeconomic and Racial Differences in Health: Patterns and Explanations.” *Annual Review of Sociology* 21: 349-86.

Williamson, Jeffery G., and Peter Lindert. 1980. *American Inequality*. New York: Academic Press.

Wolff, Edward N. 1995. *Top Heavy: A Study of the Increasing Inequality of Wealth in America.* New York: Twentieth Century Fund Press.

Wolff, Edward N. 2000. “Recent Trends in Wealth Ownership, 1983-1998.” Working Paper No. 300. Jerome Levy Economics Institute. New York: Bard College.

Wolff, Edward N. 2001. “Racial Wealth Disparities: Is the Gap Closing?” Public Policy Brief No. 66. New York: The Levy Economics Institute of Bard College.

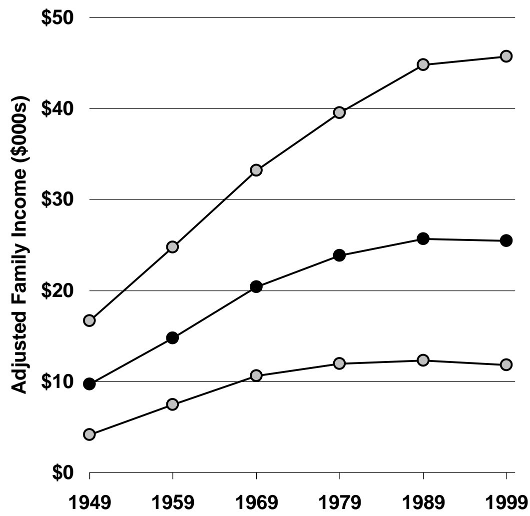
World Health Organization. 2001. *World Health Report 2000.* Statistical Annex, Table 5 (http://www.who.int/whr/2001/archives/2000/en/pdf/StatisticalAnnex.pdf, accessed 17 October 2001).

Appendix Table 1. Percentage of Household Budgets Spent on Food versus Recreation, by Occupation of Head of Household, 1918-1988.

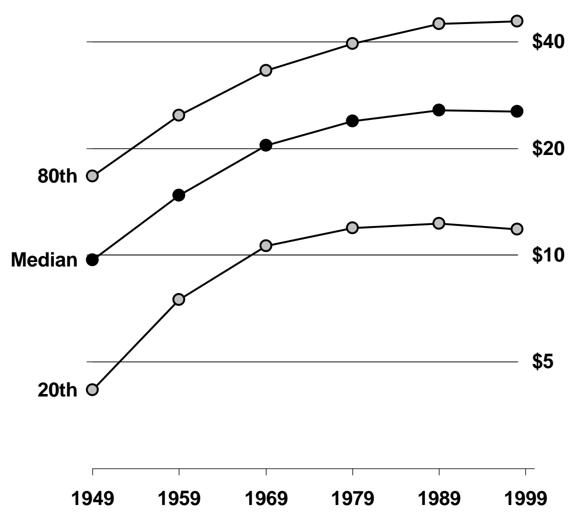
	Pct. Spent on Food			Pct. Spent on Recreation		
	Laborers	Wage-Earners	Salaried	Laborers	Wage-Earners	Salaried
1918	42%	40%	35%	4%	4.5%	6%
1935	32	31	23	5	6	8
1950	27	26	24	7	7	8
1973	16	15	14	8	9	10
1988	11	10	9	9	9	12

	1918	1935	1950	1973	1988
<u>FOOD</u>					
Ratio of Laborer % to Salaried %	1.2	1.4	1.1	1.1	1.2
Difference of Laborer % and Salaried %	-7	-9	-3	-2	-2
<u>RECREATION</u>					
Ratio of Laborer % to Salaried %	.7	.6	.9	.8	.75
Difference of Laborer % and Salaried %	2	3	1	2	3

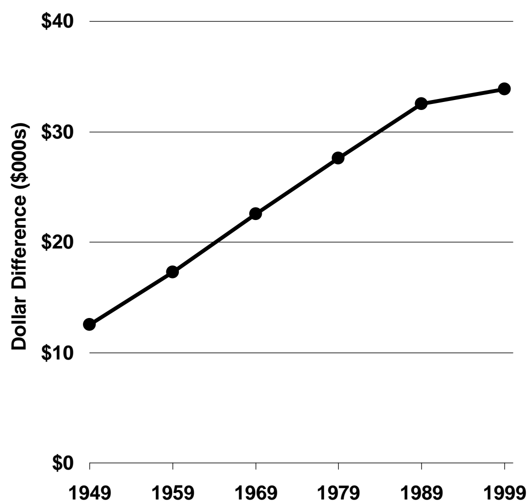
A. Real Dollars



C. Ratio Scale (using natural logarithm)



B. Real Dollar Difference (80th minus 20th)



D. Real Dollar Ratio (80th / 20th)

Figure 1. Adjusted Income of Families and Individuals--20th, 50th, and 80th Percentiles--by Year. Two Versions of Presenting the Incomes and Differences of Income: Arithmentic versus Ratio.

Note: Incomes are adjusted for inflation using the Consumer Price Index (research series) and for family size by dividing by the square root of family size.

Source: For 1949 through 1989, IPUMS; for 1999, estimate based on 1998 CPS.

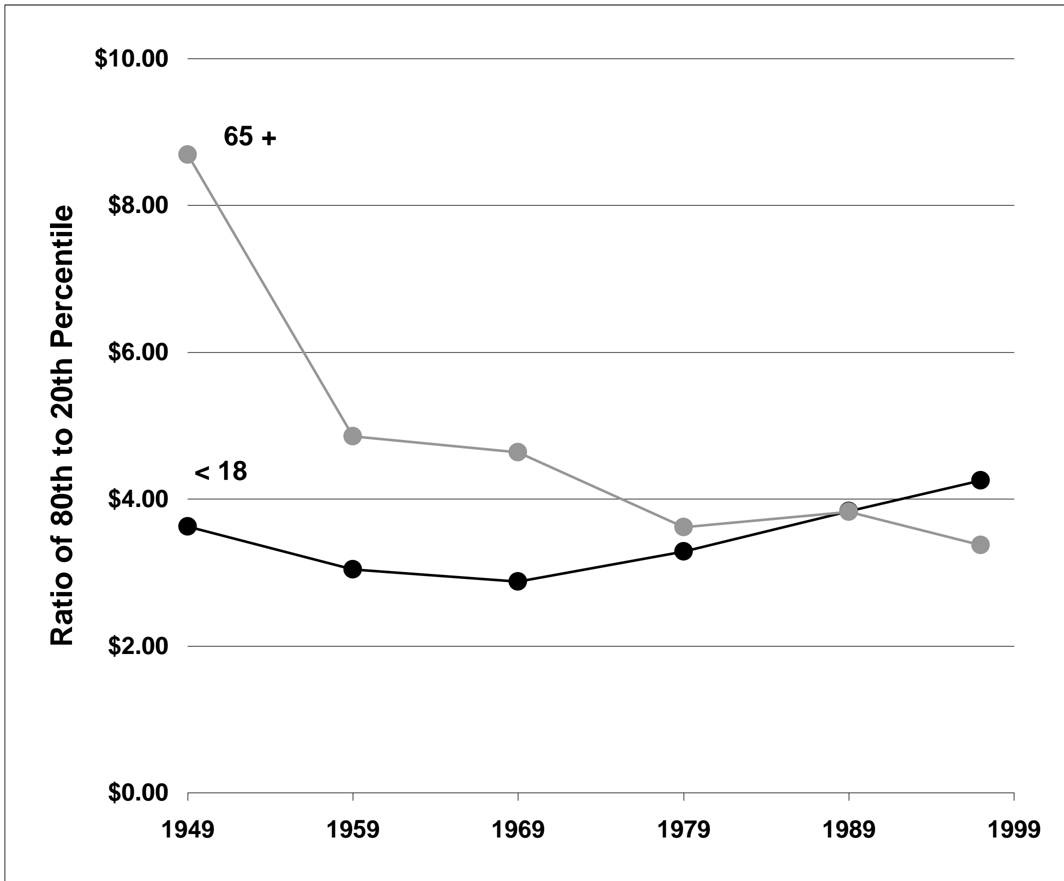


Figure 2. The Ratio of Adjusted Family Incomes for the 80th versus the 20th Percentile Among the Elderly and Among Children.

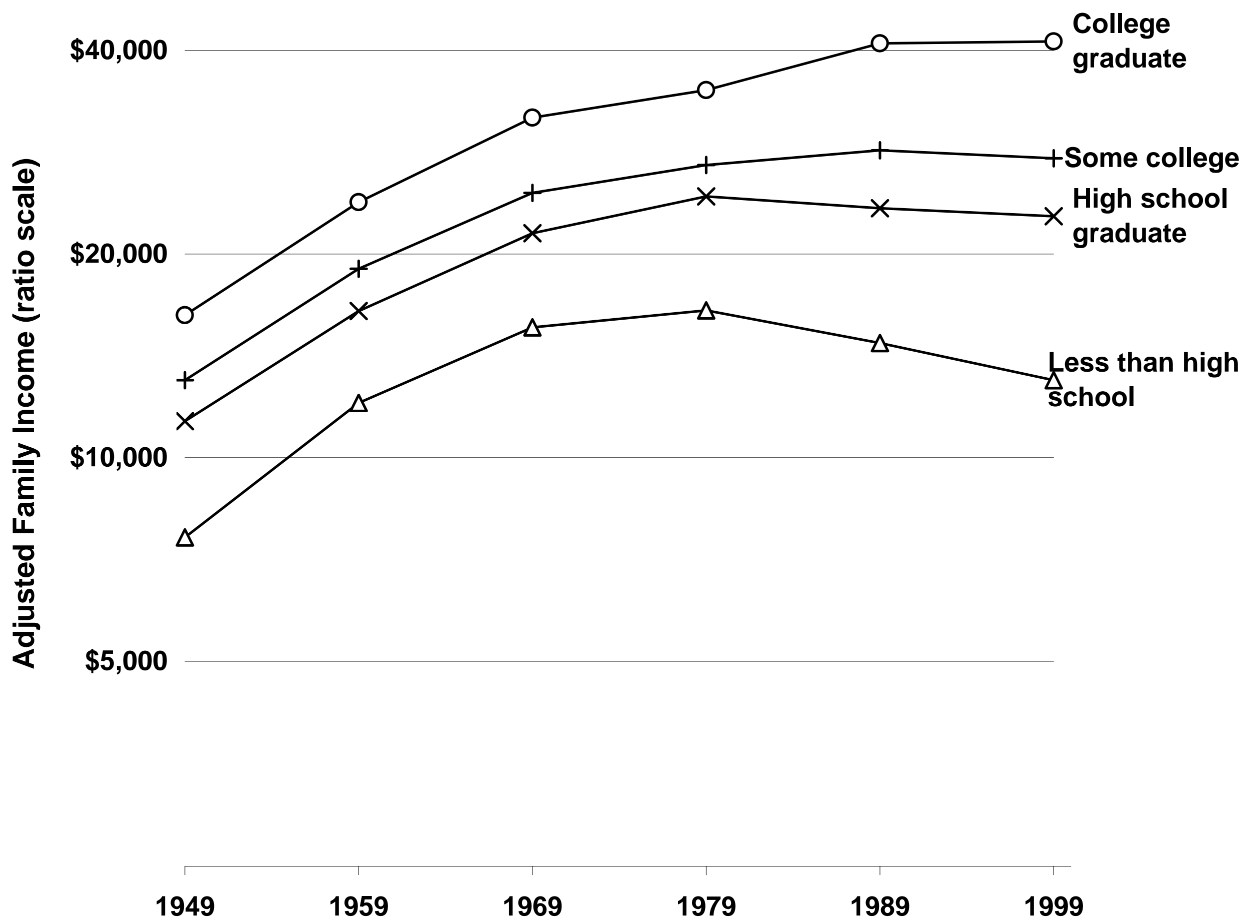


Figure 3. Median Adjusted Family Income, by Education
Sources: IPUMS and CPS.

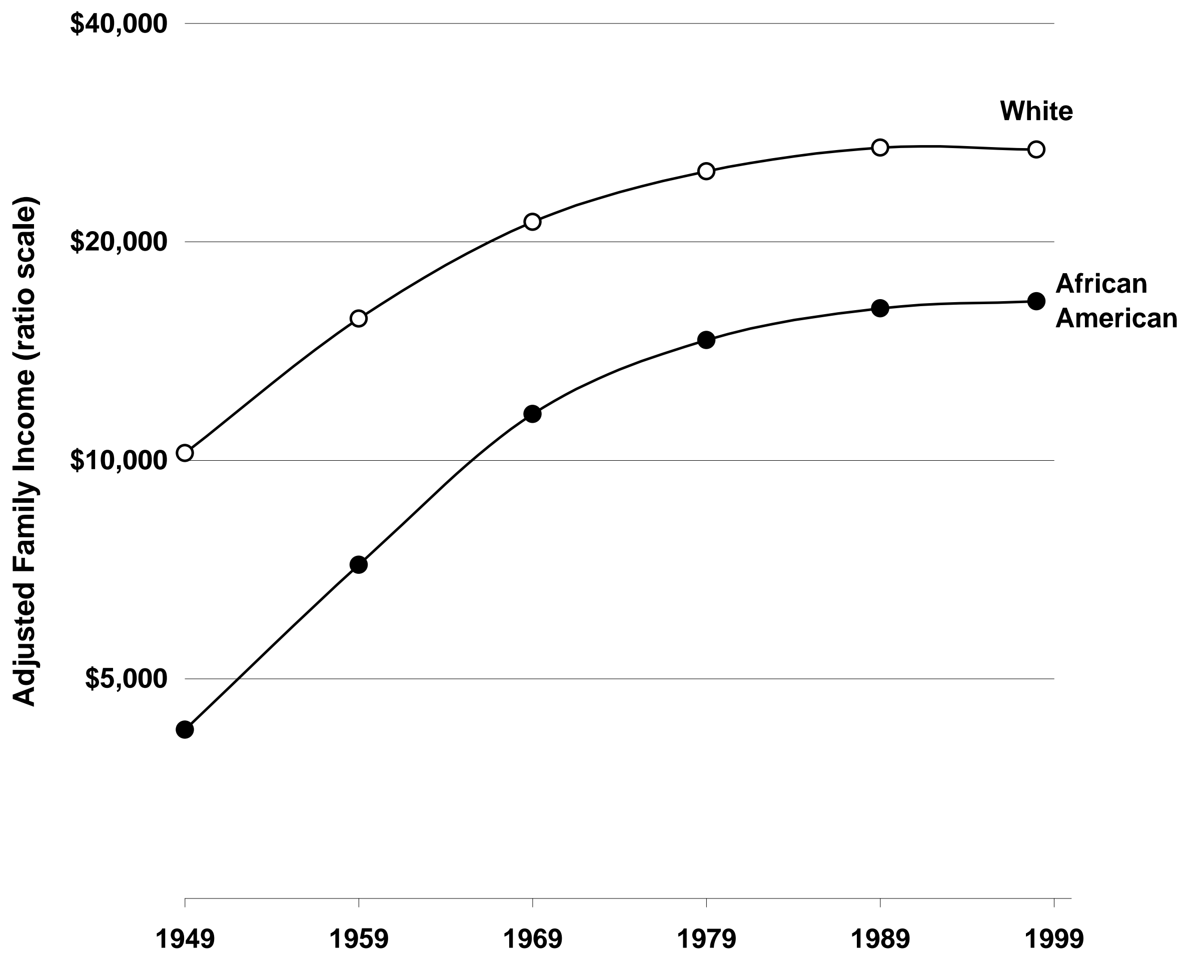


Figure 4. Median Adjusted Family Income, by Ancestry
Sources: IPUMS and CPS.

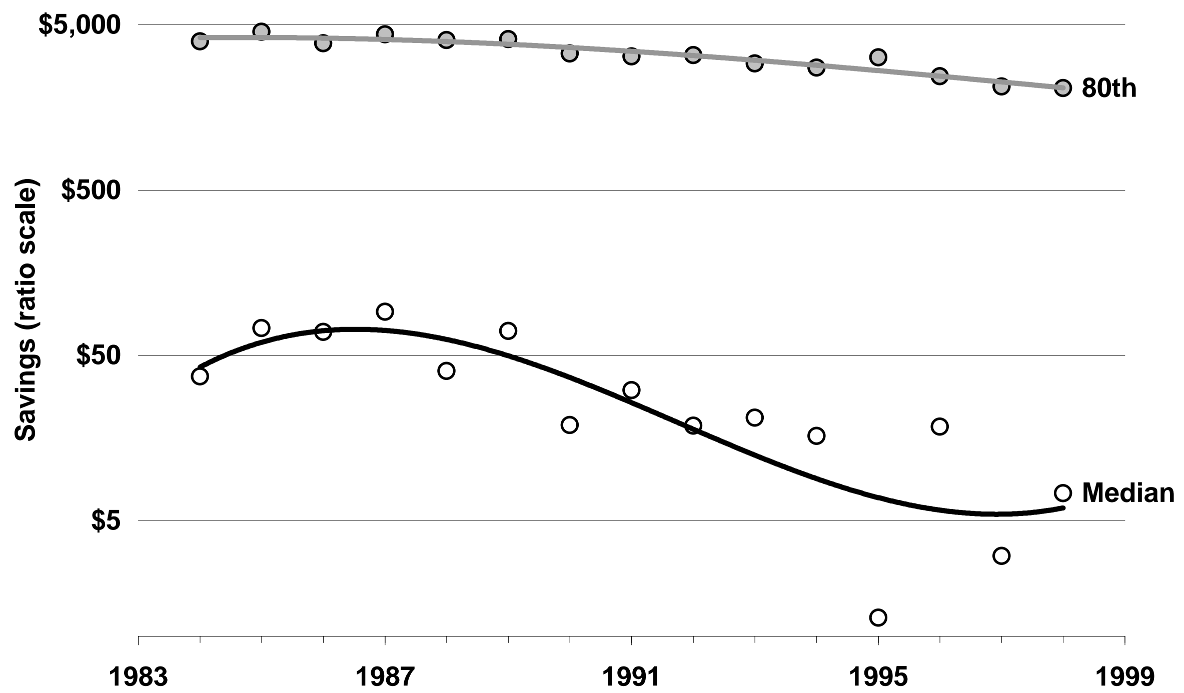


Figure 5. Savings Accounts: Adults, Adjusted for Family Size, 1984-1998

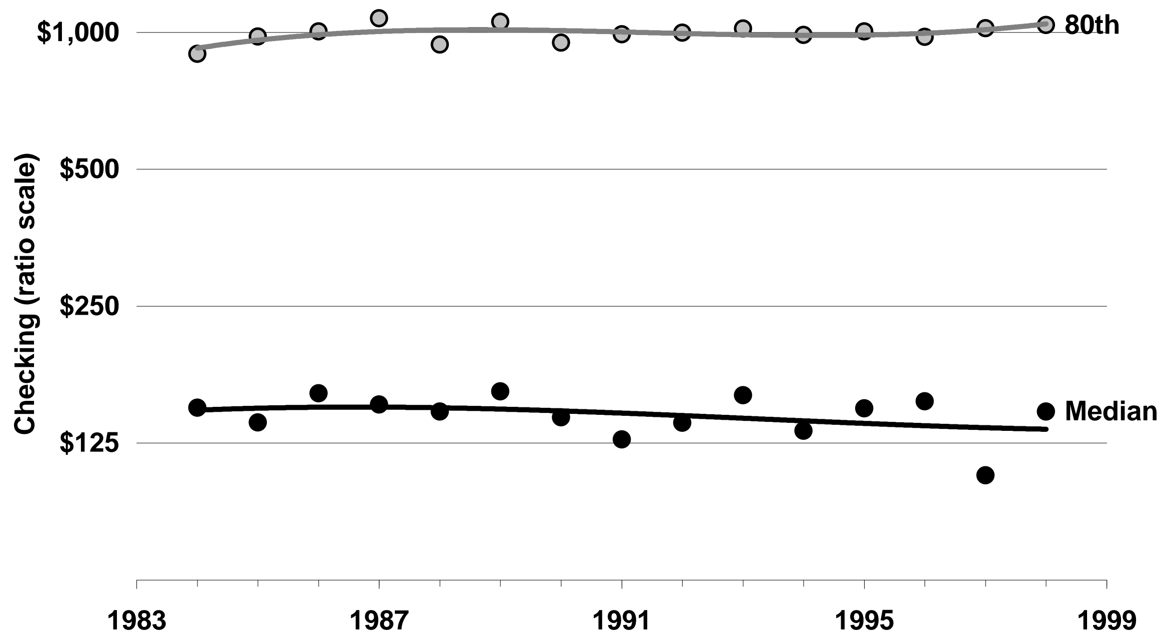


Figure 6. Checking Accounts: Adults, Adjusted for Family Size, 1984-1998

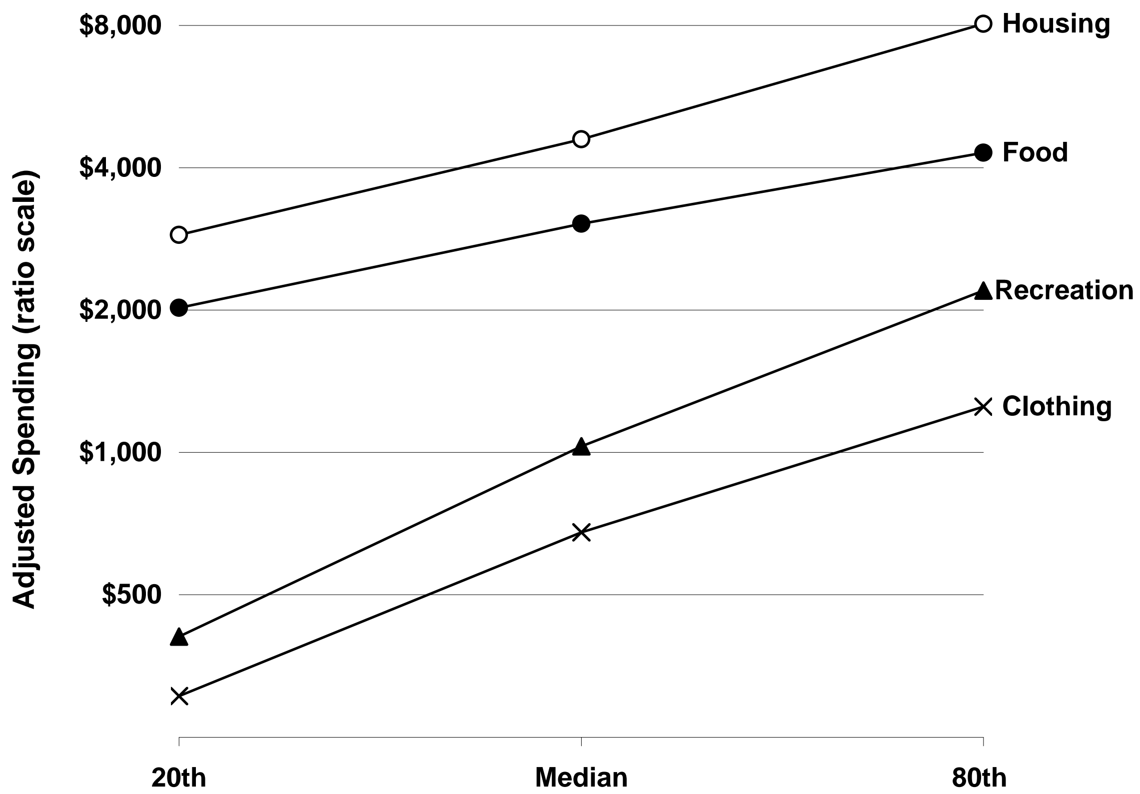


Figure 7. Amounts Spent on Food, Housing, Clothing, and Recreation by the 20th, 50th, and 80thPercentile Spenders in 1998, Adjusted for Family Size

Note: Because we use a ratio scale in this figure, the slope of each line indicates the disparity in spending in that spending category.

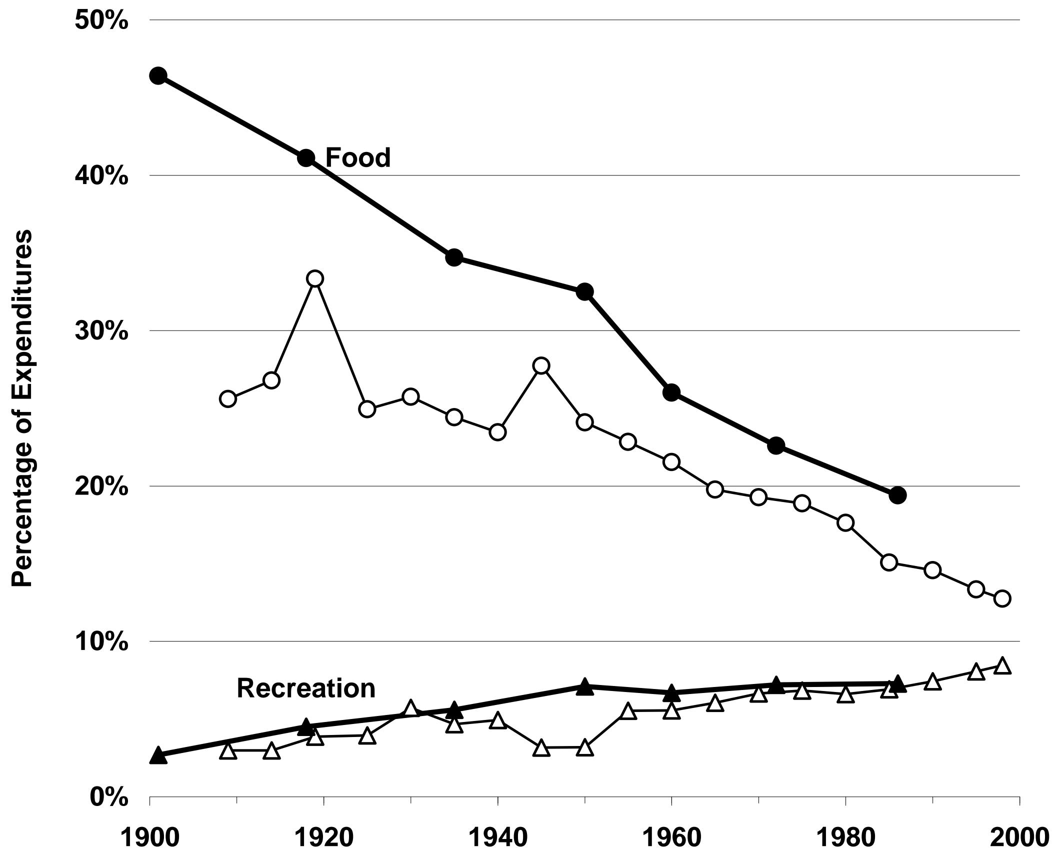


Figure 8. The percentage of consumers' spending on food (upper lines) and on recreation (lower lines) 1901-1998

Note: Urban household surveys of wage and salaried workers (heavy lines) and national accounts data (thin lines).

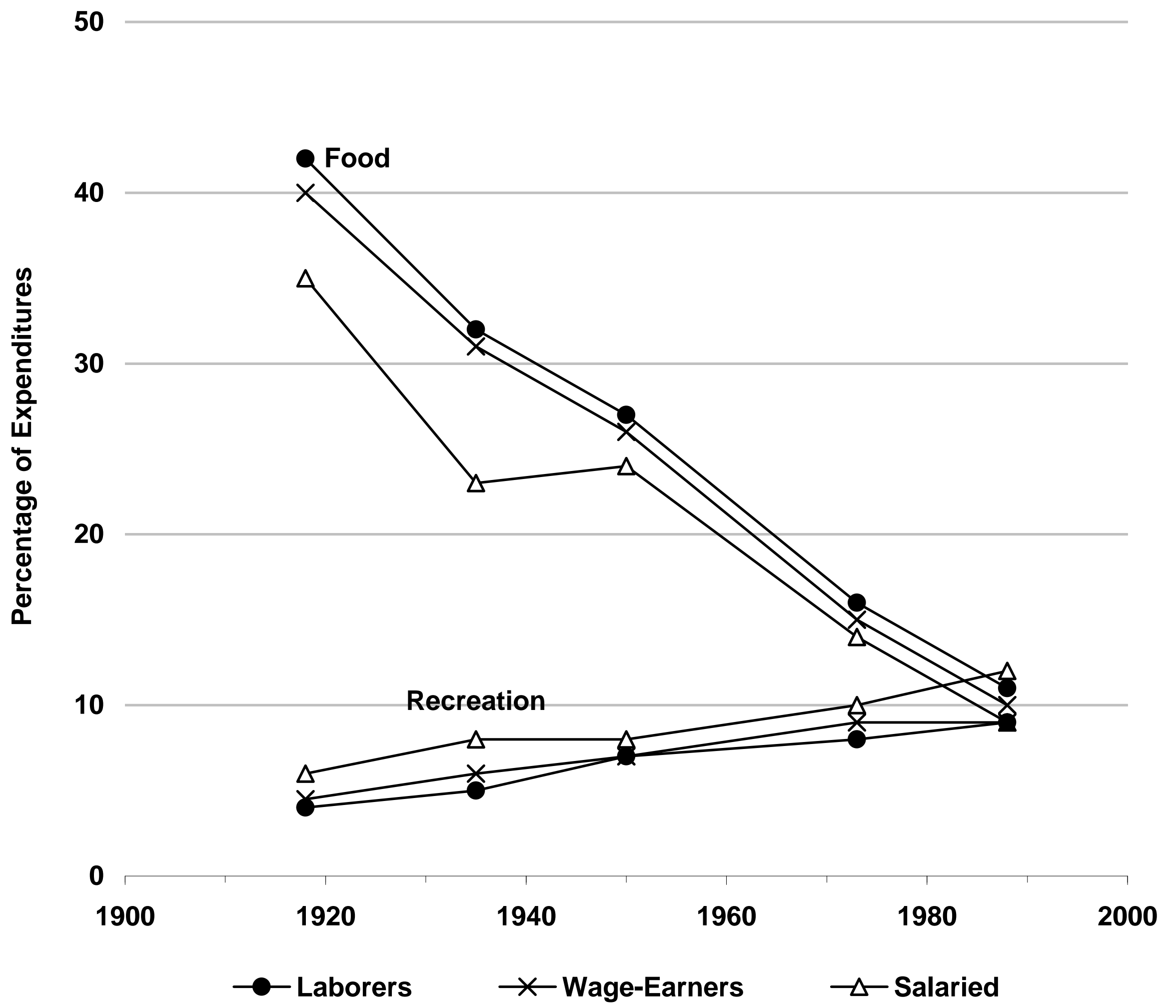


Figure 9. Percentage of Expenditures Spent on Food and on Recreation, by Occupation of Head of Household, 1918-1988

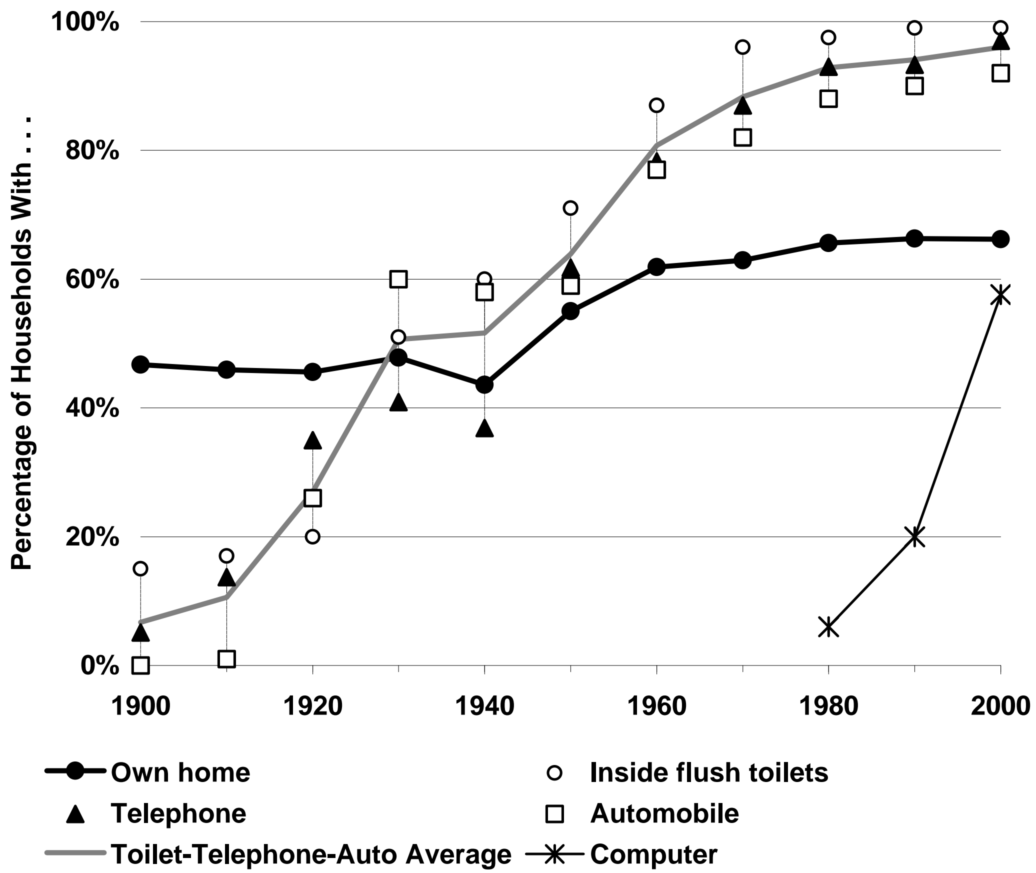


Figure 10. Percentage of Households with Specified Commodities, 1900-2000.

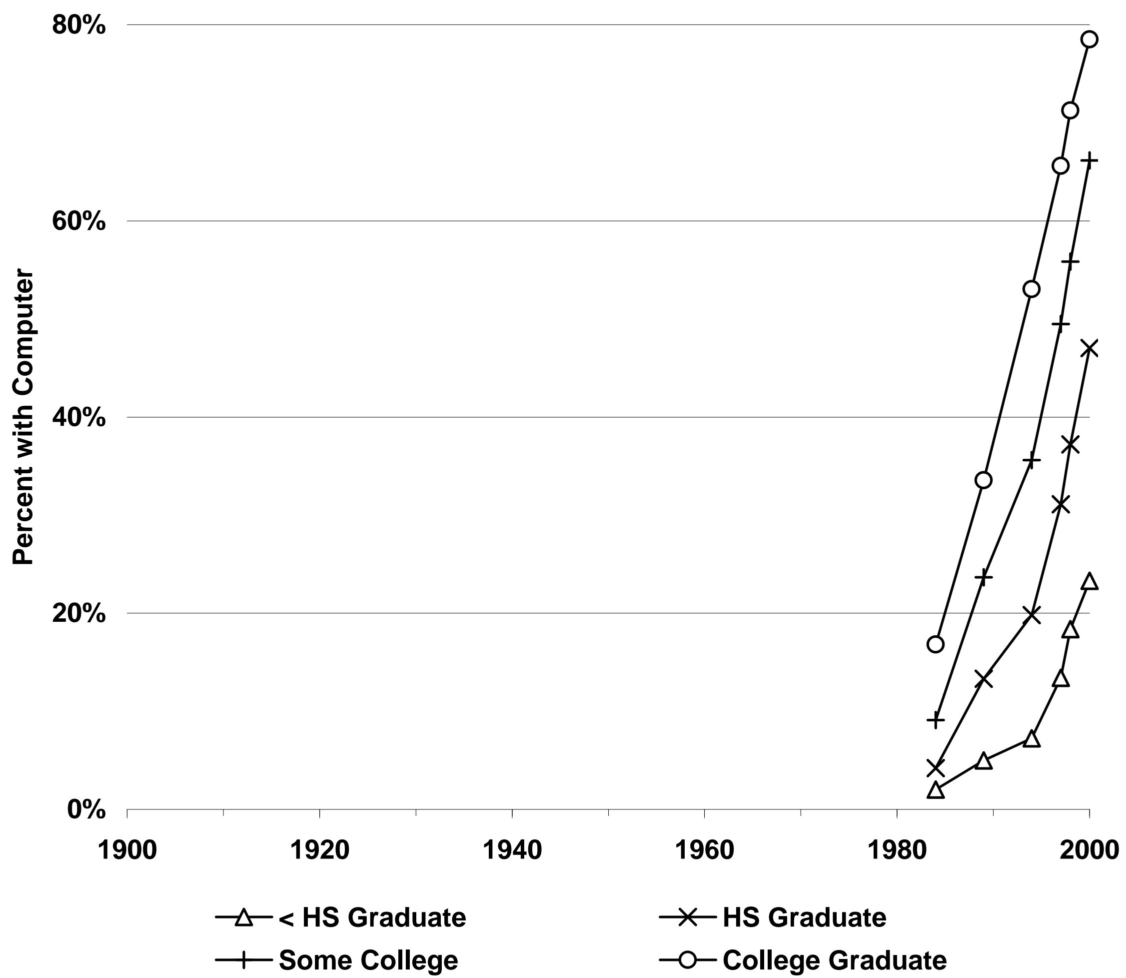


Figure 11. Percentage of Americans with a Computer in the Home, by Education (or Education of Head of Household), 1984-2000

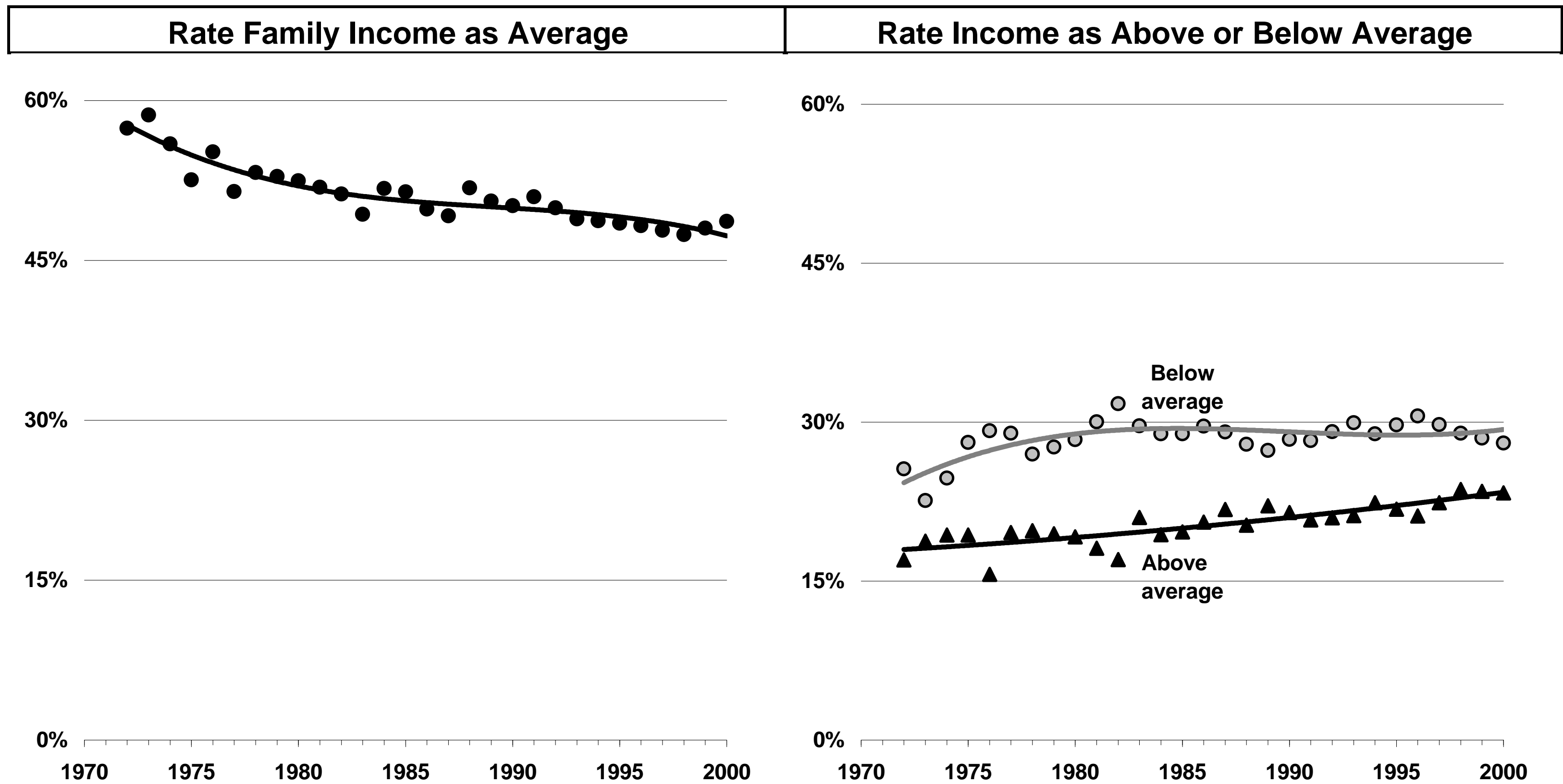


Figure 12. Subjective Assessment of Family's Income, by Year

Source: General Social Survey, 1972-2000

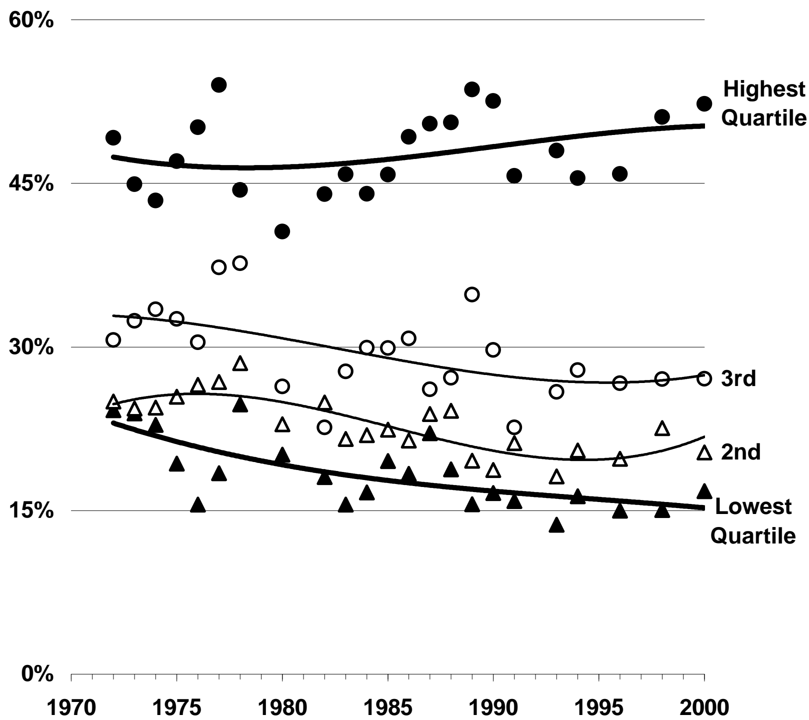


Figure 13. Percentage of Respondents Who Say They Are Satisfied with Their Families' Finances, by Adjusted Family Income Quartile, by Year

Source: General Social Survey, 1972-2000

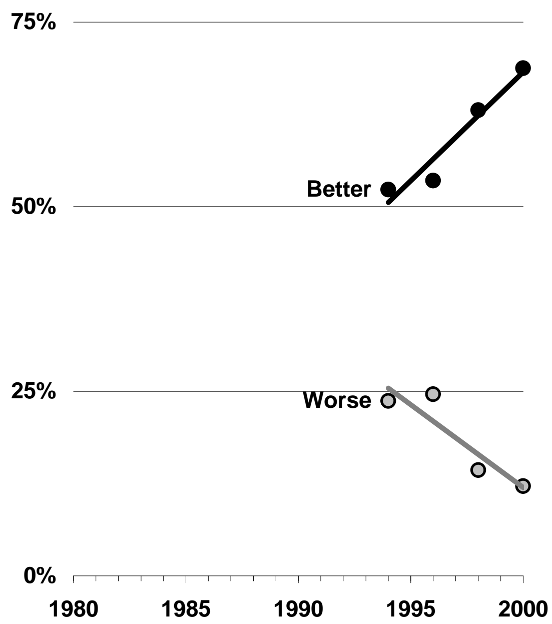


Figure 14. Assessment of Whether the Next Generation Will Have a Better or Worse Standard or Living than the Current Generation Has, by Year.

Source: General Social Survey, 1994-2000