

RESEARCH INSTITUTE FOR HOUSING AMERICA SPECIAL REPORT

The Distribution of Wealth in America Since 2016

John C. Weicher Director, Center for Housing and Financial Markets Hudson Institute



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His previous research on wealth has been published in the Review of the Federal Reserve Bank of St. Louis, The Public Interest, The Wall Street Journal, and United States Income, Wealth, Consumption, and Inequality, edited by Diana Furchtgott-Roth and published in the International Policy Exchange Series of Oxford University Press. His most recent paper, The Distribution of Wealth Since the Great Recession, has been published by the Research Institute for Housing America.

He was President of the American Real Estate and Urban Economics Association in 1982 and received the Association's George Bloom Award for Career Achievement in 1993. He holds an A.B. in English from the University of Michigan and a Ph.D. in economics from the University of Chicago. He is the author, co-author, or editor of sixteen books or monographs, and the author of numerous popular and scholarly articles.

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Executive Summary

After almost a decade of increasing inequality during the Great Recession and its aftermath (as documented in my previous RIHA report, *The Distribution of Wealth Since the Great Recession*, covering 2007–2016), the distribution of wealth in the United States became somewhat more equal between 2016 and 2019. The average net worth of Americans increased by 1.9 percent during those three years, from \$733,000 to \$747,000 (both measured in 2019 dollars), while the net worth of the typical household — the family in the middle of the distribution, richer than half and poorer than half — increased by 17.6 percent, from \$103,000 to \$127,000, the highest it has been since 2007.

The share of our total wealth belonging to the richest 10 percent of us declined modestly; the share belonging to the broadly defined middle-wealth families increased slightly; for the poorest 30 percent, their assets have consisted mostly of their cars and their checking accounts, and they were not much if any better off in 2019 than they had been in 2016.

These three groups are defined on the basis of their net worth, but the dividing lines between them are drawn with respect to the composition of their portfolios. Nearly all the rich households own stock in publicly traded corporations, and close to half also personally own and in most cases actively manage businesses which are not publicly traded - privately owned corporations, proprietorships, partnerships, and professional practices. These assets constitute about sixty percent of their wealth. Among the broad middle class, the assets in their retirement accounts and the equity in their homes are about two-thirds of their wealth. (Eightyfive percent were homeowners in 2019.) Their objectives appear to be maintaining and improving their standard of living and being able to support a comfortable retirement. About one-third of the poorest families have liabilities that exceed their assets; they may have student loans or installment debt, or some households among the fifteen percent who are homeowners may have mortgages that exceed the value of their homes.

Most of these generally positive changes came to an abrupt halt with the onset of the coronavirus early in 2020, and the economy went into a recession In February. It was short but sharp; the trough occurred In April 2020, and within a year the economy had recovered to the point that Gross Domestic Product was larger than it had been before the start of the recession. The three most widely followed stock market indexes all set new records in February 2020, then lost a third of their value in the next six weeks, recovered to reach new records by the end of the year, and after further fluctuations have all reached new highs more than 30 times so far this year.

Business activity — especially small business — and employment followed similar but less extreme down-and-up patterns. The small business outlook has been improving; the National Federation of Independent Business most recently reported that September of 2021 was the eighth consecutive month of record high unfilled job openings, and the labor shortage was the biggest problem facing small business owners. At the same time, the U.S. Labor Department was reporting declines in weekly new claims for unemployment insurance to levels on a par with new claims during March of 2020.

The housing market has been more stable and more consistently positive, thanks in part to extraordinarily low mortgage interest rates during 2020 and well into 2021. The homeownership rate was higher in 2019 than it had been in 2016 among all of the major racial and ethnic groups, although there were some declines for particular groups in 2018 and 2019, as calculated by the Census Bureau in its quarterly report on homeownership.

Introduction

The distribution of wealth in the United States has attracted increasing research and policy attention since the early 1980s. One important reason is that there is now a data source that surveys samples of American households every three years on a consistent basis and facilitates analysis of the changes in the distribution. This is the Survey of Consumer Finances (SCF), conducted by the Federal Reserve Board.

The first Survey was conducted in 1983; the thirteenth and most recent in 2019. Each SCF surveys several thousand households, with an extensive set of questions about assets and liabilities. The SCF combines two samples: one chosen randomly from the population on the basis of geography, known as the "area-probability sample," and the other a sample of households that are expected to have high wealth, which is drawn from a list of households based on their income tax returns, known as "the list sample." The latter sample is developed in cooperation with the Internal Revenue Service. The reason for having two samples is that wealth is concentrated among a small number of households, such as "the richest one percent" or "the richest 10 percent," and a random sample of the population will include few wealthy households and provide little information about a substantial fraction of total household wealth. In recent surveys, about three-quarters of the households were from the area-probability sample. About two-thirds of the households in the area-probability sample completed the interviews, compared to one-third of the list sample and about one-sixth of those in the list sample who are considered most likely to be the wealthiest families.

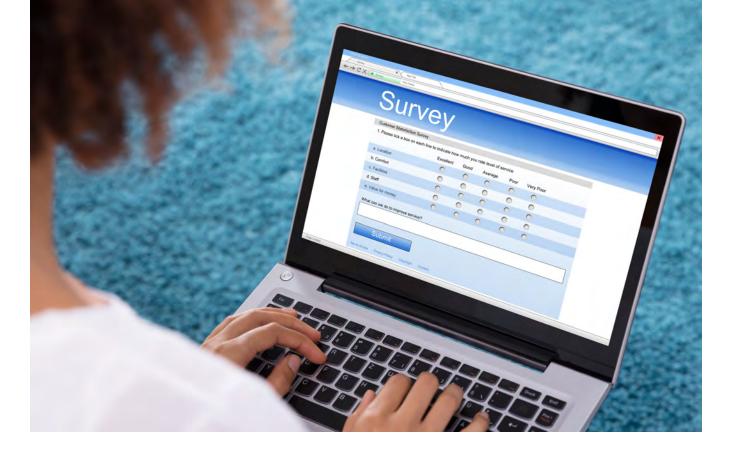
The SCF is not a panel survey. It does not interview any household in more than one survey. The median length of an interview is about 90 minutes, but some interviews can take substantially longer than three hours. These are typically wealthy households drawn from the list sample. There is no geographic information about respondents, which helps to preserve anonymity for rich households, who might be identifiable if their place of residence becomes public information, along with detailed information about their assets and liabilities.

The SCF is very different from the Forbes 400, which identifies each of the 400 individuals it judges to be the richest in the United States, and typically includes most of the same people from one year to the next. The SCF does not attempt to identify and interview the richest 400 households, or any other households, unless they are drawn from one of the samples. Indeed, it excludes the Forbes 400. In 2019, however, the Federal Reserve analysts calculated wealth concentration estimates when the Forbes 400 was included in each of the ten Surveys of Consumer Finances from 1989 to 2016. They found that the share of U.S. wealth held by the richest one percent increased by between 0.8 and 1.6 percent of total wealth in the individual surveys, with an average increase of 1.3 percent. Without the Forbes 400, the richest one percent held between 30 and 39 percent of total wealth in the various surveys. The analysts concluded that the exclusion of the Forbes 400 resulted in a relatively modest change in the concentration of wealth. They also concluded that the pattern of survey-to-survey changes in the distribution of wealth was not affected when the Forbes 400 were included in the sample.

THE POOR, THE RICH, AND THE MIDDLE-WEALTH FAMILIES

This paper uses the same framework as my previous paper on the distribution of wealth during the Great Recession (Weicher, 2020). Both papers classify households on the basis of their wealth and the composition of their portfolios. Households are divided into three groups: the least wealthy 30 percent, the most wealthy 10 percent, and the 60 percent in between.

Bricker, Jesse, Peter Hansen and Alice Henriquez Volz, "Wealth Concentration in the U.S. after augmenting the upper tail of the Survey of Consumer Finances," *Economics Letters 184*, No. 108659 (November 2019), Elsevier B.V.



The households in each group have broadly similar portfolios. The assets of the least wealthy consist largely of their cars and their transaction accounts. These are essentially necessary assets for most households. A small share of these households own their own home (about 15 percent) or have retirement accounts (about 20 percent). A larger share (over one-third) have student debt.

The portfolios of the richest households consist largely of the businesses they own and in most cases actively manage, and also the stock that they own in publicly traded companies. These assets constitute about 60 percent of their wealth. In addition, nearly all are homeowners and nearly all have retirement accounts.

Among the large number of families in the broad middle class, two-thirds of their net worth consists of their homes and their retirement accounts, although some own small businesses, or commercial or rental real estate in addition to their homes. With the emphasis on their homes and their retirement accounts, they appear to be constructing portfolios that would enable them to have a comfortable retirement.

By and large, the rich, the poor, and the middle-wealth families have different portfolios because they have different objectives. Their objectives do not appear to have changed since at least 2007.

RACE AND ETHNICITY

Households can also be distinguished on the basis of the race or ethnicity of the head of the household. The SCF employs a four-way classification: White, non-Hispanic; Black, non-Hispanic; Hispanic; and a combined category of Other races or two or more races. The proportion of all households who fall into each category in 2019 is 64.9 percent for White, non-Hispanic; 14.3 percent for Black, non-Hispanic; 9.2 percent for Hispanic; and 11.7 percent for the remaining category of Other race or two or more races. It is informative to distinguish households by race or ethnicity, as well as by wealth.

The Components of Household Wealth

In casual conversation, "wealth" often refers to financial assets, notably stocks and bonds, and perhaps bank accounts. This is correct as far as it goes, but it excludes a number of assets that are certainly of value to their owners and the value of which is established in markets for these commodities.

The wealth of any individual household consists of the value of the assets it owns, minus the amount of its debts.

- The value of a home, minus the amount owed on the mortgage and the amount borrowed on any home equity line of credit.
- The value of the cars and other vehicles owned by the household, minus the amount owed on any loans to buy these vehicles.
- The value of any rental housing and commercial property owned by the household, minus the mortgages on these properties.
- The value of businesses owned directly by the household

 proprietorships, partnerships, professional practices
 such as law or medicine, farms, and stock in closely-held
 corporations which is not publicly traded minus any
 debts owed by these businesses.

- Any stocks, bonds or mutual funds.
- The balances in checking and savings accounts.
- The cash value of whole life insurance policies.
- The current value of IRAs, Keogh plans, and other retirement savings accounts.

Offsetting the value of these assets, wealth takes account of any installment debt such as student loans, credit card balances or other consumer debt, as well as the mortgages, auto loans, and business debts mentioned above.

Measures of wealth typically exclude the value of consumer durables such as furniture, even though wealth includes the outstanding debts that were incurred to buy them. Wealth also typically excludes the present value of any pensions or Social Security payments that the household expects to receive in the future, which are difficult to quantify.²

Table 1 lists the components of net worth and their importance for American households, as reported in the 2016 and 2019 Surveys of Consumer Finances. They are calculated as the average shares over the two surveys.

The first Survey of Consumer Finances, conducted in 1983, included calculations of the present value of expected future Social Security benefits for households for active workers who were at least 40 years old, and the present value of private defined-benefit pensions. These proved to be difficult to calculate, and they were excluded in later surveys (Kennickell and Shack-Marquez, 1992). Quite recently, however, the SCF analysts, working with other economists, have produced such estimates, which result in substantially less concentration of wealth among rich households (Jacobs et al, 2021).

Table 1. The Composition of Household Wealth, 2016-2019

Category	Average Share of Total Household Wealth
Net worth	100.0%
Total assets	114.4%
Total liabilities	-14.4%
Assets	
Owner-occupied homes	36.0%
Unincorporated business	22.3%
Retirement accounts	17.3%
Mutual funds	10.7%
Stocks (directly owned)	6.8%
Transaction accounts	5.6%
Investment real estate	3.8%
Vehicles	3.1%
Trusts and other managed accounts	2.9%
Bonds	1.1%
Whole life insurance	1.0%
CDs	0.9%
Other assets	3.2%
Liabilities	
Mortgages and home equity loans	-9.9%
Debt on investment real estate	-1.3%
Education debt	-1.1%
Automobile loans	-0.9%
Consumer debt	-0.4%
Miscellaneous liabilities	-0.6%
Addendum	
Home equity	26.1%
Total stock owned (direct and indirect)*	26.0%
Equity in business	22.6%
Equity in investment real estate	2.5%
Equity in cars and other vehicles	2.2%

Source: Calculated from the 2016 and 2019 Surveys of Consumer Finances.

Readers of the previous paper may note that owner-occupied homes accounted for a notably larger share of household assets over the 2007-2016 period than they did during 2016-2019. Between the fall of 2013 and the fall of 2019, the Dow Jones Industrial Average and the S&P 500 both increased by more than 75 percent, while the Federal Housing Finance Agency's Repeat Home Sales index increased by about one-third. Despite the difference, owner-occupied homes accounted for a larger share of household assets than did stockholdings in both periods.

STOCKHOLDINGS

The Addendum to Table 1 shows that total stock owned by American households — both directly and indirectly owned - was almost 25 percent of their total assets, while the list of assets indicates that directly owned stocks accounted for less than six percent of total assets. The reason is that stocks can be and often are held as assets in accounts that can include other assets. During 2016-2019, about 19 percent of American households owned stock directly, and they owned about 20 percent of all the stock owned by American households. At the same time, 53 percent of American households owned the other 80 percent of stocks indirectly, in any of seven categories that are reported separately in the SCF. These categories include retirement accounts, mutual funds, thrift savings plans, the plans of future pensions, the plans of current pensions, trusts, and annuities. In the interview process, the SCF asks respondents first about the ownership of retirement accounts or accounts in the other categories, and then about the extent to which these accounts hold stocks.

This analysis makes use of total stockholdings, direct and indirect, and also the account categories in which both stocks and other assets can be included in the same account. The choice depends on which classification seems more useful for a particular purpose. Total stockholdings are usually more useful for measuring the extent to which a household's portfolio consists of business assets, as identified above; total assets in retirement accounts are more useful in assessing the extent to which households have the primary goal of saving for a comfortable retirement and are moving toward that goal.

The SCF uses the term "equity" for the total value of both directly and indirectly owned stocks. This paper uses the term "stockholdings," since "equity" can also refer to homeowners' equity in their homes, or the value of a vehicle net of any outstanding loan balances.

^{*} Includes stock owned within mutual funds, retirement accounts, and other managed accounts (for example, trusts), as well as directly owned shares of stock.

Measuring Inequality

The distribution of income or wealth is usually measured in either of two ways. One is a description of the entire distribution among all households, the other focuses on the concentration of income or wealth at one end of the distribution.

THE GINI COEFFICIENT AND THE LORENZ CURVE

The most common measure of the entire distribution is the Gini coefficient, named for Corrado Gini, an Italian statistician and sociologist who developed it early in the 20th century and published it in a 1912 paper. Households are ranked from the poorest to the richest, and the cumulative share of total income or wealth is then measured against a perfectly equal distribution. Figure 1 illustrates the ranking. The cumulative share of population is measured along the horizontal axis, from the poorest household to the richest. and the cumulative share of total income or wealth for that share of the population is measured on the vertical axis. A perfectly equal distribution is a straight line — a 45-degree line — from the lower left corner to the upper right corner: each one percent of the population has one percent of the income or wealth of the country. The actual distribution is measured by the cumulative share of the total income or wealth for each percentage of the population, from the poorest to the richest. The poorest five percent may have one percent of the total, for example.

The line connecting these points will always lie below the straight line unless the distribution is perfectly equal. This line is known as the Lorenz curve, named for Max Lorenz, an American economist and statistician who first drew it in 1905. The Gini coefficient is calculated as the area between the line of equality and the Lorenz curve, divided by the total area under the line of equality. If all the wealth in the country is owned by one household, the Lorenz curve lies along the horizontal axis from zero to one, and then becomes a vertical line very nearly coinciding with the vertical axis. The more unequal the distribution, the closer the Lorenz curve is to the horizontal axis, and the closer the Gini coefficient is to unity; the more equal the distribution, the closer the Lorenz curve is to the straight line, and the closer the Gini coefficient is to zero.

Source: Calculated from 2007–2019 Surveys of Consumer Finances.

Figure 1 shows the Lorenz curves for the most recent five Surveys of Consumer Finances, and Table 2 reports the corresponding Gini coefficients for the five most recent SCFs. Unlike most figures, the vertical axis in Figure 1 is on the right side of the diagram, rather than the left. Also, at the far left of the figure, the Lorenz curves all lie below the horizontal axis, because some households have negative wealth: they owe more than their assets are worth. Income can be zero, but not negative, and therefore the Lorenz curve for income can never be below the horizontal axis, and the Gini coefficient for income can never be negative.

The Lorenz curves in Figure 1 appear to be almost superimposed on each other, particularly at the low wealth and high wealth ends of the population. In between, from about the 40th to the 90th percentiles, the Lorenz curve for 2007 is distinct from the later curves, but the curves for 2010 through 2019 are quite close to each other. Only from about the 75th to the 90th percentiles of the distribution is it clear that the curve for 2016 lies below the other curves, and the distribution of wealth for that survey is the most unequal.

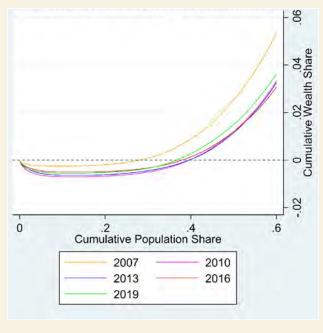
The differences in the distribution of wealth between surveys can be seen much more clearly in Figures 2 and 3, which magnify the Lorenz curves at the low and high ends of the distribution, respectively. In Figure 2, it is clear that the distribution was most equal in 2007 and most unequal in 2010 for the less wealthy half of the population. The 2013 distribution is slightly more equal than the 2010 distribution for the least wealthy third of the population, and the distributions for 2016 and 2019 are very close to each other for these households. From about the 40th percentile to the 60th percentile, the 2019 distribution is more equal than it is for any of the three previous surveys, and around the 50th percentile, the distributions for 2010, 2013, and 2016 become nearly indistinguishable.

Figure 3 magnifies the distributions for the richest 15 percent of the population. The distribution for 2007 is the most equal between about the 85th and 95th percentile. Above the 95th percentile, the distributions for 2007 and 2010 are virtually the same; they appear to be superimposed on each other. The 2016 distribution is the least equal; the rich households have the largest share of wealth of any of the five most recent surveys.

While the Lorenz curves appear to be almost superimposed in some parts of the distribution of wealth in the three figures, it is reasonably clear that the Lorenz curve for 2007 is closest to the line of equality, and the Lorenz curve for 2016 is farthest away, at least for the population share between roughly 0.600 and 0.900.

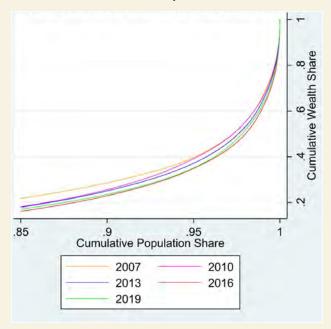
The Gini coefficients in Table 2 present a much simpler picture of the distribution of wealth than the Lorenz curves; they distinguish much smaller changes from one SCF to the next than the Lorenz curves can show. The distribution of wealth became more unequal between 2007 and 2010, very slightly more unequal between 2010 and 2013, and slightly more unequal between 2013 and 2016, before becoming somewhat more equal between 2016 and 2019. This statement, however, does not give much information about how the distribution changed. The difference between distributions is more meaningful where it is more evident for the Lorenz curves.

Figure 2. Relative Lorenz Curves, 2007–2019, for the Poorest 60% of Sample



Source: Calculated from 2007–2019 Surveys of Consumer Finances.

Figure 3. Relative Lorenz Curves, 2007–2019, for the Wealthiest 15% of Sample



Source: Calculated from 2007–2019 Surveys of Consumer Finances.

Table 2. The Changing Distribution of Wealth, 2007-2019

Year	Gini Coefficient
2007	0.816
2010	0.846
2013	0.849
2016	0.860
2019	0.852

Source: Calculated from the 2007–2019 Surveys of Consumer Finances.

CONCENTRATION RATIOS

Measures of the concentration of wealth are often referenced in popular discussions of inequality. The share of wealth owned by the richest one percent of all households is much easier to calculate than a Gini coefficient and much easier to understand. In addition, the shares held by the richest one percent or ten percent attract attention. They have certainly done so in recent years.

Table 3 shows the changes in the overall distribution of wealth for the richest one percent, five percent, and 10 percent, and also the shares for the households between one percent and five percent, and between five percent and 10 percent, for the last five surveys. The concentration ratios increased from one survey to the next from 2007 to 2016, and then declined between 2016 and 2019.

The ratios do not all change to the same extent from one survey to the next, however. The shares of the richest one percent and the richest five percent both increased by about half of one percentage point between 2007 and 2010, while the share of the richest 10 percent increased by three percentage points. The share going to the second richest five percent of all households thus increased by about 2.5 percentage points, while the share of the richest five percent only increased by 0.5 percentage points.

Something similar happened between 2016 and 2019. The share of the richest one percent declined from 38.5 percent to 37.2 percent, while the share of the richest five percent declined only from 65.1 percent to 64.9 percent. The share going to the 95th to 99th percent of all households thus increased by 1.1 percentage point. It is easy to overlook this increase and focus on the declines that occurred for both the richest one percent and the richest five percent.

Table 3. The Concentration of Wealth Between 2007 and 2019

Category	2007	2010	2013	2016	2019
Richest 1%	33.6%	34.1%	35.5%	38.5%	37.2%
Richest 5%	60.3%	60.9%	63.9%	65.1%	64.9%
Richest 10%	71.4%	74.4%	75.0%	77.1%	76.5%
Difference Between Richest 1% and Richest 5%	26.8%	26.8%	28.4%	26.6%	27.7%
Difference Between Richest 5% and Richest 10%	11.1%	13.5%	11.1%	12.0%	11.6%

Source: Calculated from the 2007–2019 Surveys of Consumer Finances.

WEALTH INEQUALITY AND INCOME INEQUALITY

Much more attention has been given to the distribution of income than to the distribution of wealth. The SCF has income data for the households in the survey, in addition to wealth, going back to 1989, and the Current Population Survey (CPS) conducted annually by the Census Bureau has calculated Gini coefficients for income for each year back to 1947. These data series do not follow similar patterns. Table 4 shows the Gini coefficients for wealth and income for the SCF since 2007, and the Gini coefficients for income from the CPS over the same period. One important difference between the income and wealth data in the SCF is that households are asked about their income for the year previous to the survey, because most households are interviewed between May and December of the survey year, and they will not know their income for that year until after the interview. Table 4 therefore reports Gini coefficients for wealth for the survey years between 2007 and 2019, and Gini coefficients for income for the years before those surveys.

Table 4. Gini Coefficients for U.S. Wealth (2007-2019) and Income (2006-2018)

	Wealth	Income (SCF)	Income (CPS)
2007	0.816	0.574	0.470
2010	0.846	0.549	0.468
2013	0.849	0.574	0.477
2016	0.860	0.598	0.489
2019	0.852	0.590	0.486

Source: Wealth and Income (SCF) are calculated from the 2007-2019 Surveys of Consumer Finances; Income (CPS) is reported in U.S. Bureau of the Census, *Income and Poverty in the United States*: 2019, Table A-4.

The data do not follow similar patterns. The distribution of wealth became more unequal from 2007 to 2016, with an especially large increase between 2007 and 2010, and then more equal between 2016 and 2019, while the distribution of income as calculated from the SCF became much more equal between 2006 and 2009, and then much more

unequal between 2009 and 2015. The distribution of income as reported in the CPS moved in the same direction as the distribution calculated from the SCF between each pair of years, but to a much lesser extent, and was consistently more equal than the distribution calculated from the SCF.

There are some differences between the SCF and CPS which contribute to the difference between the income coefficients. The SCF definition of income includes realized capital gains, while the CPS does not, for example. There are also changes in the CPS sample design over time, particularly after each census.

Both measures of income inequality are much lower than the SCF measure of wealth inequality. The most important reason for these differences is that wealth and income have different relationships with the age of the household head. Figure 4 shows these differences for the 2016 and 2019 SCFs. The data are calculated for three-year age cohorts, to match the three-year interval between surveys. This introduces some fluctuations between age cohorts, especially for net worth, but simplifies the discussion later in the paper.

Young adults start their working lives with entry-level positions and incomes, and their net worth consists mostly of their cars and their checking accounts, and for many also includes their debts, especially student loans. Their income is typically three or four times their net worth during their 20s, but net worth tends to increase more rapidly and by their late 30s, their wealth is likely to exceed their income. Income tends to increase until the head of the household is around 60, then declines as households begin to retire. Wealth continues to increase until the head of the household is about 70. By then the wealth of the typical household is four times their income, and while older households certainly tend to draw down their wealth, their income tends to decrease more rapidly.

The SCF includes households headed by someone between the ages of 18 and 95. Figure 4 is truncated at both the low and high ends, however, because the samples are small. In 2016, for example, the wealthiest age cohort consists of households headed by someone in their early 90s.

Figure 4A. 2015 Median Income and 2016 Median Net Worth by Age Cohort in 2015–2016 (Adjusted to 2019 dollars)

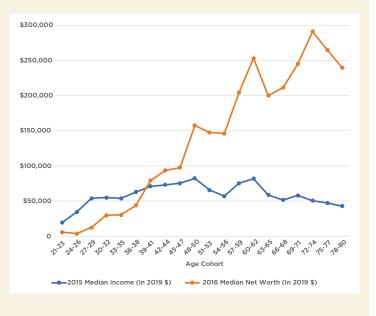
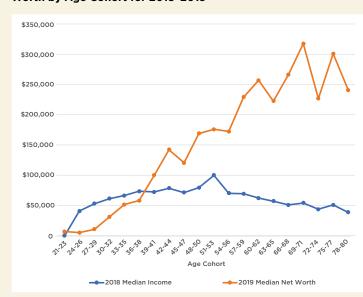


Figure 4B. Median Income and Median Net Worth by Age Cohort for 2018-2019



Source: Calculated from 2016 and 2019 Surveys of Consumer Finances.

The Distribution of Wealth from 2016 to 2019

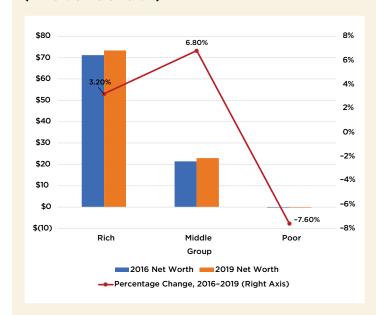
The overall increase in wealth between 2016 and 2019 differed from the typical changes from survey to survey between 2007 and 2016. In the course of the Great Recession, the share of total wealth owned by the richest 10 percent of households increased during each triennium. From 2016 to 2019, the opposite was the case.

As of 2016, the richest 10 percent of American households held 77.1 percent of total household wealth. Of the \$3.7 trillion increase in total wealth between 2016 and 2019, however, the rich households received about \$2.25 trillion (about 60 percent) and middle-wealth households received about \$1.5 trillion (about 40 percent). The division of the increase in total net worth between the rich and the middle-wealth households was quite different than it had been during each of the three previous trienniums. Between 2007 and 2010, when total wealth and the wealth of each group declined, the decline was smaller in percentage terms for the rich than for either middle-wealth families or the poor; between 2010 and 2013, there was a slight increase in total wealth of about four percent, nearly all of which (90 percent) accrued to the rich; between 2013 and 2016, there was a large increase in total wealth of about 30 percent, and again nearly all of the increase (85 percent) accrued to the rich. Over these nine years, the share of total wealth owned by the rich increased from about 71.4 percent to 77.1 percent. The 60/40 split of the net increase in wealth between 2016 and 2019, however, resulted in the share of net worth held by the rich declining slightly from 77.1 percent to 76.5 percent.

The poor as a group had negative net worth in each survey from 2010 through 2019, and they were a little further in the red in 2019 than they had been in 2016. Their debts exceeded their assets by \$304 billion in 2016 (measured in 2019 dollars), and that disparity increased to \$327 billion (an increase of 7.6 percent) in 2019. Figure 5 shows the change in the wealth of each group during these three years, both the total dollar amount and the percentage.

Looked at in terms of the change in assets, the largest share of this \$3.7 trillion increase was a \$2.2 trillion increase in home equity; the total value of home equity was 13 percent

Figure 5. 2016-2019 Changes in Total Wealth by Group (Trillions of 2019 Dollars)



Source: Calculated from 2016 and 2019 Surveys of Consumer Finances.

more than it had been in 2016. There were both positive and negative changes in the aggregate value of individual assets and liabilities; holdings of stocks in various forms increased by about \$1.5 trillion, for example.

For all three groups, the composition of their portfolios did not change much from 2016 to 2019, following the pattern that had been the norm since at least 2007.

THE ASSETS, AND THE LIABILITIES, OF POOR HOUSEHOLDS IN 2016 AND 2019

For the poor, their most important assets were still their cars and their transaction accounts. In 2016, 95 percent of poor households had transaction accounts, with a total of \$83 billion and an average balance of \$2,300; in 2019, 96 percent had accounts, with a total of \$99 billion and an average balance of \$2,700. More poor households also owned cars: 69.4 percent were owners in 2016, and 71.6 percent in 2019. The total value of their cars was \$338 billion in 2016 and \$350 billion in 2019; the average value of the cars owned, per household, was \$23,500 in 2016 and \$27,800 in 2019. Their total equity in their cars was \$194 billion in 2016 and \$180 billion in 2019; their average equity dropped from \$7,400 to \$6,500. About 10.4 percent owed more on their car loan than the market value of the car in 2016; that percentage was down to 6.6 percent in 2019.³

The most noteworthy change among the poor, however, was the increase in homeownership. In 2016, about 14.5 percent of poor households (5.48 million) owned their home. About 18 percent of these owners (close to one million) owed more on their mortgage and/or HELOC than their house was worth, in their judgment.⁴ Poor homeowners with positive equity in their homes had about \$48 billion in home equity and an average home equity of about \$11,000. In 2019, 14.9 percent of poor households (5.77 million) were homeowners, of whom about six percent (350,000) believed that they were underwater. The total home equity for poor homeowners with positive equity in their homes was about \$120 billion; their average equity was about \$22,000. This is a modest increase in homeownership, a substantial reduction in the proportion who were underwater, and a doubling of the home equity of those with positive equity, all in the course of a three-year period.

In contrast, the value of the stocks held by poor households, consisting mainly of their retirement accounts, did not increase, but the number of poor households holding stock did. In 2016, nineteen percent held stock, with a total value of \$55 billion and an average value of \$7,900; in 2019, 23 percent held stock, also with a total value of \$55 billion, but with an average value of \$6,400.

Poor households had total assets worth about \$1.3 trillion in 2016 and \$1.4 trillion in 2019, but their debts were larger in both years, and they became poorer during those three years. In 2016, their liabilities were about \$1.6 trillion, consisting primarily of \$600 billion in student loans, \$500 billion on their homes, and \$170 billion on their cars. In 2019, the

As a result, in 2019 the total net worth of the poor was a negative \$327 billion; as of 2016, it had been a negative \$304 billion (both measured in 2019 dollars). The mean wealth of poor households deteriorated from about negative \$8,000 to about negative \$8,500.

Student debt was a particularly important factor in these changes. Nationally, it increased from less than \$100 billion total in 1989 to \$960 billion in 2016 and to \$1.1 trillion in 2019. It has weighed particularly on young households and minority households. The 2019 SCF data show that households in their 20s and 30s constituted more than half of the households with student debt, owed more than half of all outstanding student debt, and owed more, on average, than older households. This was especially true for households in their 30s, who had an average debt of \$10,000 more than households in any other age group. It was also true for Black households. They comprised 14 percent of all households in 2019, but they were 20 percent of all households with outstanding student loans, and they had a larger average debt than the households of any other race or ethnicity reported in the SCF.

Table 5. Student Debt in 2019

	% Of all households	% Of all households with student debt	% Of student debt	Average debt
Age				
20s	10.6%	22.8%	21.2%	\$38,000
30s	18.1%	32.5%	38.3%	\$48,000
40s	16.0%	20.9%	19.2%	\$37,000
50s	18.8%	14.9%	13.6%	\$37,000
Older	36.4%	8.8%	7.7%	\$35,000
Race/Ethnic	city			
White	64.9%	60.6%	60.1%	\$40,000
Black	14.2%	20.1%	22.2%	\$45,000
Hispanic	9.6%	6.4%	4.9%	\$31,000
Other	11.3%	12.9%	12.8%	\$40,000

Source: Calculated from 2019 Survey of Consumer Finances.

situation was similar: their liabilities were about \$1.7 trillion, consisting mostly of \$650 billion in student debt, \$640 billion owed on their homes, and \$170 billion owed on their cars.

The market value of cars is determined by the SCF, based on "data collected by the National Automobile Dealers Association and a variety of other sources. For other types of vehicles, the respondent is asked to provide a best estimate of the current value." (Bhutta et al, 2020, p.19, fn.35).

The SCF asks homeowners what they believe their home is worth and uses their answer as the measure of the value of that home.

THE RICH: DOING BUSINESS

The total net worth of the rich households increased by \$2.25 trillion between 2016 and 2019, from \$71.211 trillion (measured in 2019 dollars) to \$73.463 trillion. This was about a 3.2 percent increase in real terms. The average wealth of rich households increased by \$400,000 (about 7.5 percent), from \$5.3 million to \$5.7 million, in three years. Their median net worth also increased, but the increase in median wealth was half the increase in average wealth: about \$200,000, from about \$2.4 trillion in 2016 to about \$2.6 million in 2019.

Their business assets — privately held and mostly actively managed — increased from \$19.4 trillion to \$20.1 trillion, about a 3.7 percent increase in real terms. These businesses include proprietorships, partnerships, professional practices, and corporations whose stock is not traded on stock markets. About 45 percent of the rich households owned one or more of these businesses, an increase from the 2016 proportion of 41 percent. The value of their businesses constituted 27.3 percent of the net worth of rich households in 2016, and 27.4 percent in 2019. The average value of their business was about \$3.5 million in both years.

Publicly traded stocks were also a substantial share of the wealth of the rich, and nearly every rich household -93.74 percent in 2016, 94.04 percent in 2019 - owned them. Their holdings totaled \$19.8 trillion in 2016 and \$21.1 trillion in 2019, an increase of 6.6 percent in real terms. The average holding amounted to \$1.57 million in 2016 and \$1.75 million in 2019, an increase of about 11.5 percent.

Nonresidential real estate properties — predominantly commercial buildings and rental housing properties with at least five apartments — also fall into the category of business assets and were mostly privately owned, but they are reported separately in the SCF. They declined in importance between 2016 and 2019. About 2.9 million rich households held them in both surveys, but their equity in their holdings fell from \$3.5 trillion in 2016 to S2.9 trillion in 2019, and the equity of the average holding declined by 21 percent, from \$1.23 million to \$960,000. (The SCF reports the household's equity in these properties, net of any debt.)

Altogether, these business assets of rich households amounted to \$44.4 trillion in 2019, an increase of four percent from the total of \$42.7 trillion in 2016. They constituted 60.1 percent of the wealth of the rich in 2019, slightly more than the 59.7 percent in 2016, and their average value was \$3.4 million in both years.

The SCF includes another category of residential real estate, consisting partly of second homes and partly of small rental properties (one to four rental units). About half of all rich households owned some properties in this category, but the

number declined between surveys: there were 6.5 million rich owner households in 2016 (51.9 percent) and 6.1 million in 2019 (47.6 percent). The total value of these properties also declined by about three percent, from slightly less than \$5.2 trillion to about \$5.05 trillion. The SCF separately reports the debt on these properties, as with owner-occupied homes; there were 2.5 million owners with total mortgage debt of \$655 billion in 2016 and 2.2 million with total debt of \$808 billion in 2019. In both surveys, a majority of households with these properties owned them free and clear: 4.0 million in 2016 (61 percent of all owners) and 3.9 million in 2019 (64 percent). The equity in these properties, including those with mortgages and those owned free and clear, amounted to \$4.5 trillion in 2016 and about \$4.35 trillion in 2019, a reduction of 3.3 percent. These amounted to 6.3 percent of the total net worth of the rich households in 2016, and just over 6.0 percent in 2019.

Nearly all rich households were homeowners — 94.57 percent in 2016 and 96.06 percent in 2019. The total value of their homes was \$10.0 trillion in 2016 and \$11.8 trillion in 2019, with average values of \$892,000 and \$957,000, respectively. About 41 percent of these rich households owned their homes free and clear in 2016; 42.7 percent were in this comfortable position in 2019. At the other end of the spectrum, 0.18 percent of owners in 2016 and 0.35 percent in 2019 owed more than their homes were worth, in their own judgment. The total home equity of rich owners was \$8.25 trillion in 2016 — an average equity of just under \$700,000 — and \$9.19 trillion in 2019, an average of \$715,000. These amounted to 11.6 percent and 12.5 percent of the wealth of rich households as a whole in 2016 and 2019, respectively.

Nearly all rich households — 89 percent in 2016 and 91 percent in 2019 — also had at least one retirement account. The total value of their accounts was about \$10.4 trillion in 2016 and \$11.1 trillion in 2019, and the average value of a household's retirement account holdings was about \$929,000 in 2016 and \$946,000 in 2019. Their account holdings amounted to 14.6 percent of the net worth of rich households in 2016, and 15.1 percent in 2019. Retirement accounts have been growing steadily since they became generally available in 1981. By 2019 they were much more common among rich households than mutual funds (owned by 43.5 percent), direct ownership of stocks (47.5 percent), annuities (12 percent) or trusts (11 percent).

Transaction accounts have been termed necessities in this paper. To prove the point, in 2016 every rich household in the SCF had at least one transaction account. In 2019, this was not quite accurate. Only 99.9985 percent of rich households surveyed in that year had transaction accounts. One household reported that it did not.



THE MIDDLE-WEALTH HOUSEHOLDS: BETTER OFF

The \$1.5 trillion increase in the net worth of middle-wealth households amounted to an increase of 6.5 percent. Their average net worth was \$297,000 and their median net worth was \$201,000 in 2019, increases of about 10 percent and 20 percent from 2016, respectively. Most of the increases were the result of increases in their equity in their homes, which in turn were partly the result of an increase of about 19 percent in house prices between the 2016 and 2019 survey periods of the SCF and partly the result of an increase of 2.6 million in the number of middle-wealth homeowners.

Their homeownership rate increased from 83.2 percent to 84.7 percent, the average value of their homes increased from \$229,000 to \$241,000 (5.1 percent), and the average equity in their homes increased from \$136,000 to \$142,000 (4.1 percent). The proportion who owned their homes free and clear went up from 34.66 percent to 35.09 percent, while the proportion who were underwater declined from 1.36 percent to 1.01 percent of middle-wealth homeowners with mortgages (from 0.89 percent to 0.66 percent of all middle-wealth homeowners). The number who were underwater dropped from 550,000 to 430,000.

Their total equity in their homes increased from \$8.5 trillion to \$9.6 trillion. This was about a 13 percent increase in their home equity. Since home equity was much the largest share of their wealth in both years, by any measure middle-wealth homeowners as a group benefitted from being homeowners during these three years.

At the same time, middle-wealth households did not increase their holdings of other assets that would contribute to their retirement position. The number with retirement accounts declined from 46.6 million households with a total value of \$5.5 trillion and an average value of \$118,000 to 44.7 million households with a total value of \$5.4 trillion and an average value of \$121,000. The number with cash value life insurance declined by 0.3 percent, about 50,000 households, from 17,110,000 to 17,062,000, and the average cash value of a policy remained virtually unchanged, at about \$20,600. The total cash value of their policies declined very slightly from about \$352 billion in 2016 to \$350 billion in 2019.

All in all, the share of their portfolio that was oriented toward a comfortable retirement increased by just over \$1 trillion, from \$14.4 trillion to \$15.4 trillion. It continued to be about two-thirds of their net worth, as it had been since at least 2007.

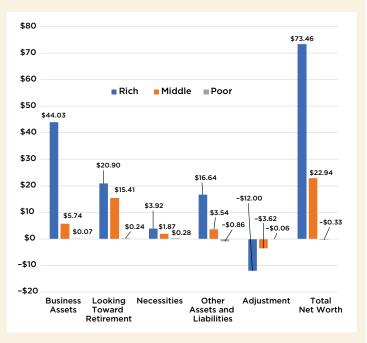
In addition, a number of middle-wealth households owned other residential property besides their homes, typically second homes or small rental properties. About 13.75 percent of middle wealth households owned such properties in 2016, with a total value of \$1.48 trillion and an average value of \$142,000; about 13.25 percent owned them in 2019, with a total value of \$1.56 trillion and an average value of \$152,000. The SCF also reports the debt on these properties, amounting to \$650 billion in 2016 and \$412 billion in 2019; the equity in these properties for middle-wealth owners was about \$750 billion in 2016 and \$1.1 trillion in 2019. Whether these properties should be counted toward retirement would depend on the plans of the households owning them.

Some middle-wealth households had assets that are more commonly found in the portfolios of rich households. About 8.7 million (11.25 percent) owned businesses, with a total value slightly less than \$1.2 trillion (about 5.2 percent of the total net worth of all middle-wealth households). Over 90 percent of these business owners were active managers of their businesses, and it is reasonable to anticipate that some of these middle-wealth households may become rich households in time. Most, however, are not likely to do so. The median value of their businesses among all middle-wealth owners was about \$50,000, and the median age of the owners was 51.

A smaller number of middle-wealth households (5.4 million, about 7 percent) owned non-residential real estate. A few of these households (about 47,000, less than one percent) had large holdings, worth more than \$500,000. The typical middle-wealth owner, however, had non-residential property worth less than \$50,000, net of any mortgage or other debt on the property, and the median age of these owners was 61.

For each of these groups, the composition of their portfolios was similar in 2019 to earlier years. As Figure 6 shows, rich households continued to devote 60 percent of their assets to businesses, both those they directly owned and personally managed, and those in which they held stock; middle wealth households continued to devote two-thirds of theirs to planning for a comfortable retirement, and poor households continued to devote almost half of their assets to their transaction accounts and their cars. These percentages did not change much between 2016 and 2019, or for that matter from 2007 to 2019.

Figure 6. 2019 Portfolios by Household Wealth (Dollars in trillions)



Source: Calculated from 2019 Survey of Consumer Finances.

THE RACE AND ETHNICITY OF MIDDLE-WEALTH HOUSEHOLDS

Middle-wealth households not only comprise 60 percent of all households, their net worth covers a wide range, they are a large share of the households in each racial or ethnic category, and the age of the household heads covers seven decades, ranging from the early 20s to the mid-90s. The central tendencies, however, are often similar.

Table 6 shows both the differences and the similarities among these households by race and ethnicity in 2019, with a focus on their housing. Average wealth varied substantially by race, for example, from just over \$320,000 among White households and also among Other households, to just under \$200,000 for both Black and Hispanic households. In each category, however, a large majority — more than three-quarters — were homeowners, and their homes were the largest component of their wealth, as the table shows. About one-third of all homeowners — and one-third of White, Hispanic, and Other households — owned their homes with no outstanding debt, as did over 40 percent of Black households.

The other two assets that are oriented toward retirement were less widely held and less important to middle-wealth households than their homes, as is evident in Table 7. Over 60 percent of White households and Other households had retirement accounts, and both had more than \$100,000 in their accounts. The accounts of White households had 27 percent higher balances, on average, while Other household heads were almost seven years younger. Half of Black households also had accounts, with an average value about \$10,000 less than Other households, and they were about seven years closer to retirement. Noticeably fewer Hispanic households had retirement accounts, and the average value of their accounts was less than \$70,000 — quite a bit lower than any other group.

Table 6. Net Worth and Homeownership for Middle-Wealth Households in 2019 by Race and Ethnicity

	White	Black	Hispanic	Other	All
Households	54.5 million	8.9 million	6.4 million	7.4 million	77.2 million
Average Age (Years & Months)	55 & 8	55 & 11	48 & 10	48 & 10	54 & 5
Mean Net Worth	\$322,000	\$193,000	\$198,000	\$323,000	\$297,000
Homeowners	87.03%	78.56%	82.29%	76.86%	84.68%
Mean Home Value	\$215,000	\$145,000	\$196,000	\$253,000	\$209,000
Mean Home Equity	\$149,000	\$115,000	\$134,000	\$184,000	\$148,000
Owners with Mortgage/HELOC	65.50%	57.60%	66.50%	67.10%	64.90%
Mean Mortgage (incl. HELOCs)	\$149,000	\$122,000	\$156,000	\$216,000	\$153,000
Owners Free & Clear	34.50%	42.40%	33.50%	32.90%	35.10%

Source: Calculated from 2019 Survey of Consumer Finances.

Table 7. Retirement Accounts and Cash Value Life Insurance by Race and Ethnicity

	White	Black	Hispanic	Other	All
Households with IRAs	60.5%	50.6%	37.5%	63.2%	57.7%
Mean Value	\$132,000	\$94,000	\$68,000	\$104,000	\$122,000
Households with Insurance	22.7%	31.1%	9.0%	18.3%	22.1%
Mean Value	\$19,500	\$24,100	\$16,200	\$26,100	\$20,700

Source: Calculated from 2019 Survey of Consumer Finances.

Fewer than one-third of the households in each category had cash value life insurance, and the cash values were much less than the mean values of retirement account portfolios. Over 30 percent of middle-wealth Black households had policies, compared to about 20 percent of White households and those of other races or more than one race, and less than 10 percent of Hispanic households. Over 12 million middle-wealth households had policies, but only about 700,000 had policies with a value of \$100,000 or more; the median policy had a value of about \$8,400. Not many middle-wealth households in any category were likely to find their policies an important contributor to their retirement.

As of 2019, households of Other races or more than one race appear to be best prepared for retirement. Their mean net worth is the same as the mean for White households, and they are seven years younger, on average. Black households are least well prepared; they have less than \$200,000 in assets and are the oldest group. Hispanic households have the same retirement portfolios as Black households and are seven years younger.

WHO WAS POOR AFTER THE GREAT RECESSION?

Who were the poor, by income and by wealth, in 2016 and 2019? For one thing, they were young — under 30, to a substantial extent. In 2016, there were 15 million households in which the head was in his or her 20s. Almost a quarter (24.7 percent) of these young households had an income below the poverty line. This was double the national poverty rate of 12.3 percent, as reported by the Census Bureau (Semega et al., 2020, Table B-5). They were, officially, poor. Over half of them were single individuals; another quarter were single adults with children.⁵

In this respect, young households were better off in 2019 than they had been in 2016. Their poverty rate was notably lower — 16.4 percent. This improvement contributed to a drop in the national poverty rate to 10.5 percent, down 1.3 percent from 2018 and 2.2 percent since 2016, and the lowest on record over the 60 years since poverty was first officially measured (Semega et al., 2020, p. 12). The previous lowest rate was 11.1 percent, in 1973.

What was true for income was also true for wealth. Typical young households were poor in both, as Table 8 shows. In 2016, the median net worth of the households in their 20s was about \$6,600. More than a quarter of these households (28.9 percent) had debts exceeding the value of their assets. In 2019, the position of households in their 20s was somewhat better: their median net worth was \$7,800 - 18 percent higher than three years earlier. But the proportion with negative net worth was virtually unchanged: 28.6 percent in 2019 instead of 28.9 percent in 2016. Further, on average the position of those with negative net worth was worse: their debts were \$50,000 more than their assets in 2019, compared to \$31,000 in 2016.

Table 8. Young Households with Low Net Worth, 2016 and 2019

	2016	2019
Panel A. Households in their 20s		
Total Households	15.0 million	15.2 million
Median Income	\$34,400	\$37,700
Poverty rate	24.7%	16.4%
Mean Income	\$47,100	\$55,500
Median Net Worth	\$6,600	\$7,800
Households with Negative Net Worth	28.9%	28.6%
Mean Net Worth	\$31,200	\$40,900
Panel B. Households in their 30s		
Total Households	20.9 million	23.0 million
Median Income	\$59,200	\$67,200
Poverty rate	21.0%	9.5%
Mean Income	\$81,000	\$88,000
Median Net Worth	\$34,700	\$43,800
Households with Negative Net Worth	18.6%	17.7%
Mean Net Worth	\$174,000	\$197,400

Source: 2016 and 2019 Surveys of Consumer Finances.

In general, households with a head in his or her 30s were substantially better off in terms of both income and wealth, but few were rich. The poverty rate for these households in 2019 was not much more than half of the rate for those in their 20s. Most of those who were below the poverty line in their 30s were similar demographically to the poor households in their 20s: they were single individuals living alone or single individuals with children. Also, the median income for households in their 30s in both years was about

The poverty line is set on the basis of the number of people in the household and the number of children in it.

75 percent above the median for those in their 20s, and both the mean and median net worth of those in their 30s were five times as high.

It should be noted that in 2020 income took a step backwards, as reported by the Census Bureau (Shrider, 2021). Median household income fell by a statistically significant 2.9 percent, from \$69,750 to \$67,521, and this decline was widespread. Median incomes for White, Hispanic, and Asian households all declined by at least 2.5 percent, and median incomes for households of all age cohorts fell by at least three percent. The national poverty rate increased from 10.5 percent to 11.4 percent. This was still lower than the rate in 2018, and in every other year back to 2001; for that matter, the 2020 poverty rate was lower than the poverty rate in every year from 1979 to 1999.

RACE, ETHNICITY, AND WEALTH AMONG YOUNG HOUSEHOLDS

Young households with low wealth were also disproportionately members of minority groups. Table 9 shows the proportion of each identified race or ethnic group in the SCF whose net worth was less than \$6,600 in either 2016 or 2019.⁶ The proportion is markedly higher among young Black households than for any of the other three groups in both years, and during that period the proportion increased for young Black households while declining for each of the other three groups. The composition of the portfolios is very similar for each of the four groups in both surveys.

Table 9. Young Households with Low Net Worth, 2016 and 2019

Race or Ethnicity	2016	2019
White, Non-Hispanic	44.90%	41.40%
Black or African American, Non-Hispanic	69.50%	71.10%
Hispanic or Latino	55.90%	52.80%
Other or Multiple Race	50.50%	41.20%

Source: 2016 and 2019 Surveys of Consumer Finances.

One difference is worth some attention, because of its importance in the wealth of most households over their lifetime. In 2016, almost 35 percent of the households with the head in his or her late 20s (25 to 29 years old) were homeowners, as were almost 45 percent of the households with the head in his or her early 30s (30 to 34 years old). In 2019, the proportion was essentially the same for the households in their late 20s, and a few percentage points higher for the households in their early 30s.

The equity in their homes is the most important asset for the broad group of middle-wealth households and is likely to be larger and more important over the course of their lives, the younger they are when they buy their first home. The ages of first-time homebuyers vary markedly for households in their late 20s and early 30s in both years by race and ethnicity, as Table 10 shows.

Table 10. Homeownership of Young Households by Race and Ethnicity, 2016 and 2019

Race or Ethnicity	2016	2019
Households in Their Late 20s (25-29)		
White, Non-Hispanic	44.40%	44.81%
Black or African American, Non- Hispanic	14.92%	15.65%
Hispanic or Latino	36.91%	26.61%
Other or Multiple Race	19.22%	27.20%
All Households	34.32%	33.80%
Households in Their Early 30s (30-34)		
White, Non-Hispanic	53.24%	61.16%
Black or African American, Non- Hispanic	25.77%	20.90%
Hispanic or Latino	36.50%	37.15%
Other or Multiple Race	38.56%	40.65%
All Households	44.84%	48.46%

Source: 2016 and 2019 Surveys of Consumer Finances.

The homeownership rate increased slightly between 2016 and 2019 among households with White and Black heads in their late 20s, and to a substantial extent among households of Other or multiple races in the same age bracket.⁷ Hispanic households were quite different. The rate for these households declined by ten percentage points. This was enough to bring down to a small extent the overall homeownership rate for these young households between 2016 and 2019.

Among households with the head in their early 30s, the homeownership rate was higher in 2019 for the group as a whole and for three of the four racial and ethnic categories. The rate was lower for Black households by about five percentage points. Homeownership increased among White households by almost eight percentage points, among

The results are very much the same if \$7,800 is used for 2019 instead of \$6.600.

The large increase among households of other or multiple races may be at least partly the result of households changing their identification. The Census Bureau reports the number of households and the number of homeowners for each racial and ethnic group, quarterly and annually. The increases in these numbers for both of these categories are much larger on a percentage basis between 2016 and 2019 than for any of the other three. The number of households of other races increased by 10 percentage points and the number of homeowners by 14 percentage points, and the number of households of multiple races increased by 13 percentage points and the number of homeowners by 20 percentage points. The number of White households increased by two percent and the number of homeowners by four percent; the number of Black households increased by four percent and the number of homeowners by five percent. The number of Hispanic households increased by eight percent.



Hispanic households by less than one percentage point, and among households of other or multiple races by two percentage points. Overall, in both surveys the homeownership rate was higher for households in their early 30s, as a whole and for each racial and ethnic category, with the exception of Hispanic households in 2016. It was consistently and substantially highest for young White Households, and consistently lowest for young Black households.

The SCF includes households younger than 25, but this is a small number, and few of them are homeowners. In 2019, there were about 6.2 million such households, of whom just over one million were homeowners (16.75 percent). Over 800,000 of these very young homeowners were white — about 22 percent of the White households in their early 20s. The homeownership rates for very young Black and Other households were both about six percent; the rate among Hispanic households was just over 10 percent.

The Census Bureau reports homeownership rates on a quarterly basis, for the nation and for each of five racial and ethnic groups: White, Black, Hispanic, Other races, and two or more races. The Census data indicate that the overall homeownership rate increased during each of the three years from 2016 to 2019. This is also the pattern for White and Hispanic households, and for those of two or more races. For Black households, homeownership increased in 2017, but declined in each of the two subsequent years, and for those of other races, it increased in 2017 and 2018, but declined in 2019. The homeownership rate increased for each group in 2020, but it is worth noting that the Census Bureau had difficulty in reaching households during the pandemic (Manchester, 2020).

Since 2019: The Coronavirus and the Economy

"The bulk of the interviews for both the 2016 and 2019 Surveys of Consumer Finances were conducted between May and December of the survey years, but in both surveys a small fraction of the interviews occurred during the first four months of the following year" (Bhutta et al, 2020, p. 41).

The same statement appears in the Federal Reserve Bulletin articles describing each survey back to 2007, with the notable exception that there is no mention of when the other interviews occurred.8 The 2019 statement thus indicates that some interviews were conducted after the coronavirus pandemic was generally recognized in early March of 2020. What has happened in the economy since the 2019 SCF was completed — and what has happened to the distribution of wealth — is essentially what has happened since March 2020, during the pandemic. There are some important basic statistical data series that provide information for the 18 months since then — including some that provide weekly or monthly information — but some important statistics, such as the annual Census Bureau report on household income and poverty, are produced only annually, and in that instance in September of the next year.9

This chapter draws on the available information to describe the changes since 2019, and what they suggest about the distribution of wealth since then.

THE OVERALL ECONOMY

The U.S. economy began to decline suddenly and sharply in February 2020, as the coronavirus spread around the country. Gross Domestic Product declined at an annual rate of 5.0 percent in the first quarter of 2020, and then at an annual rate of 31.4 percent in the second quarter. It then rose at a rate of 33.1 percent in the third quarter — certainly an abrupt reversal — and by a further 4.3 percent in the last quarter of 2020. The economy continued to grow, at an annual rate of 6.5 percent in the first quarter of 2021 and 6.6 percent in the second quarter, at which point GDP was

BUSINESS AND EMPLOYMENT DOWNS AND UPS

The most readily available information, and the most frequent, is the price of publicly traded stocks. The three most publicized stock market indexes followed broadly similar trajectories in 2020 and the first eight months of 2021: they peaked in February 2020, lost one-third or more of their value in the next month or six weeks, then recovered rapidly and exceeded their previous peaks by the end of the year. They have been well above those peaks during 2021. During the last eighteen months, the various indexes dropped sharply and then rose sharply, being well below and then well above their values of a few months earlier.

The Dow Jones Industrial Average, for example, reached an all-time high of 29,551 on February 12, 2020, lost 11,000 points in the next six weeks, and then recovered 80 percent of the loss by early June. It exceeded the February peak and went above 30,000 in December of 2020. It continued to rise. During 2021, it peaked at 34,777.76 on May 10, and again at 34,811.74 on July 2.

The S&P 500 peaked at 3,380 on Valentine's Day in 2020, lost one-third of its value by mid-March, and regained it by August. After fluctuating for the next two months, it moved above the previous peak in November, and continued to rise over the next six months. It set records in May, June, and on July 2, at 4,352.38.

The NASDAQ also peaked on Valentine's Day in 2020, at 9,731, lost almost 3,000 points in the next five weeks, recovered by early June, and continued to rise; it peaked

two-tenths of one percent higher in the second quarter of 2021 than it had been in the first quarter of 2020. (U.S. Bureau of Economic Analysis 2021).

^{8.} For example, the 2007 Survey was largely conducted just before the start of the Great Recession in December 2007.

U.S. Bureau of the Census, Income and Poverty in the United States: 2020, published September 14, 2021, is the most recent of these reports.



at 14,138.78 on April 26, 2021, not quite 50 percent above its peak fourteen months earlier. It closed at a record high on June 30, at 14,503.95.

All three indexes reached record highs on Friday, July 9, and closed at new record highs on Monday, July 12. It was the 39th record high for the S&P 500 during the first 123 trading days of the year. (Langley and Hirtenstein, 2021). The stock market did not stop there, however. After a sharp drop on Monday, July 19, all three indexes rebounded during the rest of that week and reached new highs on Friday, July 23, followed by further new records on the next trading day, the following Monday. (McCabe and Wallace, 2021; Ostroff and Vigna, 2021).

The stock market continued to rise during the summer. The Dow peaked at 35,625 on August 16. Both the S&P and the NASDAQ set new records on August 30 and again on September 2 (the Thursday before the Labor Day weekend). The S&P 500 closed at 4,536 on September 2 and declined on September 3, but the NASDAQ rose again, and reached another new high the day after Labor Day, at 15,374. These were the 54th all-time record high close for the S&P 500 during 2021 and the 36th for the NASDAQ, (Langley and Ostroff, 2021; Decambre, 2021). They remain the records in mid-October.

Business activity followed a similar pattern, but with much less fluctuation than the stock market. The unemployment rate was at an unusually low 4.4 percent in March 2020 and an even more unusually high 14.7 percent in April. It then came down from month to month through the next year, with three exceptions. It was almost down to 11 percent in June 2020, sharply down to 8.4 percent in July, under 8

percent in September, and then down further to 5.8 percent in May 2021. It rose to 5.9 percent for June but dropped to 5.4 percent in July, further to 5.2 percent in August, and still further to 4.8 percent in September.

In between these monthly reports, the weekly initial unemployment claim data announced by the Labor Department attracted front page attention on the way up during the spring of 2020 and on the way down over the last year. The four-week moving average for the period between June 5 and July 3 in 2021 was the lowest since the average for the four weeks ending on March 14, 2020. The insured unemployment rate, a much broader measure, followed the same pattern: the four-week average over the period between August 7 and September in 2021 was also the lowest since the four weeks ending on March 21, 2020. From March to July of last year, weekly initial unemployment claims were consistently over one million, on a seasonally adjusted basis. They fell below that figure in the first week of August and fluctuated between 700,000 and 900,000 during the rest of the year but were over 900,000 for the first full week of January 2021 (U.S. Department of Labor, May 2021). There was gradual reduction during the first quarter of the year, and headlines when Initial claims fell below 500,000 in the last week of April 2021 (the week ending May 1); they had been almost 750,000 three weeks earlier (U.S. Department of Labor, May 2021).

The day after weekly initial unemployment claims dropped below 500,000, however, the Labor Department's job growth figure for April was unexpectedly low -266,000, when various analysts had forecast an increase of one million (U.S. Bureau of Labor Statistics, May 7, 2021; Cambon and Guilford, 2021).

Weekly initial unemployment claims then dropped from week to week during May, but with an upward revision of the May 1 figure to 507,000 thrown in. The last week of May paralleled the last week in April, as initial unemployment claims reached another milestone, dropping below 400,000 for the week of May 23-29 (U.S. Department of Labor, June 3, 2021). The next day, the Labor Department reported an increase in employment of 559,000, more than double the increase in April, along with a drop in the unemployment rate to 5.8 percent (U.S. Bureau of Labor Statistics, June 4, 2021). A week later, initial unemployment claims rose from 368,000 to 414,000, again raising questions about the strength of the economy. During the summer, however, initial claims declined steadily from week to week, with minor exceptions. For the week ending September 3, they were down to 310,000. The four-week moving average was 339,500, the lowest since March 14, 2020. During September, there was a mixed picture. Initial claims increased from week to week, reaching 362,000 in the week ending September 25, but then dropping to 326,000 in the week ending October 2 and further to 293,000 in the week ending October 9 — also the lowest level since March 14, 2020.

In addition to the increase from 5.8 percent in May 2021 to 5.9 percent in June, the rate was 6.7 percent in both November and December of 2020; and it rose from 6.0 percent in March 2021 to 6.1 percent in April.

The level of unemployment in each week was lower than it had been at the beginning of the month, and the four-week moving average continued to decline modestly, dropping below 2.8 million for the first time since March 21, 2020. The unemployment rate was 1.9 percent. (U.S. Bureau of Labor Statistics, "Unemployment Insurance Weekly Claims," October 14, 2021).

While the Labor Department was reporting these somewhat encouraging trends, the National Federation of Independent Business was reporting that September 2021 was the eighth consecutive month of record high unfilled job openings, and the labor shortage was the biggest problem facing small business owners. A record 49 percent of small business owners reported a shortage of applicants for vacant positions in July, followed by a new record at 50 percent in August and another new record, 51 percent, in September. These were the highest percentages in 48 years. From June through September, the general business outlook was increasingly negative among small business owners. Half of small businesses responding to an NFIB survey in early September reported that supply chain disruptions were having a significant impact on sales, compared to 32 percent two months earlier. Only ten percent said that supply chain disruptions were having no impact.

The analysts at NFIB summarized the outlook as of July: "Economic disruptions related to COVID will likely continue into 2022 for many. Overall, the second half will be OK, what we take into 2022 remains to be seen." (Dunkelberg and Wade, 2021a). In early October, the analysts were more pessimistic: "The fourth quarter is underway, but it's going to be a rocky one." (Dunkelberg and Wade, 2021b).

Other, less negative data on small businesses comes from the Census Bureau, which began a Small Business Pulse Survey in April 2020, asking businesses about the effect of the coronavirus pandemic on a monthly basis. In that first month, 51 percent of small businesses reported a "large negative effect." There has been improvement since then as the proportion reporting a "large negative effect" slowly declined, to 27 percent in April 2021, and the proportion reporting "little or no effect" slowly improved, from eight percent to 21 percent. The proportion reporting a "moderate negative effect" has been consistently the largest, at a little less than about 45 percent since June of 2020."

CONSTRUCTION AND HOUSING

The Associated General Contractors of America publishes a summary of construction activity and employment on close to a weekly basis (in 2020, they issued 47 reports), drawing on Bureau of Labor Statistics data and on information from

 U.S. Bureau of the Census, "Small Business Pulse Survey," Small Business Pulse Survey Data (census.gov) available at https://portal.census.gov/ pulse/data/#weekly, accessed October 11, 2021. local contractors. Through most of 2020, AGC reported that residential construction activity was increasing, but that most non-residential construction had declined, on a year-to-year basis. In the first quarter of 2021, AGC noted a reverse: an increase in non-residential construction employment, and little growth in residential construction; but recent reports have reverted to the 2020 pattern. In the first eight months of 2021, total construction starts were 6.0 percent higher than during the first eight months of 2020. This was due to single-family housing starts, which were 32 percent higher; multifamily starts were down 6.4 percent, non-residential building was down by 11 percent, and engineering starts (such as roads and bridges) were up by 0.8 percent.¹²

One reason that there has been little recent growth in residential construction is that residential construction has been less hard hit than most business activities. Fortunately, much information on house prices and production is available. Housing starts have been rising since April of last year when they were occurring at a seasonally adjusted annual rate of 934,000. Three months later they were at a rate of 1.497 million (60 percent higher), and they have been above 1.5 million in every month since, with the exception of February — which was followed immediately by a month when housing units were started at a seasonally adjusted annual rate of 1.725 million. Over the most recent 12 months (September 2020 through August 2021), housing starts were 1.688 million units. Single-family homes have accounted for between two-thirds and three-quarters of total housing starts in each of those months, which is perhaps partly due to households choosing to move to suburban and exurban areas.¹³



- Associated General Contractors, "Construction Employment remains below pre-COVID peak in 36 states; reports on starts are mixed," *Data Digest* Vol. 21. No 32. August 16-20, 2021.
- U.S. Bureau of the Census, "Monthly New Residential Construction, August 2021," Release Number CN21-152, issued September 21, 2021, available at newresconst_auto_text_202108.docx (census.gov)



Sales of new homes have been gradually declining, after a sharp drop at the onset of the coronavirus. Sales dropped by 20 percent from February to April 2020 but were well above the February rate by June (17 percent higher) and fluctuated between 900.000 and 1 million on a seasonally adjusted annual rate through March of this year, with the exception of February. They dropped below 800,000 by April and have been just above 700,000 in the four months since then. The median new home price has been consistently over \$300.000 since the pandemic began; it was a record \$390,900 in both July and August (the latest available).¹⁴

Despite the coronavirus, existing home sales were higher in 2020 than in either of the previous two years, at 5,060,000 homes. Sales fluctuated in a range of 5.5 to 6.0 million (at a seasonally adjusted annual rate) from September of 2020 through February of 2021. They have been between 5 million and 5.5 million from March to July since then. The most recent rate, for July, is 5.28 million. The June median sales price of \$363,300 is the highest on record, slightly higher than the \$359,900 median price in July and the \$356,700 median price in August. The Federal Housing Finance Agency reports that housing prices increased by 20.2 percent from the first quarter of 2020 to the second quarter of 2021 (U.S. Federal Housing Finance Agency, 2021).¹⁵

One important reason for the strength of the housing market has been the continuing low mortgage interest rates. The 30-year monthly average mortgage commitment rate has been below three percent for nearly all of the last 12 months, and while it was slightly lower 6 months ago than the 2.87 percent in July, it is much below the levels that we have become accustomed to (Freddie Mac, 2021).

THE DISTRIBUTION OF WEALTH SINCE 2019

Since early 2019 the Federal Reserve has produced a series of quarterly wealth estimates for American households, "The Distributional Financial Accounts of the United States." This series makes use of both the Survey of Consumer Finances and the Financial Accounts of the United States; the latter produces quarterly data on the balance sheets of major sectors of the economy. The Distributional Financial Accounts are created by reconciling the asset and liability categories of the SCF and the Financial Accounts in an accounting framework that is consistent with both data series. This reconciliation is necessary because these series were established at different times and for different purposes.

Within this accounting framework, the Distributional Financial Accounts are intended to provide quarterly estimates of the total wealth of American households and its distribution among four household wealth categories: the richest one percent, the next richest nine percent, the next richest 40 percent, and the poorer half of all households. The data are provided more frequently and on a more timely basis than the SCF.

The quarterly estimates have been constructed beginning with the third quarter of 1989 and continuing to the first quarter of 2021, as of this writing. They indicate that the distribution of wealth became more unequal between 2016 and 2019. The richest 10 percent of American households owned 69.1 percent of total household wealth in the last quarter of 2016, rising to 69.6 percent in the last quarter of 2019. By contrast, the SCF indicates that the richest 10 percent owned 77.08 percent of total household wealth in 2016 and 76.47 percent in 2019.

U.S. Bureau of the Census, "Monthly New Residential sales, August 2021," Release Number CB21-, 155, issued September 24, 2021, available at https://www.census.gov/construction/nrs/pdf/newressales.pdf; National Association of Realtors, "Existing Home Sales Recede 2.0% in August," September 22, 2021.

^{15.} The National Association of Realtors does not adjust the sales price data for inflation. The Federal Housing Finance Agency's monthly and quarterly price indexes show continued price increases since 1990 through the second quarter of 2020, the latest available at this writing.

The Policy Response

The response to the coronavirus was unusually prompt and extraordinarily large. Three pieces of legislation were enacted in three weeks during March 2020. The third was the Coronavirus Aid, Relief, and Economic Security Act — the CARES Act — which appropriated \$2.2 trillion for a broad range of payments and loans to families, businesses, and other organizations, enacted on March 27. The CARES Act is the largest stimulus package in American history, more than 2½ times the size of the response to the Great Recession (the American Recovery and Reinvestment Act of 2009, which appropriated \$831 billion). The coronavirus Aid, Relief, and Economic Security Act of 2009, which appropriated \$831 billion).

The largest programs created in the CARES Act were the "Main Street Lending Program," consisting of loans from federally insured depository institutions to small and medium-sized corporations and nonprofit organizations with fewer than 15,000 employees or less than \$5 billion in annual revenue in 2019 (\$500 billion); the Paycheck Protection Program, for small businesses (up to 500 employees - more for hotels and restaurants) and nonprofit organizations (\$349 billion); payments to tax-paying households with incomes up to \$198,000, consisting of \$2,400 for a married couple filing jointly, \$1,200 to other individuals, and \$500 for each dependent child under 17 years old (\$301 billion); an increase of \$600 per week for individuals receiving unemployment benefits (\$250 billion); funds to state and local governments facing financial problems because of high coronavirus caseloads (\$150 billion); and a variety of smaller programs.

Some of these activities are new programs; others are program expansions to provide support for individuals or entities particularly affected by the coronavirus.

- 16. The first was the Coronavirus Preparedness and Response Supplemental Act, appropriating \$8.3 billion for vaccine research and development, enacted on March 6. The second was the Families First Coronavirus Response Act, appropriating about \$104 billion in paid sick leave and unemployment benefits for affected workers and their families, enacted on March 18. The second act was more than 12 times the size of the first, and the third was more than 20 times the size of the second.
- 17. See Kambhampati (2020) for a detailed comparison.

THE PAYCHECK PROTECTION PROGRAM

The Paycheck Protection Program provided funds to the Small Business Administration for loans to small businesses and non-profit organizations (including churches and other religious institutions). SBA's established Economic Injury Disaster Loan program (EIDL) was also extended to nonprofit organizations that were affected by the coronavirus, without reference to whether they were located in declared Disaster Areas. PPP was arguably the most popular of the programs created in the CARES Act. The \$349 billion authorized for these loans was allocated within two weeks. A second appropriation of \$320 billion was provided in the PPP and Health Care Enhancement Act, which was enacted on April 24 (less than a month after the CARES Act) and expired on August 8. A third appropriation of \$284 billion was part of the Consolidated Appropriations Act, enacted on December 27. Of that \$284 billion, a total of \$70 billion was set aside for lending by community financial institutions or for making loans by small lenders, or for small loans (less than \$250,000) to borrowers in low- or moderate-income neighborhoods. Another \$35 billion was set aside for new PPP borrowers.

The total amount available from all three Acts was \$953 billion. By June 2020, 4.5 million businesses had received \$500 billion in PPP loans, an average of about \$111,000.

Borrowers were able to draw \$10 million or 2.5 times their average monthly payroll for their first PPP loan. They could subsequently draw up to \$2 million for a second loan, if they had received and used all of the proceeds from the first loan, or expected to use all of the proceeds, before receiving the second loan. Businesses could have no more than 500 employees to be eligible for their first loan;

those seeking a second loan could have no more than 300 employees. They also had to have experienced a loss of 25 percent or more of the gross receipts in any quarter during 2020, compared to their receipts for the same quarter in 2019. Originally, the proceeds of loans from the CARES Act or the PPP and Health Care Enhancement Act had to be used within eight weeks of receiving them; this was later extended to 24 weeks. Sixty percent of the loan amount for any PPP loan had to be used for payroll expenses.

The Federal Reserve System issued four interim final rules allowing PPP loans by member banks to small businesses owned by bank insiders, such as executive officers, directors, and principal shareholders. Such loans would normally be subject to the Federal Reserve's Regulation O: "Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks," which could result in delaying or prohibiting a bank from making a PPP loan to those businesses (Federal Reserve System, 2021). The fourth rule expires on March 21, 2022.

As mentioned, PPP loans were available to small taxexempt nonprofit organizations, including churches and other religious houses of worship. A survey of Protestant churches found that 40 percent had applied for assistance by the end of April 2020, either through PPP or EIDL, and 59 percent of those who applied had received approval (Earls, 2020), literally within a month of the passage of the CARES Act. Smaller churches were less likely to apply. The survey also found that the proportion of congregations that were meeting at the church declined from 99 percent at the beginning of March to fewer than 10 percent by the end of the month and remained below 10 percent from week to week throughout April (which included Easter). A survey of Catholic bishops three months later found that 95 percent of dioceses had helped parishes apply for federal or state assistance programs, such as PPI (Sadowski, 2020).

THE MORATORIUM ON EVICTIONS

One of the smaller initiatives in the CARES Act was a moratorium on evictions of tenants in rental housing, which applied both to properties that received rental assistance enabling lower-income households to afford the rents, and to rental properties with federally-backed mortgages. In addition, the act included a moratorium on foreclosures on owner-occupied homes that had federally-backed mortgages. These moratoria initially protected the occupants until August 31, 2020 (just over five months after the CARES Act became law).

Neither moratorium is included in the list of the larger programs established by the CARES Act, because there were no enforcement mechanisms nor any funding for affected homeowners or renters in the Act. The Centers for Disease Control and Prevention imposed a ban on rental evictions on September 4, 2020, which was set to expire on December 31; it was extended three times in 2021, however, to March 31, June 30, and July 31. The ban applied to both federally-assisted rental properties and those with federally-backed mortgages, which together provide about one-quarter of rental housing units (Goodman, Kaul, and Neal, 2020).¹⁸

Legislation subsequently provided \$46.55 billion to fore-stall the eviction of renters who were unable to make their monthly payments. The Consolidated Appropriations Act, signed into law by President Trump on December 27, 2020, provided \$25 billion; an additional \$21.55 billion was provided in the American Rescue Plan Act, signed into law by President Biden on March 11, 2021. By the end of June, however, only about \$3 billion (6.5 percent of the total amount) had been spent, although the Treasury Department reported that 16 percent of renters were behind on their rent.

The July 31 expiration of the ban, and the slow rate of spending the funds appropriated to provide protection from eviction, were reported in The Wall Street Journal on August 2 (Parker, 2021). President Biden had asked Congress the previous week to pass a law offering new protections against evictions, saying that the administration did not have the legal authority to impose a new ban on its own. The administration had also said that an opinion by Supreme Court Justice Kavanaugh held that any further extension of the moratorium would need Congressional approval (Stein et al, 2021). The day after the article, however, the President announced a temporary ban on evictions, and the CDC issued a temporary halt on residential evictions in communities with high transmission levels of COVID-19. This order was scheduled to expire on October 3 (Walensky, 2021).

Instead, it was challenged in court by owners and managers of rental property, and blocked by the Supreme Court on August 26, in a decision that the eviction ban exceeded the CDC's authority and that the decision to allow or ban an eviction moratorium was up to Congress rather than the CDC (Barnes et al., 2021). The Court's decision was

^{18.} This calculation, by Urban Institute housing market analysts, is the share of rental housing units which are eligible for the assistance. The Centers for Disease Control and Prevention misinterpreted it to mean that about one-quarter of all renters were in fact receiving the benefit of the moratorium (Walensky, 2021, p. 6). The analysts were less optimistic: "The CARES Act's eviction protection provisions cover approximately 12.3 million occupied federally financed rental units, or slightly more than one in four total rental units in the US. There are, however, operational impediments to this relief. How a renter would find out whether their landlord has a federal mortgage is unclear, and landlords may not know about available relief or how to take advantage of it. Renters are also unlikely to be aware of all the provisions and protections available under the 350-page CARES Act. Finally, given renters are more financially vulnerable than homeowners, they'll also need rental payment assistance. Solving for these issues will be a central concern for policymakers in the coming weeks and months." (Goodman, Kaul, and Neal, 2020).

consistent with the previous opinion by Justice Kavanaugh permitting a moratorium but requiring Congressional approval for an extension (Bravin and Kendall, 2021).

An analysis of the actual disbursement under the moratorium, conducted by the National Association of Realtors, concluded that about 633,000 households received assistance during the first six months of 2021, about four to five months' rental payments on average, and also that more assistance was provided when disbursement was made through local governments as opposed to being made by state governments. About 20 percent of the funds allocated to local governments (\$1.2 billion) had been disbursed, compared to 10 percent of the allocation to state governments (\$1.8 billion) (Coratoron, 2021). The states in which the highest proportion of allocated funds had been disbursed were Virginia (41 percent) and Texas (34 percent); the states in which the lowest proportion of allocated funds had been disbursed were New York and Wyoming (both less than one percent).

A month later, the U.S. Treasury reported that as of July 31 a total of \$4.7 billion (10.1 percent) had been distributed (Ackerman and Parker, 2021). Virginia and Texas had increased their disbursements to 53 percent and 46 percent, respectively, while New York and Wyoming had still disbursed less than one percent of their state allocations. New York did not begin to disburse funds until June (Parker and Ackerman, 2021).

It should be noted that seven states, and some cities, had imposed statewide moratoria, which are not affected by the Supreme Court decision. These include New York, as well as California, Illinois, Minnesota, New Jersey, New Mexico, and Washington (Noble, 2021). New York's ban was set to expire on August 31, but on September 1 it was extended by the state legislature and on September 2 was signed by Governor Hochul (Vielking and Parker, 2021). Illinois faced the same situation, but Governor Pritzker extended its ban through September 18. Both states subsequently extended their bans.

FEDERAL RESERVE ACTIONS TO SUPPORT THE ECONOMY

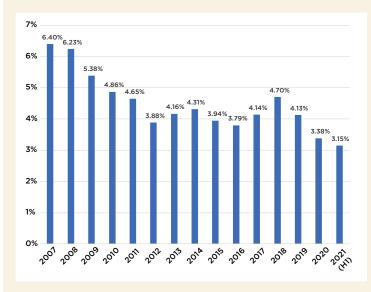
The Federal Reserve Board took substantial actions to support the economy in a number of ways, including creating facilities to support programs established in the CARES Act. In addition to permitting PPP loans to bank insiders, it took the loans as collateral. Similarly, it bought loans that banks had made to small and medium-sized corporations through the Main Street Lending Program, offering four-year loans to companies that employed up to 10,000 workers or had annual revenues of less than \$2.5 billion. These were the two largest programs created in

the CARES Act; together they accounted for almost 40 percent of the \$2.2 trillion authorized in the Act (Board of Governors of the Federal Reserve System, 2020).

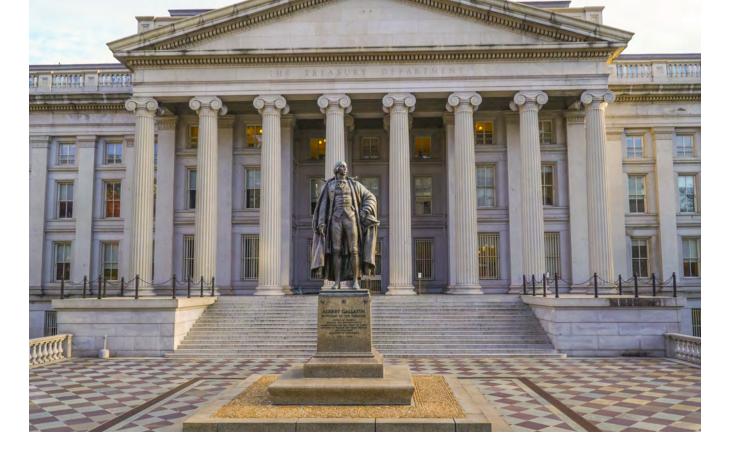
More broadly, the Fed has provided liquidity to the economy during the pandemic, supporting the growth in real gross domestic product over the last year. Growth during the second quarter of 2021 was 6.6 percent, an increase from the 6.3 percent recorded during the first quarter.

One of the most widely noticed actions has been the policy of buying mortgage bonds in response to the collapse of the housing market during the Great Recession. During 2001 to 2007, the annual average 30-year fixed-rate mortgage interest rate ranged between six and seven percent, about a percentage point lower than it had been in the 1990s. During those years, the homeownership rate increased from about 67 percent to 69 percent, a historically high rate. As the Great Recession continued, the homeownership rate dropped to about 63 percent by 2016, the lowest it had been in more than two decades. The Federal Reserve adopted a policy of "quantitative easing," buying mortgage securities in large quantities to reduce interest rates and bring the Great Recession to a close (Singh, 2021). The mortgage rate fell below four percent during 2015 and 2016 and below three percent during 2020 and 2021 (Figure 7), and the housing market experienced a substantial strengthening, with the homeownership rate increasing to between 65 and 66 percent during those years, despite the pandemic. The refinancing boom contributed to the ability of homeowners to survive the exceptionally sharp recession during 2020.

Figure 7. National Mortgage Rates Since 2007 (30-Year Fixed Rate Mortgages, Percent)



Source: Bankrate (Dhara Singh, "Historical Mortgage Rate Trends: 1970s to 2021," August 5, 2021).



It also contributed to the shortness of the recession. The Business Cycle Dating Committee of the National Bureau of Economic Research, the accepted authority on US business cycles, determined in April 2020 that the cyclical downturn started in February, which is the shortest time it has ever taken for making such a judgment. In July 2021, it determined that the cyclical trough ended in June 2020, making the recession the shortest in our history. 19 Our Gross Domestic Product fell by 31.4 percent in the second quarter of 2020, but then made up nearly all of the decline in the next three quarters.²⁰ The Dating Committee decided that the length and strength of the economic recovery after the second quarter of 2020 indicated that any subsequent downturn of the economy would be a new recession and not a continuation of the recession that began in February of 2020 (National Bureau of Economic Research Business Cycle Dating Committee, July 2021). As far as I can find, nobody has challenged that determination.²¹

recovery. Chairman Powell noted in August that "the pace of the recovery has exceeded expectations, with output

Indeed, the Federal Reserve's policy of quantitative easing has been accompanied by the exceptionally rapid economic

surpassing its previous peak after only four quarters, less than half the time required following the Great Recession."22 A month earlier, Governor Brainard noted that "the tailwinds to growth from the fiscal stimulus during the first half [of 2021] are shifting to headwinds that will continue through the remainder of 2021 and 2022. Even so, growth this year is expected to compensate fully for last year's sharp contraction" (Brainard, 2021).

The weakness of the stock market during the month of September suggested that the Fed might appropriately begin the process of cutting back on quantitative easing sooner than anticipated. Chairman Powell, testifying on September 30 before the House Financial Services Committee, noted that "almost all of the time, inflation is low when unemployment is high, so interest rates work on both problems," but that is not the current situation: inflation is above the Federal Reserve's target, but the economy is "far away, we think, from full employment." The authors of this news story added, "Mr. Powell and his colleagues have signaled strongly in recent days that... the Fed would formally announce a gradual reduction, or tapering, of its monthly purchases of \$120 billion in Treasury and mortgage debt at its next meeting, Nov. 2-3" (Davidson and Timiraos, 2021).

^{19.} NBER was founded in 1920 and published its first dates of business cycles in 1929. It has measured the length of economic upturns and downturns dating back to 1854.

^{20.} Gross Domestic Product for the first quarter of 2021 was three percent lower than in the second quarter of 2020. See "Gross Domestic Product (Second Estimate), Corporate Profits (Preliminary Estimate), Second Quarter 2021," August 26, 2021, Table 1, available at gdp2q21_2nd.pdf

See also Josh Mitchell. "U.S. Economy Bounces Back Near Its Peak." Wall Street Journal, April 30, 2021, p. A1.

Powell, Jerome H., "Monetary Policy in the Time of Covid," Speech at the economic policy symposium sponsored by the Federal Reserve Bank of Kansas City, August 27, 2021, p.1. Real gross domestic product (GDP) increased at an annual rate of 6.6 percent in the second guarter of 2021, according to the "second" estimate released by the Bureau of Economic Analysis, U.S. Bureau of Economic Analysis, "Gross Domestic Product (Second Estimate) Corporate Profits (Preliminary Estimate) Second Quarter 2021," August 26, 2021, Table 6, available at gdp2q21_2nd.pdf (bea.gov).

Conclusion

After almost a decade of increasing inequality during the Great Recession, the distribution of wealth became somewhat more equal, and average households became somewhat richer, between 2016 and 2019. Average and median real net worth increased, the latter reaching its highest level since 2007. The share of total wealth owned by the richest 10 percent of American households declined slightly, from 77.1 percent to 76.5 percent, and the fraction of households whose net worth was negative declined from 11 percent to 10.4 percent.

These increases were partly the result of rising prices for stocks and for homes. Both the Dow Jones Industrial Average and the Standard and Poor's 500 increased by 45 percent between December 2016 and December 2019, and the Federal Housing Finance Agency's Repeat Home Sales Price Index increased by 19 percent over the same period. The stock indexes fluctuated during these years, rising in 2017 and 2019 with a moderate decline in 2018; the FHFA Index increased by about six percent from year to year during the period. Households that owned stocks or homes in 2016 were in a position to enjoy increases in the value of these assets; those who bought their first homes or opened retirement accounts sometime between 2016 and 2019 were also in position to increase their wealth for the next year or two after those acquisitions.

All three household groups maintained the composition of their portfolios between 2016 and 2019. The rich continued to concentrate on businesses they owned and businesses in which they owned stock, which constituted 60 percent of their wealth. Middle-wealth families continued to devote two thirds of their portfolios to the homes they owned and to their retirement accounts. The poor mainly had transaction accounts and cars — the necessities of life for all households — and little else.

The median net worth for each of the racial and ethnic categories reported in the SCF increased during this period. The largest percentage increases — from the smallest base year levels — accrued to Black and Hispanic households. Young households, in all categories, have started from low levels of wealth in their early 20s, but have generally experienced steady growth until they reach retirement age; that pattern has continued since 2016.

At the same time, it is worthwhile to note that Black households were not well positioned for retirement. In 2019, half of Black households were poor (49.94 percent), and almost as many were middle wealth (48.59 percent). Fewer than two percent were rich (1.47 percent). The mean net worth of middle-wealth Black families was \$193,000, and their average age was 55 years and 11 months. Their net worth was smaller than any of the other three demographic categories, and their average age was higher. Their equity in their homes comprised 60 percent of their net worth, and the balance in their retirement account comprised 50 percent. Most could probably expect to receive Social Security when they retired, but many were likely to have student debt, and the amount of their debt was larger than was the case for the households in any other racial or ethnic category.

The experience since 2019 is analogous to the experience at the onset of the Great Recession: a period of economic growth and wealth acquisition came to an abrupt halt in February and March of 2020 and was followed by a sharp reversal. The unemployment rate was 4.0 percent in January 2019 and less than four percent each month for the rest of the year and the first two months of 2020. It was 4.4 percent in March 2020, and 14.7 percent in April. It began to drop immediately; it was less than 12 percent in June, less than nine percent in August, less than seven percent in October, and less than six percent in since May of this year. The rate in September was 4.8 percent and the number of unemployed individuals was 7.672 million, both the lowest levels since March 2020.



The stock market followed a similar pattern. All three of the most widely followed indexes set records in February of 2020, lost more than one-third of their value in the next six weeks, recovered to set new all-time record highs before the end of the year. The S&P500 and the NASDAQ have gone on to set new records a number of times this year, most recently on September 2nd and September 3rd, respectively. These were the 54th all-time high that the S&P 500 has reached so far this year, and the 35th all-time high for the NASDAQ over the same period (Langley and Ostroff 2021; Decambre 2021).

The housing market was strong through last year, due partly to historically low mortgage interest rates. Housing starts were 1.76 million at a seasonally adjusted annual rate in April 2021, the highest in 15 years; sales of both new and existing homes were high in the first quarter of this year but declined during April and May. Both rich and middle-wealth families continued to be homeowners: the 2019 SCF reported that 96 and 85 percent of them, respectively, owned their homes — both increases since 2016 — and also that more poor households were homeowners (about 14.9 percent in 2019, compared to about 14.5 percent in 2016). The increase in the overall homeownership rate during 2020 and 2021, as reported by the Census Bureau, indicates that homeownership continues to be important to American families.

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