The Concentration of Household Wealth

Brian W. Cashell
Specialist in Macroeconomic Policy

May 23, 2006

Congressional Research Service
7-5700
www.crs.gov
RL33433

CRS Report for Congress
Prepared for Members and Committees of Congress

Summary

The distribution of household wealth has a number of economic and social ramifications. Obviously, the wealthier a household is the higher a standard of living it can maintain. This is of particular importance with respect to the elderly population whose income typically falls in retirement.

Data regarding the distribution of wealth are limited. There are some data available from estate tax returns although they reflect only the small proportion of the population that is subject to the tax. The Federal Reserve Board conducts regular surveys of household wealth known as the Survey of Consumer Finances. This report examines data from this survey on the distribution of household wealth.

Perhaps the two most general measures of household wealth available are mean and median household net worth. In 2004, mean household net worth was $448,200 and the median household net worth was $93,100. The large difference between the mean and median suggests a significant inequality in the distribution of household net worth.

Although any characterization of the degree of inequality is necessarily subjective, the distribution is nonetheless far from equal. In 2004, the top 1% of the distribution accounted for one-third of total household net worth. This wealth class includes all households with a net worth of about $6.0 million and over. The top 10% held over two-thirds of all household wealth. This wealth class begins with those households with a net worth of at least $827,600.

Wealth is much more unequally distributed than income. A number of studies have attempted to explain why the distributions of income and wealth are so different. Among important contributors to inequality in the distribution of wealth are variations in saving out of an unequally distributed income, the incidence of entrepreneurs, who may save at very high rates to finance business investments, and, among the wealthiest, the desire to leave bequests. This report will not be updated.

Contents

Tables

Contacts

Introduction

Saving, investment, and the accumulation of wealth are important determinants of long-run economic prosperity. Consuming less and saving more out of current income allows for more growth in domestic capital. A larger capital stock allows workers to be more productive and contributes to higher living standards. For that reason, the national saving rate is a frequent consideration in public policy issues, whether it is raising household saving or reducing the federal budget deficit.

The low household saving rate is a particular concern not only because it means less funds available for capital investment but also because it suggests households are not making adequate provisions for their futures. Whether that is the case depends on how wealthy they are. Perhaps the most important reason for households to save is to accumulate enough wealth so that they do not experience a drastic decline in living standards on retirement. The low household saving rate suggests that may not be happening.[1]

It is important to remember that saving out of current income is not the only way in which households may grow wealthier. Those who have assets may see their wealth grow as a result of rising asset prices. Appreciation in the value of household assets may substitute for household saving in that it satisfies households' needs to accumulate wealth.

The rise in the stock market during the 1990s, for example, is widely believed to have contributed to the measured decline in household saving. More recently, appreciation in housing prices may also have substituted for household saving that might otherwise have been set aside. As long as rising asset prices lead to greater household wealth the low saving rate may be less of a concern.

However, that reflects only the overall picture. How wealth is distributed and which households may have benefitted from asset price appreciation are also important in interpreting the significance of the decline in household saving.

Data regarding the distribution of wealth are limited. There are some data available from estate tax returns, but they reflect only the small proportion of the population subject to the tax.[2] The best source for data on household wealth is a survey the Federal Reserve Board conducts every three years known as the Survey of Consumer Finances (SCF). This report examines data from these surveys.

Trends in Household Wealth

Every three years, the Board of Governors of the Federal Reserve conducts the *Survey of Consumer Finances*.[3] It is designed to gather detailed information on the level and composition of household assets, liabilities, and income. High income households are sampled separately because

[1] See CRS Report RS21480, *Saving Rates in the United States: Calculation and Comparison*, by Brian W. Cashell.

[2] In 2004, the estate tax exemption was $1,500,000 and 1.3% of all deaths incurred estate tax liability. See CRS Report RS20593, *Asset Distribution of Taxable Estates: An Analysis*, by Steven Maguire.

[3] Data from the Survey of Consumer Finances are available on the Internet at the Board of Governors website http://www.federalreserve.gov/pubs/oss/oss2/scfindex.html.

they account for such a large share of total household wealth. The current series of surveys began in 1983.

The survey counts both financial and real assets. Financial assets include bank accounts, stock and bond holdings, individual retirement accounts, and Keogh accounts. Real assets include home equity, and other real property such as automobiles. Liabilities include home mortgages and consumer credit. Excluded from these figures are the value of household furnishings, and other durable goods, as well as the present value of future benefits from Social Security or defined benefit pension plans.

Mean and Median Household Net Worth

The two most general measures of household wealth available are mean and median household net worth. Mean net worth is simply total net worth divided by the number of households. Median net worth is the mid-point in the overall distribution of household wealth. In other words, if all the households are ranked from poorest to richest the median wealth would be that of the household in the exact middle of the distribution. Half of households are poorer than the median and half are wealthier. The median is probably a better indication of the wealth of the 'typical' household than is the mean. Mean wealth can be significantly affected by changes at the very upper end of the distribution. The ratio of mean to median can be an indicator of the degree of equality, or of inequality in a distribution.

Table 1 presents mean and median household net worth from the SCF in constant 2004 dollars.[4] Between 1989 and 2004, household wealth grew in real terms (i.e., it grew faster than inflation). Real mean household net worth increased by 64.4%, or at an average annual rate of 3.4%. Real median household net worth increased by 35.3%, or at an annual rate of 2.0%.

The means are substantially higher than the medians, which is indicative of a considerable concentration of wealth in the upper end of the overall distribution. Moreover, the ratio of mean to median net worth has risen, suggesting that the distribution of household wealth has become more unequal since the survey began.

Table 1. Mean and Median Household Net Worth

	Constant 2004 Dollars		Ratio of Mean to Median
	Mean	Median	
1989	$272,600	$68,800	3.96
1992	245,700	65,200	3.77
1995	260,800	70,800	3.68
1998	327,500	83,100	3.94

[4] All inflation adjustments in this report rely on the consumer price index for all urban consumers (CPI-U), published by the Department of Labor, Bureau of Labor Statistics.

2001	421,500	91,700	4.60
2004	448,200	93,100	4.81

Source: Board of Governors of the Federal Reserve System.

The Distribution of Net Worth

To get a more detailed picture of the inequality hinted at by the difference between mean and median net worth, this section presents figures showing detailed estimates of the distribution of household net worth derived from SCF data. **Table 2** shows the share of total net worth held by households within selected percentiles of the distribution.

Table 2. Distribution of Household Net Worth, Selected Years

Percentile of the Net Worth Distribution	Household Net Worth					
	1989	1992	1995	1998	2001	2004
	Share of Total Net Worth					
0% to 50%	3.0%	3.3%	3.6%	3.0%	2.8%	2.5%
50% to 90%	29.9	29.6	28.6	28.4	27.4	27.9
90% to 95%	13.0	12.5	11.9	11.4	12.1	12.0
95% to 99%	24.1	24.4	21.3	23.3	25.0	24.1
99% to 100%	30.1	30.2	34.6	33.9	32.7	33.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
	Minimum Net Worth					
0% to 50%	<0	<0	<0	<0	<0	<0
50% to 90%	68,800	64,200	71,300	85,600	93,200	92,900
90% to 95%	519,300	457,400	478,000	572,900	794,000	827,600
95% to 99%	902,400	847,600	829,700	1,015,800	1,392,200	1,393,000
99% to 100%	3,354,400	3,172,700	3,156,000	4,291,700	6,246,800	6,006,000

Source: Arthur B. Kennickell, "Currents and Undercurrents: Changes in the Distribution of Wealth, 1989—2004," Survey of Consumer Finances Working Paper, January 2006, available at http://www.federalreserve.gov/pubs/oss/oss2/method.html.

Although any characterization of the degree of inequality is necessarily subjective, the distribution is nonetheless far from equal. In 2004, the top 1% of the distribution accounted for one-third of total household net worth. This wealth class includes all households with a net worth of at least $6 million.[5] The top 10% held more than two-thirds of all household wealth. This wealth class begins with those households with a net worth of at least $827,600.

The data in **Table 2** indicate a general shift in the overall distribution with the share of wealth in the top 5% growing and the shares of the lower percentiles declining. That the share of wealth held by the top 1% of the distribution fell between 1995 and 2004 while the ratio of mean to

[5] See the bottom row in **Table 2** for the amounts that define each wealth class shown here.

median income increased substantially, may be an indication of changes occurring within the top 1%, among a small number of households at the very top of the distribution.

Table 3 presents the share of total net worth accounted for by selected wealth classes. The wealth classes are adjusted for inflation and are expressed in terms of constant 2004 dollars.

Table 3. Proportion of Households by Wealth Class

Wealth Class (2004 $)	Percentage of Households					
	1989	1992	1995	1998	2001	2004
negative	7.2	7.2	7.1	8.0	6.9	7.1
zero	3.9	3.2	2.6	2.5	2.6	1.7
1 to 999	4.0	3.0	2.4	3.2	2.7	2.3
1K to 2.5K	3.1	3.6	2.5	2.4	2.3	3.2
2.5K to 5K	4.3	3.4	3.4	3.2	3.3	4.0
5K to 10K	4.0	4.9	5.5	4.7	4.6	4.4
10K to 25K	8.0	9.2	9.2	7.9	7.9	7.8
25K to 50K	9.3	10.5	10.0	9.4	9.0	8.8
50K to 100K	13.3	14.2	15.8	12.5	12.2	11.9
100K to 250K	20.8	21.5	22.2	21.9	19.1	18.6
250K to 500K	11.3	10.0	9.9	12.5	13.5	12.4
500K to 1M	5.6	5.2	5.5	6.5	8.4	9.6
more than 1M	5.2	4.2	3.8	5.3	7.5	8.1

Source: Arthur B. Kennickell, "Currents and Undercurrents: Changes in the Distribution of Wealth, 1989—2004," Survey of Consumer Finances Working Paper, January 2006, available at http://www.federalreserve.gov/pubs/oss/oss2/method.html.

The data in **Table 3** indicate an increase in the proportion of households with net worth of greater than $250,000. There was an especially large increase in the proportion of households with net worth greater than $1,000,000 between 1995 and 2004. Also worth noting is the decline in the proportion of households with zero or negative net worth from 11.1% to 8.8% between 1989 and 2004.

Table 4 presents data showing the distribution of separate types of assets in 2004. The bottom row of the table indicates the level of wealth that defines each wealth class. The figures show clearly that some assets are much more equally distributed than others. If an asset were equally distributed the proportion of that asset owned by each wealth class would equal the size of that wealth class. If vehicles, for example, were equally distributed, the top 1% would own 1% of the net worth of vehicles, and the bottom 50% would own 50% of the total net worth of vehicles. As it is, vehicles are the most equally distributed asset. The most unequally distributed assets are bonds, business equity, and stocks.

The relative inequality of the distribution of different kinds of assets may have implications for the recent decline in the household saving rate. A number of studies, for example, found a close connection between the decline in the household saving rate during the 1990s and the rapid rise in equity prices.[6] If that is what happened then it is likely that it tended to be the saving of those households at the top of the wealth distribution that was affected rather than those in the middle and bottom. Almost 80% of equity is held by the wealthiest 10% of the household distribution. If equity price appreciation substituted for saving out of income, it did so for a small portion of the population.

Since 2000, equity prices leveled off but saving did not recover. Some analysts have found evidence that housing price appreciation may now be substituting for saving out of current income and driving up household wealth. Housing wealth is much more equally distributed than stock. The wealthiest 10% of households accounted for just 38.2% of equity in principal residences in 2004. At the same time, those in the next 40% of the distribution accounted for 50.1% of equity in principal residences. If rising house prices substituted for saving out of current income it did so for a much larger proportion of the population than did stock price appreciation.

Table 4. Shares of Assets Accounted for by Selected Wealth Classes, 2004

	Percentile of the Net Worth Distribution				
	0 to 50%	50 to 90%	90 to 95%	95 to 99%	99 to 100%
Net Worth	2.5	27.9	12.0	24.1	33.4
Assets	5.8	31.0	11.4	22.2	29.5
—Financial Assets	2.5	26.0	13.6	26.3	31.6
Liquid Assets[a]	5.4	33.3	11.2	27.0	23.1
CDs	2.3	42.3	21.5	22.3	11.5
Savings Bonds	9.8	51.0	15.3	19.9	4.0
Other Bonds	0.1	2.9	3.1	23.7	70.2
Stocks	0.6	10.3	10.1	28.2	50.9
Mutual Funds	0.7	18.2	10.7	32.7	37.6
Retirement Accounts[b]	3.4	38.3	19.6	25.2	13.6
Life Insurance	6.5	36.2	10.7	24.9	21.6
Annuities and Trusts	0.7	17.8	12.7	21.0	47.8
Other Financial Assets	5.9	16.9	8.4	15.3	53.5
—Nonfinancial Assets	7.6	33.9	10.2	20.0	28.3
Vehicles	26.8	49.8	7.9	9.6	5.8
Principal Residence	11.7	50.1	11.9	16.4	9.9
Other Residential Property	1.5	22.0	14.5	32.5	29.4
Nonresidential Real Estate	0.7	16.3	11.3	24.4	47.3
Net Business Equity	0.3	9.2	5.7	22.4	62.3

[6] See CRS Report RL33168, *Why is the Household Saving Rate So Low?*, by Brian W. Cashell.

	Percentile of the Net Worth Distribution				
	0 to 50%	50 to 90%	90 to 95%	95 to 99%	99 to 100%
Other Nonfinancial Assets	3.6	24.4	7.0	28.7	36.2
Debt	24.2	48.6	8.3	11.5	7.3
Principal Residence[c]	22.8	53.5	8.9	10.0	4.9
Other Residential Property[d]	3.0	25.7	12.7	36.1	22.5
Installment Debt	46.2	39.3	2.8	4.5	7.2
Other Lines of Credit	10.9	25.1	1.9	15.3	46.9
Credit Card Balance	45.7	46.9	3.6	3.1	0.7
Other Debt	16.9	20.3	8.9	16.8	37.0
Memo: Equity[e]	1.2	20.0	13.2	28.8	36.8

Source: Arthur B. Kennickell, "Currents and Undercurrents: Changes in the Distribution of Wealth, 1989—2004," Survey of Consumer Finances Working Paper, January 2006, available at http://www.federalreserve.gov/pubs/oss/oss2/method.html.

a. Holdings of checking, savings, money market, and call accounts.

b. IRAs, Keogh accounts, and other pensions accounts where withdrawals or loans may be taken (such as 401(k) accounts).

c. Mortgage and home equity loans secured by principal residences.

d. Mortgages secured by residential real estate other than principal residences.

e. Total value of direct and indirect holdings of corporate stock.

Net Worth, Income, and Saving

Between 1995 and 2004, the share of families owning stock either directly or indirectly[7] increased from 40.4% to 48.6%. Although stock ownership is far more common in higher income classes, there was an increase in stock ownership all across the income distribution during the 1990s. **Table 5** shows the share of families holding stock directly and indirectly by income class as well as the median value of those holdings. In addition to increases in the proportion of families owning stock, the value of stock holdings increased substantially as well.

Table 5. Family Holdings of Stock

Percentile of Income	Percentage of Families Holding Stock		Median Value of Stock Holdings (thousands of 2004 $)	
	1995	2004	1995	2004
less than 20%	6.5	11.7	4.6	7.0
20% to 39.9%	24.7	28.8	7.8	8.8
40% to 59.9%	41.5	49.2	7.7	11.6

[7] Indirect holdings include stocks held by life insurance companies, private and state and local pension funds, and mutual funds.

Percentile of Income	Percentage of Families Holding Stock		Median Value of Stock Holdings (thousands of 2004 $)	
	1995	2004	1995	2004
60% to 79.9%	54.3	66.5	15.6	20.0
80% to 89.9%	69.7	82.5	30.8	34.6
90% to 100%	80.0	91.0	73.9	169.9
All Families	40.4	48.6	18.0	24.3

Source: Board of Governors of the Federal Reserve System.

Not surprisingly, overall wealth and income are correlated. Those at the upper end of the income distribution are able to set more aside and thus accumulate wealth at a faster rate than those at the bottom. At the same time, those at the high end of the wealth distribution are likely to have considerable additional income in the form of interest, dividends, and rents. **Table 6** presents figures for 2004 that show mean and median net worth for families, by selected income classes. The ratio of mean to median income is 1.64 compared to a ratio of 4.81 for net worth, suggesting that the distribution of net worth is much more unequal than that of income. The last column in the table indicates the proportion of each income class that saved in 2004. As might be expected, the proportion of families who save tends to rise with income.

Table 6. Family Net Worth by Income Class, 2004

Percentile of Income	Income ($ in thousands)		Net worth ($ in thousands)		Percentage of Families Who Saved
	Median	Mean	Median	Mean	
less than 20%	11.1	10.8	7.5	72.6	34.0
20% to 40%	25.7	26.1	34.3	122.0	43.5
40% to 60%	43.2	43.4	71.6	193.8	54.4
60% to 80%	68.1	69.1	160.0	342.8	69.3
80% to 90%	104.7	106.5	311.1	485.0	77.8
90% to 100%	184.8	302.1	924.1	2,534.4	80.6
All families	43.2	70.7	93.1	448.2	56.1

Source: Board of Governors of the Federal Reserve System.

Explaining the Distribution of Wealth

In many ways, attempts to understand the accumulation and distribution of wealth are closely related to efforts to explain household saving behavior. Most attempts to model wealth accumulation and distribution begin with the distribution of income and add to that base some model of household saving behavior.

Most models of saving behavior begin with some variation of what economists refer to as the "life cycle" model. This refers to the notion that saving behavior, for some at least, tends to

follow a humped pattern over the course of a lifetime. Early in life, or career, when earnings are relatively low most of, if not more than, current income is consumed and the rate of saving is low. Over the course of a career, however, as income rises saving also tends to rise and wealth accumulates. After retiring, income falls and so does saving as retirees draw down wealth to afford consumption in retirement.

That model helps resolve an apparent inconsistency in saving behavior. One, at any given point in time those with higher incomes tend to have higher saving rates, and two, as incomes have risen over time the saving rate has not. The model however, falls short of completely explaining observed saving behavior. It also falls far short of explaining why the wealth distribution is so much more unequal than the income distribution.

Savers take more than retirement into consideration when deciding how much out of current income to spend and to save. One reason people save is for precaution, for the proverbial rainy day. Income may vary over the course of a lifetime for unpredictable reasons, such as illness or economic fluctuations over the course of the business cycle. Some wealth, therefore, is accumulated to dampen the effects of those events on living standards.[8]

Although such models can account for a distribution of wealth that is substantially more unequal than the distribution of income, they fail to account for the observed characteristics of the wealth distribution. For the most part, they fall short of explaining the full extent of the inequality.

That suggests that there may be other variables in addition to the income distribution that should be considered.[9] One factor that seems to contribute to the overall inequality in the wealth distribution is the number of self-employed relative to the rest of the population. Entrepreneurs may save at a higher rate, and accumulate greater wealth because of difficulties obtaining sufficient capital to start their own businesses.

Using data from the 1989 SCF, one study found that entrepreneurs account for more than 60% of the wealth held by those in the top 1% of the wealth distribution.[10] The study also concluded that entrepreneurs, even though they tend to be wealthy, face constraints on borrowing and so they also tend to have higher rates of saving as a way of accumulating capital. The authors of this study found the incidence of entrepreneurship to be an important contributor to inequality in the wealth distribution.

There is also evidence that bequests may play an important role in explaining the concentration of wealth, especially among the wealthiest in the distribution.[11] While "involuntary," that is unplanned bequests added little to explanations of wealth concentration, "voluntary," or planned bequests did. The desire to leave bequests also helps to explain the high rate of saving observed in the wealthiest households.

---

[8] Quadrini, Vincenzo and Ríos-Rull, José-Victor, "Understanding the U.S. Distribution of Wealth," Federal Reserve Bank of Minneapolis, *Quarterly Review*, spring 1997, pp. 22-36.

[9] Díaz-Giménez, Javier, Vincenzo Quadrini, and José-Victor Ríos-Rull, "Dimensions of Inequality: Facts on the U.S. Distributions of Earnings, Income, and Wealth," Federal Reserve Bank of Minneapolis, *Quarterly Review*, spring 1997, pp. 3-21.

[10] Marco Cagetti and Mariacristina De Nardi, "Entrepreneurship, Frictions, and Wealth," Federal Reserve Bank of Minneapolis, Staff Report 322, Sept. 2003, 40 pp.

[11] Mariacristina De Nardi, "Wealth, Inequality, and Intergenerational Links," Federal Reserve Bank of Minneapolis, Staff Report 314, Nov. 2002, 43 pp.

A different kind of bequest, nonfinancial in nature, may also be important in explaining why wealth is so much more unequally distributed than income.[12] Parents, it seems, may also bequeath a certain kind of human capital in addition to any financial or real assets they may leave to their children. Assuming that parents are able to pass on to their children earning power in some form seems also to contribute to explanations of wealth concentration among the very wealthy.

Author Contact Information

Brian W. Cashell
Specialist in Macroeconomic Policy
bcashell@crs.loc.gov, 7-7816

[12] Ibid.