

“Inheritances and the Distribution of Wealth”

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April 14, 2016

Brief Synopsis

- 1. I investigate two main questions. First, have inheritances become more important over time? Second, how much, if at all, do inheritances contribute to overall wealth inequality?
- 2. Calculations will be performed from 1989 through the year 2013 on the basis of the U.S. Federal Reserve Board's Survey of Consumer Finances.

- **3.** With regard to the first issue, there is reason to think that the share of wealth transfers in net worth has been rising over time because the current generation of elderly is now the richest in U.S. history. Moreover, the baby-boom generation has now reached the prime inheritance age group of 50 to 59. For both reasons, the baby-boomers may be the first generation to inherit a considerable amount of money. However, there is little evidence of an inheritance “boom.”

- 4. With regard to the second, though inheritances received are much greater for richer families than poorer ones and are perceived as a major cause of rising wealth inequality, in fact inheritances as a share of current wealth tend to be higher for poorer families and thus tend to reduce overall wealth inequality.

Some Motivation

- 1. More than twenty years ago, Avery and Rendall (1993) forecasted that an inheritance boom would occur for baby boomers over the decade of the 2000s.
- 2. Later, Schervish and Havens (1999) predicted that over the 55-year period from 1998 to 2052, a minimum of \$41 trillion (in 1998 dollars) would pass from the older generation to the younger one.

- 3. More recently, Munnell *et. al.* (2011) projected that the “Baby Boom” generation (those born between 1946 and 1964) will inherit 84 trillion dollars (in 2009 dollars) over its lifetime.
- 4. Thomas Piketty in his famous book, *Capital in the Twenty-First Century* (2014) showed that the share of the annual flow of inheritances in national income has remained about 8 to 12 percent over the century in France, the U.K., and Germany. He argues that in the future it is likely to reach 15 percent. Thus he speaks of the rise of “partimomial capitalism.”

Some Background

- What is wealth? Assets are:
- (1) the gross value of owner-occupied housing.
- (2) other real estate owned by the household.
- (3) cash and demand deposits.
- (4) time and savings deposits, certificates of deposit, and money market accounts;

What Is Wealth (cont.)?

- (5) government bonds, corporate bonds, foreign bonds, and other financial securities.
- (6) the cash surrender value of life insurance plans.
- (7) the cash surrender value of pension plans, including IRAs, Keogh, and 401(k) plans.

What Is Wealth (cont.)?

- (8) corporate stock and mutual funds.
- (9) net equity in unincorporated businesses.
- and (10) equity in trust funds.
- Total liabilities are the sum of.
 - (1) mortgage debt.
 - (2) consumer debt, including auto loans.
 - and (3) other debt, including educational loans.

What Is Wealth (cont.)?

- NOT INCLUDED HERE:
- 1. Value of vehicles (standard FRB tables INCLUDE this).
- 2. Other consumer durables.
- 3. The value of future social security benefits the family may receive upon retirement (usually referred to as "social security wealth"), as well as the value of retirement benefits from private pension plans ("pension wealth").

Sources of Wealth Data

- 1. 1989, 1992, 1995, 1998, 2001, 2004, 2007, 2010, and 2013 Survey of Consumer Finances (SCF) conducted by the Federal Reserve Board.
- 2. Each survey consists of a core representative sample combined with a high-income supplement.

Figure 1. Mean and Median Net Worth, 1962-2013

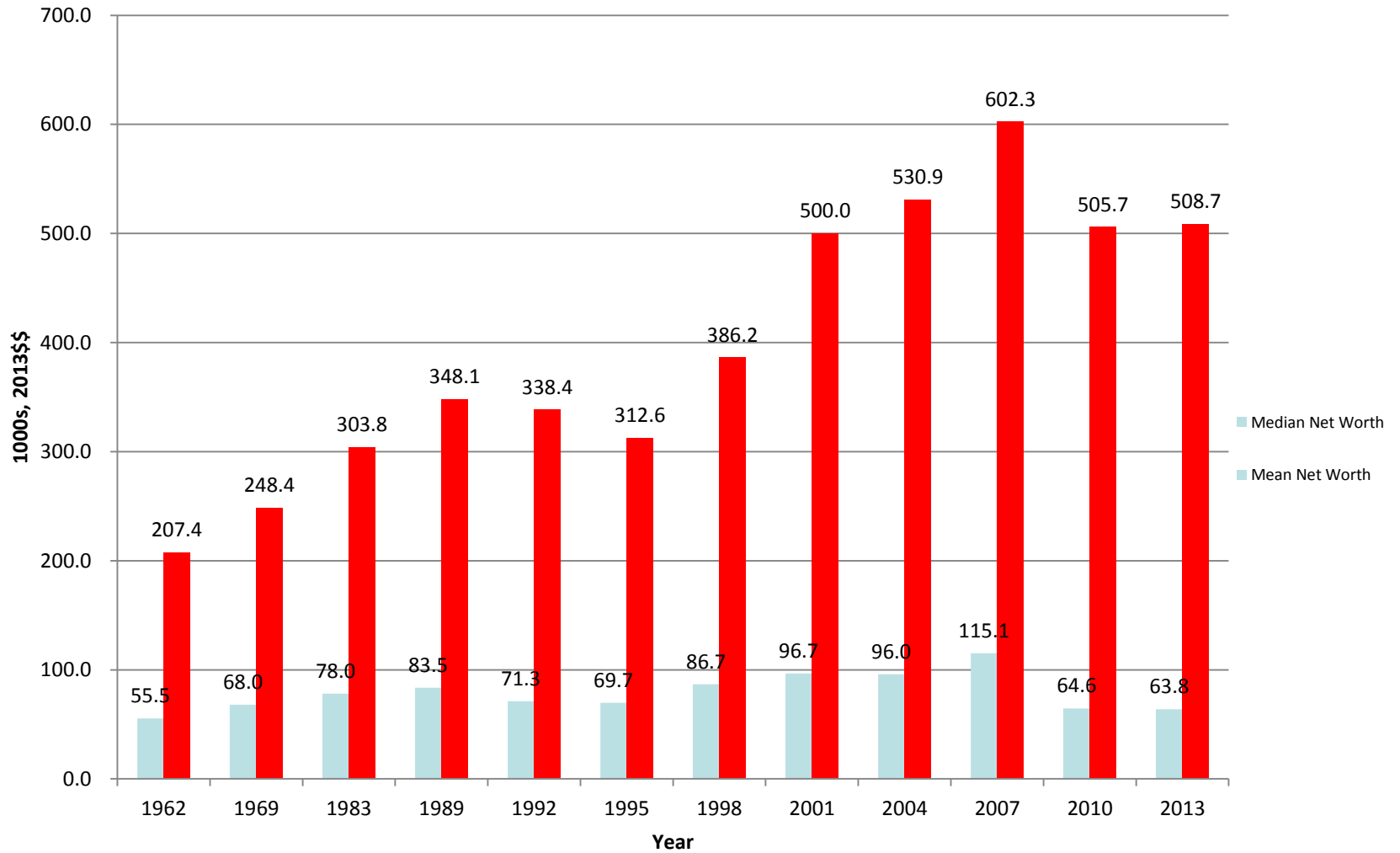


Figure 4. Mean and Median Household Income, 1962-2013

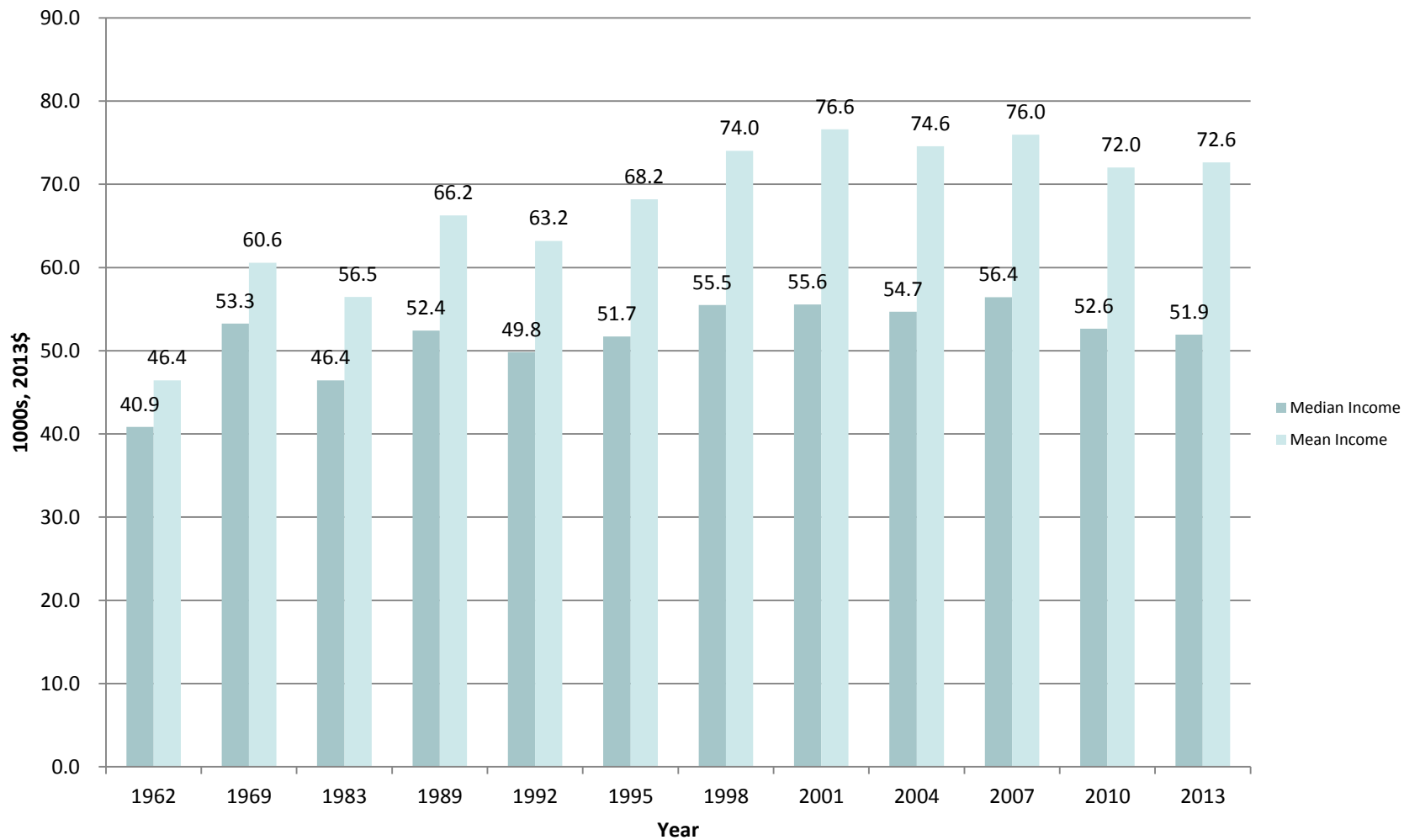


Table 1. Wealth and Income Trends, 1983-2007
(1000s, 2013\$)

				% Chng	% Chng	% Chng
	<u>1983</u>	<u>2001</u>	<u>2007</u>	<u>1983- 2001</u>	<u>2001- 2007</u>	<u>1983- 2007</u>
Median NW	78.0	96.7	115.1	23.9	19.1	47.5
Mean NW	303.8	500.0	602.3	64.6	20.4	98.2
Median Income	46.4	55.6	56.4	19.7	1.6	21.6

Wealth and Income Trends, 2001-2013 (constant dollars)

	% Change	% Change	% Change
	2001-2007	2007-2010	2010-2013
Median NW	19.1	-43.9	-1.2
Mean NW	20.4	-16.0	0.6
Median Income	1.6	-6.7	-1.3

Figure 5 Wealth and Income Inequality, 1962-2013 (Gini coefficients)

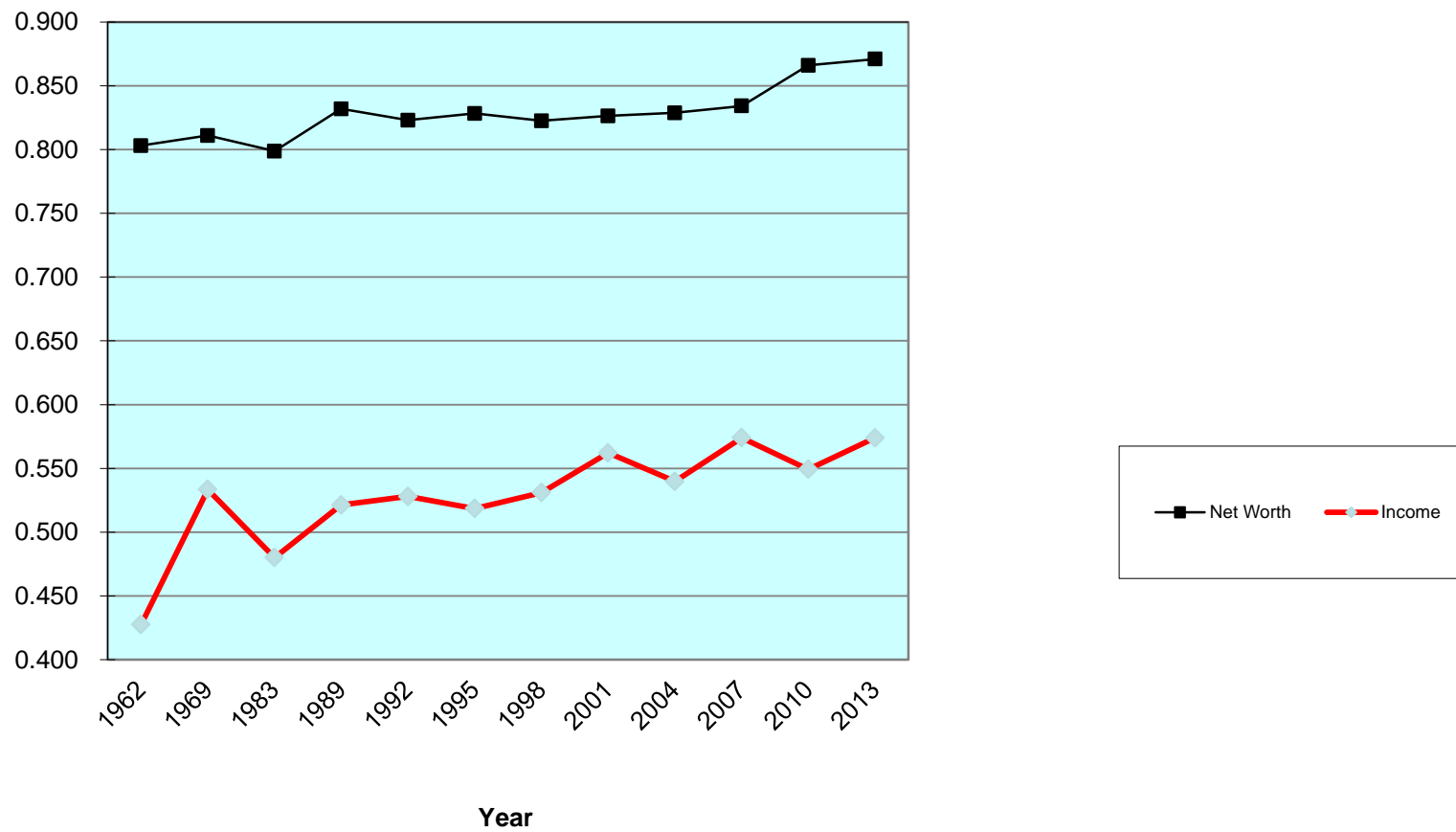


Table 2. Wealth Inequality Trends, 2007-2013

<u>NW Shares</u>	<u>2007</u>	<u>2010</u>	<u>2013</u>
Top 20%	85.0	88.6	88.9
Next 20%	10.9	9.5	9.3
Middle 20%	4.0	2.7	2.7
Bottom 40%	0.2	-0.8	-0.9
Gini Coeff.	0.834	0.866	0.871

Table 3. Income Inequality Trends, 2006-2012

<u>Income Shares</u>	<u>2006</u>	<u>2009</u>	<u>2012</u>
Top 20%	61.4	59.1	61.8
Next 20%	17.8	18.7	17.8
Middle 20%	11.1	14.9	11.1
Bottom 40%	9.6	7.3	9.4
Gini Coeff.	0.574	0.549	0.574

Literature Review

- 1. Projector and Weiss (1966), using the 1963 Survey of Financial Characteristics of Consumers, reported that only 17 percent of families had received any inheritance.
- 2. Morgan, David, Cohen, and Brazer (1962), using a 1964 Brookings study on the affluent, estimated 18 percent received any inheritance. They estimated that about one seventh of the total wealth of this group came from inheritance.

- 3. Kessler and Masson (1979) using a 1975 survey of 2,000 French families, the respondent was asked whether the family had received any significant inheritance (above \$4,000) or gifts (above \$2,000). Of all the households in the sample, 36 percent reported that they had already received some inheritance. Of the total wealth of the population, Kessler and Masson estimated that 35 percent originated from inheritances or gifts.

- 4. Klevmarcken (2001) computed that 34.4 percent of Swedish households reported receiving a gift or inheritance in the 1998 Swedish HUS wealth survey. Using a three percent capitalization of inheritances and gifts, he calculated that 19.0 percent of the wealth of Swedish households in 1998 originated in wealth transfers.

- 5. Brown and Weisbenner (2004), using the 1998 SCF, estimated that 19 percent of households that year received a wealth transfer (this is very close to my own estimate) and that one fifth to one fourth of aggregate household wealth was traceable to wealth transfers, depending on the interest rate used to capitalize past inheritances.

- 6. Laitner and Sonnega (2010) provide some more recent evidence on this subject on the basis of the 1992-2008 HRS. They found that 30 to 40 percent of households will eventually receive an inheritance (by time of death). This figure is a little higher than my estimate of around 30 percent (see Section 4.3). They also surmised that inheritances reflect a mixture of intentional and accidental bequests, with the latter twice as prevalent.

- 7. Karagiannaki (2011a) examined the trend in the *annual flow* of inheritances in the U.K. over the period 1984 to 2005. She found that the annual inheritance flow increased markedly, from £22 billion in 2005 prices in 1984 to £56 billion in 2005, and the mean value of estates more than doubled, from £81,000 to £204,100. Total annual inheritances rose from 3.0 percent of GDP in 1984 to 4.3 percent in 2005. The proportion of households receiving an inheritance increased as well, from 0.8 percent in the 1986-1990 period to 1.4 percent in 2001-2005.

- 8. Piketty (2011) tracked annual wealth transfers (inheritance and gifts) in France from 1820 to 2010 (also see Piketty, 2014). His main finding is that annual inheritances as a share of national income was about 20 to 25 percent between 1820 and 1910, fell to less than 5 percent in 1950, and then rebounded to 15 percent in 2010. For the period under consideration here, the share rose from about 6 percent in 1980 to about 13 percent in 2010. This analysis differed from those reported above in that only annual wealth transfers flows were calculated, rather than the capitalized value of current and past wealth transfers, and these were computed as a fraction of national income instead of total household wealth.

- The media made much of this finding, asserting that inheritances are rising in importance in France (and other OECD countries such as the United States). But, as argued above, the ratio of inheritances to national income is not the appropriate metric of the relative importance of wealth transfers. Rather, wealth transfers as share of personal wealth is the correct measure. Indeed, Piketty also reported that the ratio of private wealth to national income rose from about 300 percent in 1980 to about 550 percent in 2005. As a result, the ratio of annual wealth transfers to private wealth remained fairly constant at about two percent from 1980 to 2010.

- 9. Atkinson (2013) used a methodology similar to that of Piketty, in his case for the U.K, and reported very similar findings. He examined estate duty (tax) records which stretch back to 1896. He found that before World War I, total inherited wealth represented about 20 percent of national income. In the inter-war years, this ratio fell to 15 percent and then fell to about 10 percent after World War II and only 5 percent in the late 1970s. Since then, there was an upturn, with the ratio rising from 4.8 percent in 1977 to 8.2 percent in 2006. He also found that the ratio of personal wealth to national income increased since the 1970s, with the former growing twice as fast as the latter in real terms. As a result, the ratio of inherited wealth to total personal wealth was about the same in 2006 as in 1976.

- 10. Sources for this paper:
- (1) Edward N. Wolff, *Inheriting Wealth in America: Future Boom or Bust?* Oxford University Press, New York, 2015.
- (2) Edward N. Wolff, *100 Years of American Wealth*, Harvard University Press, forthcoming.

Literature Conclusion

- 11. Generally speaking, the results on the importance of inheritances and other wealth transfers in household wealth accumulation are quite varied. However, on the basis of the studies reviewed above, one might guess that about 20 to 30 percent of household wealth emanates from inheritances and other forms of wealth transfers.

SCF Inheritance Questions

- 1. Wealth Transfers are mainly of two types: (1) inheritances (bequests) and (2) *inter-vivos* gifts
- 2. Households are asked to record both the amount of the transfer received and the year of receipt.
- 3. Questions on inheritances and gifts are asked in two different ways:
 - general wealth transfers - refer to any type of gift or inheritance.
 - specific questions on inheritances and gifts of real estate and businesses.
- 4. Unclear from the questionnaire whether the questions on general wealth transfers also incorporate the specific transfers indicated in the questions on real estate and businesses.

- 5. To be on the conservative side, value of the specific wealth transfers included in only two circumstances:
 - (1) if no general wealth transfer was reported;
 - (2) if the value of the specific wealth transfer exceeds the value of the general wealth transfer.
- 6. Underreporting problems, but are there systematic biases by wealth class?
- 7. Present value of all inheritances computed as of the survey year by accumulating them at a real interest rate of 3.0 percent.

Trends in Overall Wealth Transfers, 1989-2013

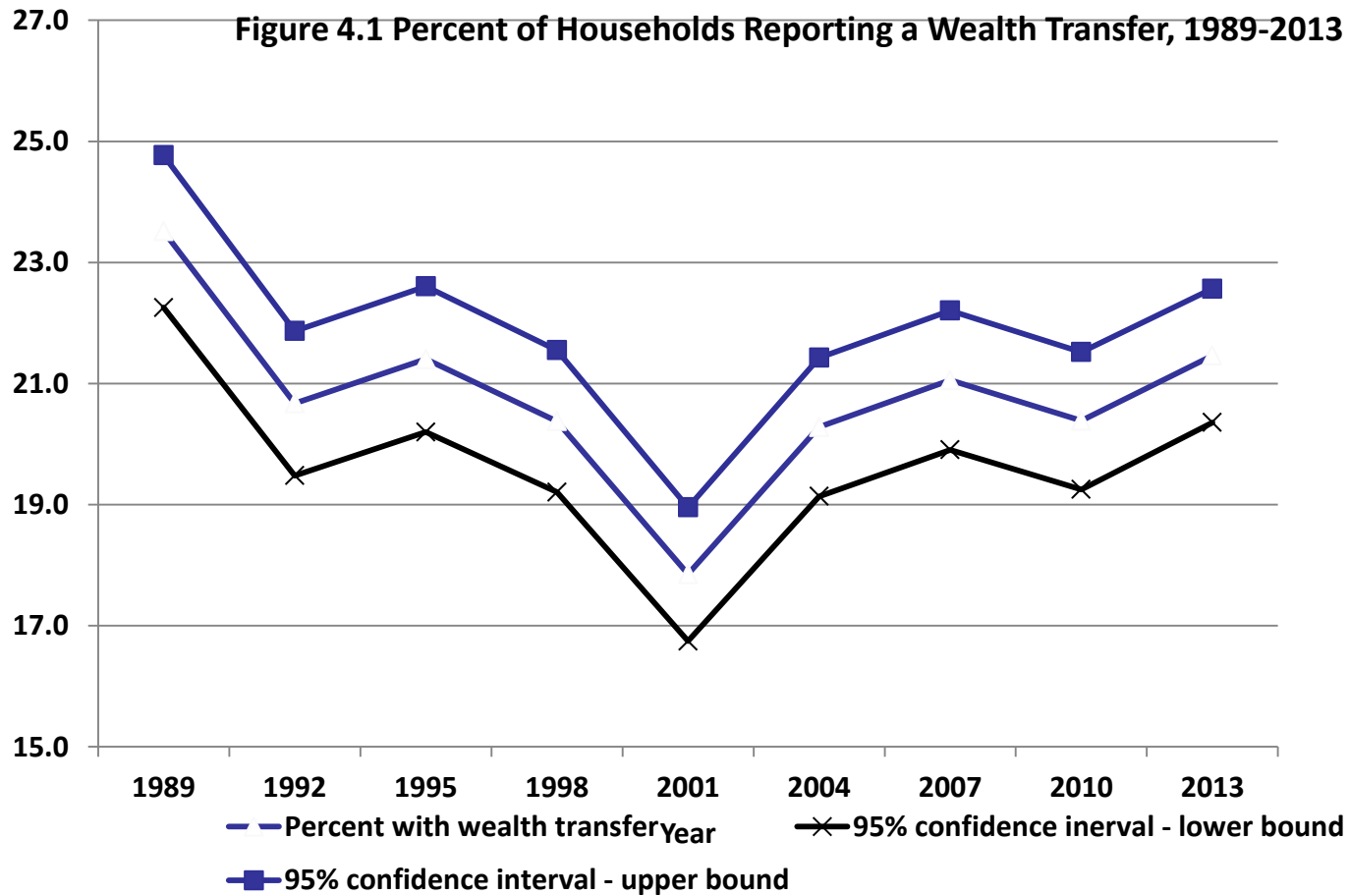


Figure 4.2. Mean Value of Wealth Transfers, Recipients Only, 1989-2013

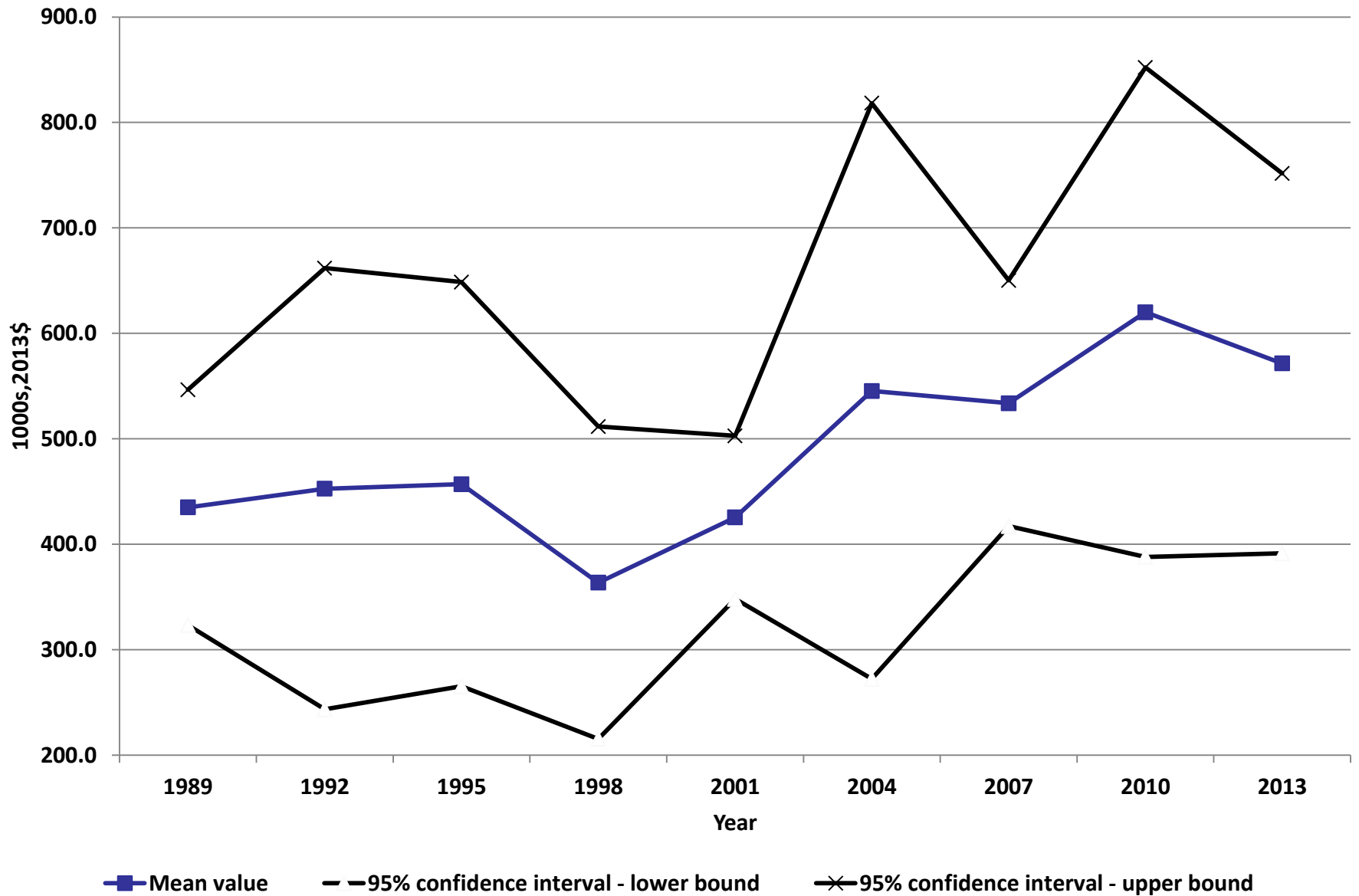


Figure 4.3. Median Value of Wealth Transfers, Recipients Only, 1989-2013

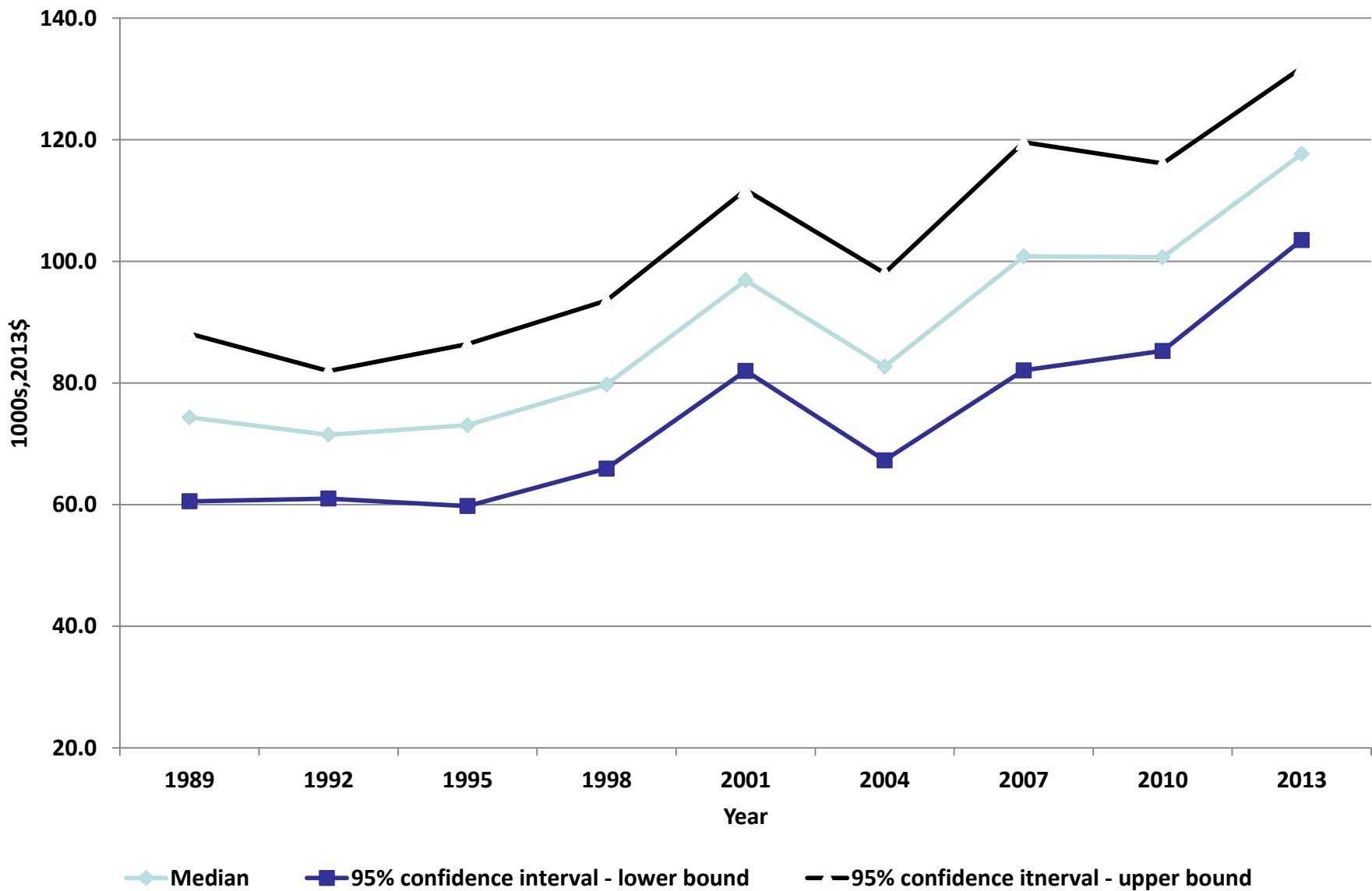
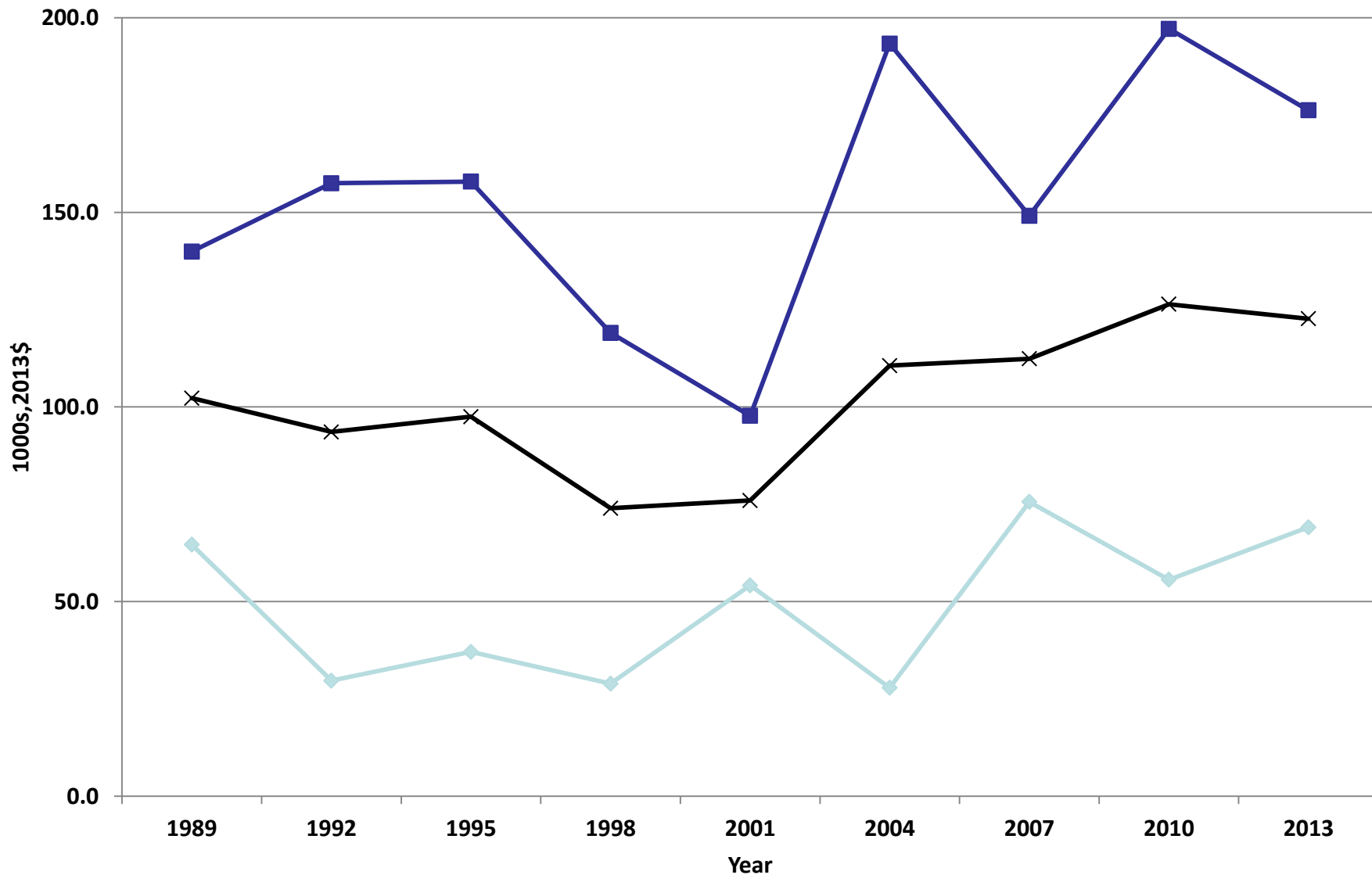
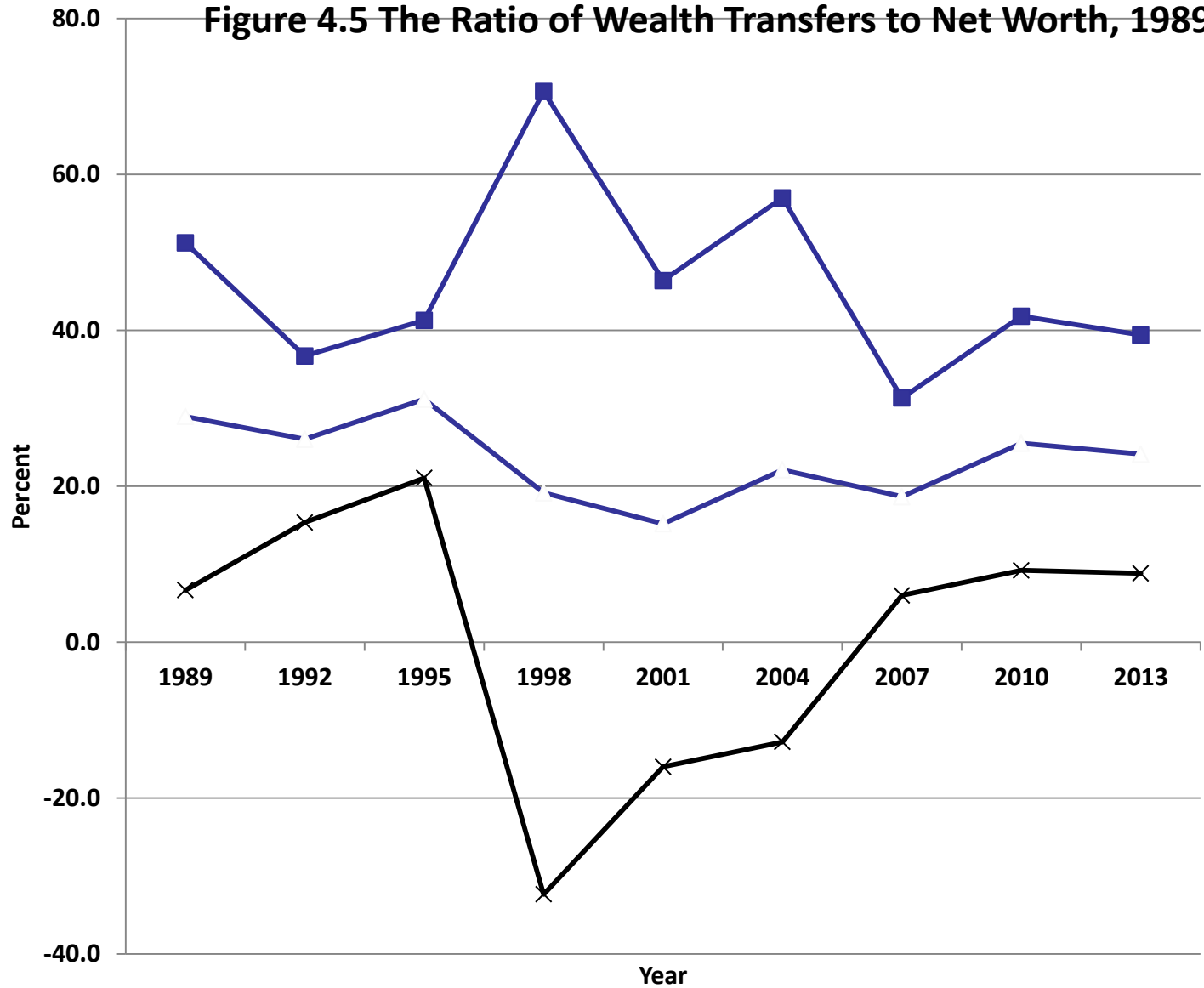


Figure 4.4 Mean Value of Wealth Transfers, All Households, 1989-2013



—x— Mean —◆— 95% Confidence interval - lower bound —■— 95% confidence interval - upper bound

Figure 4.5 The Ratio of Wealth Transfers to Net Worth, 1989-2013



—■— Ratio —x— 95% confidence interval - lower bound —■— 95% confidence interval - upper bound

Percentage of Households Receiving WT, Period Average

All households	20.8
<u>A. Income level (1998\$)</u>	
Under \$15,000	15.0
\$15,000-\$24,999	18.2
\$25,000-\$49,999	20.3
\$50,000-\$74,999	23.4
\$75,000-\$99,999	25.9
\$100,000-\$249,999	31.2
\$250,000 or more	38.0
<u>B. Wealth level (1998\$)</u>	
Under \$25,000	9.2
\$25,000-\$49,999	20.3
\$50,000-\$99,999	21.0
\$100,000-\$249,999	26.2
\$250,000-\$499,999	33.4
\$500,000-\$999,999	41.5
\$1,000,000 or over	45.1
Top 1% of Wealth	44.5

Percentage of Households Receiving WT, Period Average

All households	20.8
<u>C. Race</u>	
Non-Hispanic whites	24.8
Non-Hispanic African-Americans	10.5
Hispanics	5.6
Asian and other races	12.4
<u>D. Age class</u>	
Under 35	12.2
35-44	15.9
45-54	21.1
55-64	27.7
65-74	30.8
75 & over	28.5
<u>E. Education</u>	
Less than 12 years	13.2
12 years	18.0
13-15 years	20.6
16 years or more	28.5

Mean Value of Wealth Transfers, Period Average (1000s, 2013\$)

All households	102.3
<u>A. Income level (1998\$)</u>	
Under \$15,000	23.1
\$15,000-\$24,999	56.7
\$25,000-\$49,999	52.3
\$50,000-\$74,999	67.5
\$75,000-\$99,999	179.9
\$100,000-\$249,999	301.7
\$250,000 or more	1855.1
<u>B. Wealth level (1998\$)</u>	
Under \$25,000	7.9
\$25-000-\$49,999	25.5
\$50,000-\$99,999	24.2
\$100-000-\$249,999	60.1
\$250,000-\$499,999	113.7
\$500,000-\$999,999	278.7
\$1,000,000 or over	1176.4
Top 1% of Wealth	1587.7

Mean Value of Wealth Transfers, Period Average (1000s, 2013\$)

All households	102.3
<u>C. Race</u>	
Non-Hispanic whites	110.5
Non-Hispanic	19.7
African-Americans	
Hispanics	110.3
Asian and other races	53.2
<u>D. Age class</u>	
Under 35	34.5
35-44	55.9
45-54	71.4
55-64	82.6
65-74	343.9
75 & over	149.0
<u>E. Education</u>	
Less than 12 years	39.5
12 years	37.2
13-15 years	68.4
16 years or more	277.6

Median Value of Wealth Transfers, Period Average (1000s, 2013\$)

All households	88.6
<u>A. Income level (1998\$)</u>	
Under \$15,000	62.3
\$15,000-\$24,999	66.5
\$25,000-\$49,999	80.8
\$50,000-\$74,999	87.5
\$75,000-\$99,999	108.4
\$100,000-\$249,999	174.7
\$250,000 or more	397.1
<u>B. Wealth level (1998\$)</u>	
Under \$25,000	24.6
\$25,000-\$49,999	50.1
\$50,000-\$99,999	63.7
\$100,000-\$249,999	88.7
\$250,000-\$499,999	138.9
\$500,000-\$999,999	230.7
\$1,000,000 or over	477.0
Top 1% of Wealth	986.0

Median Value of Wealth Transfers, Period Average (1000s, 2013\$)

All households	88.6
<u>C. Race</u>	
Non-Hispanic whites	91.7
Non-Hispanic African-Americans	72.4
Hispanics	56.3
Asian and other races	101.5
<u>D. Age class</u>	
Under 35	35.5
35-44	55.5
45-54	87.5
55-64	114.5
65-74	138.3
75 & over	147.5
<u>E. Education</u>	
Less than 12 years	54.6
12 years	66.3
13-15 years	83.5
16 years or more	135.3

Ratio of Wealth Transfers to Net Worth, Period Average (%)

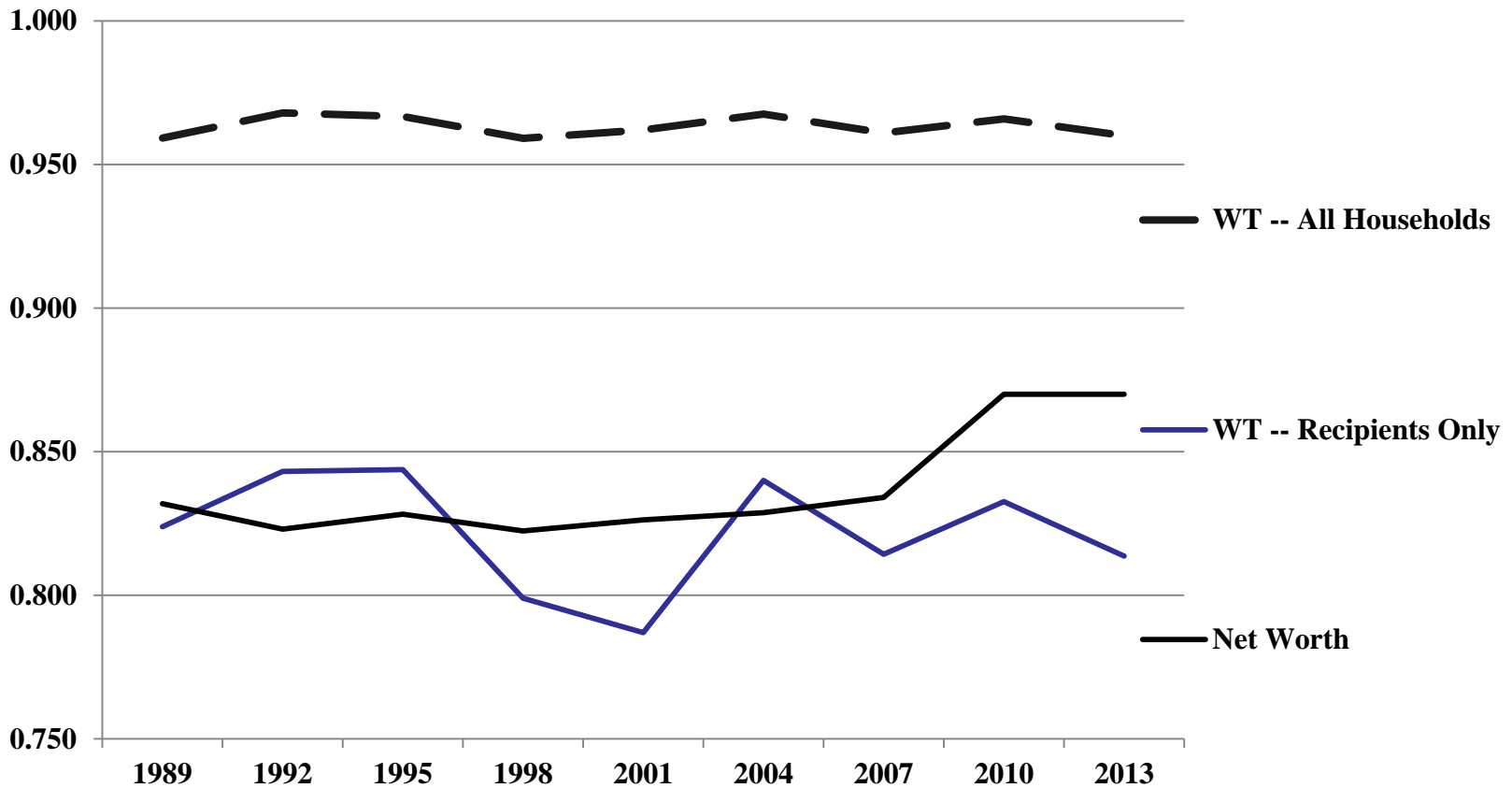
All households	23.4
<u>A. Income level (1998\$)</u>	
Under \$15,000	65.8
\$15,000-\$24,999	38.0
\$25,000-\$49,999	34.0
\$50,000-\$74,999	24.8
\$75,000-\$99,999	25.6
\$100,000-\$249,999	19.1
\$250,000 or more	16.6
<u>B. Wealth level (1998\$)</u>	
Under \$25,000	--
\$25,000-\$49,999	51.7
\$50,000-\$99,999	35.5
\$100,000-\$249,999	28.6
\$250,000-\$499,999	25.9
\$500,000-\$999,999	31.1
\$1,000,000 or over	18.8
Top 1% of Wealth	16.9

Ratio of Wealth Transfers to Net Worth, Period Average (%)

All households	23.4
<u>C. Race</u>	
Non-Hispanic whites	23.7
Non-Hispanic African-Americans	33.1
Hispanics	20.6
Asian and other races	16.2
<u>D. Age class</u>	
Under 35	30.4
35-44	19.8
45-54	20.4
55-64	17.8
65-74	25.8
75 & over	42.0
<u>E. Education</u>	
Less than 12 years	25.9
12 years	28.0
13-15 years	25.0
16 years or more	23.6

Has the Inequality of WT Increased Over Time?

(Gini coefficients)



Wealth Transfers Received in the Preceding Five Years

	1989	1992	1995	1998	2001	2004	2007	2010	2013
1. Percent of households receiving	7.7	7.6	6.2	8.1	6.9	7.5	8.4	4.6	7.8
2. Mean value of transfers, recipients only	202.3	147.5	228.0	153.3	148.2	218.0	185.7	171.7	198.3
3. Mean value of transfers, all households	15.6	11.2	14.2	12.4	10.2	16.3	15.6	7.9	15.6

Mean Value of WT Over Last Five Years, Period Average (1000s, 2013\$)

All Households			13.2
<u>A. Income Level (1998\$)</u>			
Under \$15,000			4.7
\$15,000-\$24,999			5.1
\$25,000-\$49,999			7.8
\$50,000-\$74,999			18.9
\$75,000-\$99,999			17.2
\$100,000-\$249,999			41.3
\$250,000 or more			97.8
<u>B. Wealth Level (1998\$)</u>			
Under \$25,000			1.4
\$25,000-\$49,999			3.7
\$50,000-\$99,999			4.6
\$100,000-\$249,999			8.4
\$250,000-\$499,999			18.3
\$500,000-\$999,999			61.4
\$1,000,000 or over			98.2
Top 1% of Wealth			212.6

Mean Value of WT Over Last Five Years, Period Average (1000s, 2013\$)

All Households			13.2
<u>C. Race</u>			
Non-Hispanic whites			16.4
Non-Hispanic African-Americans			3.6
Hispanics ^a			2.3
Asian and other races			8.4
<u>D. Age Class^b</u>			
Under 35			7.1
35-44			11.2
45-54			19.8
55-64			19.6
65-74			15.1
75 & over			7.2
<u>E. Education^b</u>			
Less than 12 years			2.7
12 years			5.7
13-15 years			10.8
16 years or more			29.5

Decomposition of Net Worth Inequality, Period Average

<u>A. Coefficient of variation</u>	
1) NW	6.4
2) NWX	10.2
3) WT	19.5
<u>B. Decomposition of $CV^2(NW)$</u>	
1) $\rho_1^2 CV^2(NWX)$	60.6
2) $\rho_2^2 CV^2(WT)$	28.2
3) $2CC(NWX,WT)$	-47.2
4) $CV^2(NW)$	41.6
<u>Memo: Correlation(NWX,WT)</u>	-0.45
<u>C. Percentage Decomposition of $CV^2(NW)$</u>	
1) $\rho_1^2 CV^2(NWX)$	145.7
2) $\rho_2^2 CV^2(WT)$	67.3
3) $2CC(NWX,WT)$	-113.0
4) $CV^2(NW)$	100.0

Conclusions

- 1. Inheritances tend to be equalizing in terms of the distribution of household wealth – result appears counter-intuitive.
- 2. Richer households do receive greater inheritances and other transfers than poorer ones, but as a proportion of wealth holdings, wealth transfers are greater for poorer households than for rich ones.

3. Have wealth transfers become more important over time?

- A. Share of households reporting a wealth transfer down, but mean and median transfers are up.
- B. Wealth transfers as a proportion of current net worth fell sharply.
- C. Possible explanations: 1) rapid accumulation of wealth makes inheritances less important; and 2) rise in life spans leads to decline in bequests.

2. Has the inequality of wealth transfers risen over time?

- Inequality of wealth transfers is extremely high, but no sign that it has risen.

3. Are wealth transfers responsible for rising overall wealth inequality?

- A. Net worth inequality largely unchanged between 1989 and 2007, then rises from 2007 to 2010 (the Great Recession), but is unchanged from 2010 to 2013.
- The results here indicate that over the Great Recession there was a sharp downturn in wealth transfers. The percent of households that received a wealth transfer over the preceding five years plummeted from 8.4% in 2007 to 4.4% in 2010, though there was a rebound to 7.8% in 2013. The share receiving a bequest actually increased slightly between 2007 and 2010 but the share receiving a gift fell by over four percentage points. Overall, the mean value of these transfers dropped by 49 percent (even greater than the percentage decline in median net worth over these years). However, by 2013, the mean value of these transfers was back to where it was in 2007.

- B. Negative correlation between wealth transfers and net worth implies that adding transfers to net worth actually reduces overall wealth inequality.
- C. Simulations suggest that eliminating inheritances either in full or in part would actually increase overall wealth inequality.