The Material Well-Being of the Bottom Twenty Percent and the Middle Class Since 1980

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Bruce D. Meyer

University of Chicago and NBER

James X. Sullivan

University of Notre Dame

I. Introduction

Question

- How has the material well-being of the poor and middle class changed between 1980 and today?

I. Introduction

Conventional Wisdom on Poverty

- The poor are no better off than 40 years ago
  - "There has been little overall progress in combating poverty…"

    -- Haskins and Sawhill (2010)

  - "…total official poverty rates are not much different today than they were in the late 1960s."

    --Meyer and Wallace (2009)

I. Introduction

Conventional Wisdom on the Middle Class

- The middle class has not benefitted from economic growth

  - Nearly 60 % of Americans believe that things have gotten worse for the middle class during the past decade   --CBS News (2007)

  - "…once you adjust for inflation the median income …has stagnated for almost 38 years…"

    --NPR (October 18, 2011)

I. Introduction

Conventional Wisdom Affects Policy Prescriptions

- "… the result of…failed policies…are now so painfully obvious: Middle-class working men and women and their families have been devastated."

  -- Lou Dobbs (2006)

- "Post-industrial America turned out to be a bust. The time for neo-industrial America has arrived."

  -- Harold Meyerson (September 4, 2011)

I. Introduction

Key point of our work

- When material well-being is better measured, there is evidence of substantial improvement for both the bottom twenty percent and the middle class over the past four decades.

I. Introduction

Important caveats

- The Great Recession led to a decline from which we only recently recovered; was worse for middle class than 10th percentile

- It is important to distinguish between cyclical and secular trends

- Improvements are even greater among the rich

II. Background

Official Measures

- Poverty
  - Threshold: Set in 1960s; adjusted only for inflation using the CPI-U
  - Income Concept: pre-tax money income

- Median Income
  - Income Concept : pre-tax money income

II. Background

Weaknesses of Official Measures

- Pre-tax money income measure misses key programs (Food Stamp Program, EITC, housing assistance, Medicaid, Medicare)

- Income ≠ well-being

- Rely on a price index that is biased
  - Poverty thresholds: CPI-U
  - Median income: CPI-U-RS

III. CPI Bias

- Consensus estimate: CPI-U overstates inflation by > 1 percentage point per year (less bias in last twenty years or so)
- Bias due to new goods, improved goods etc.
- Methods have changed but CPI-U does not reflect revisions
- CPI-U-RS (applies latest methods) addresses some, but not all of this bias. It still overstates inflation by approximately 0.8 percentage points per year
  - Caveat: exact bias uncertain, probably time varying
- Adjusted CPI-U-RS=CPI-U-RS minus 0.8 percentage points per year

IV. Income vs Consumption

- Conceptually, consumption is a better measure of material well-being than income

- Evidence suggests consumption is better measured than income for the poor--low percentiles of expenditures greatly exceed low percentiles of income
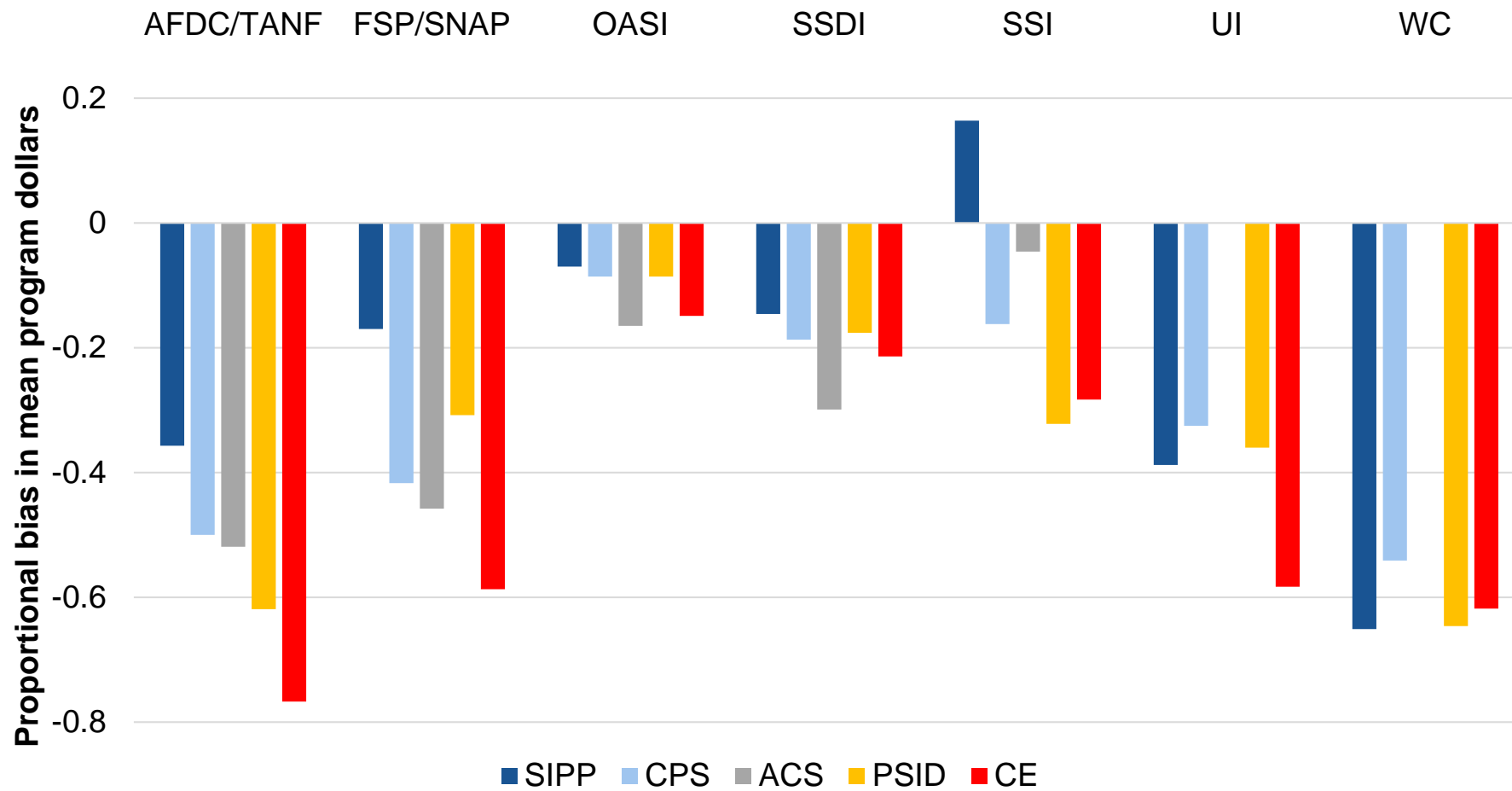
V. Data

- **Income Data**
  - Current Population Survey – ASEC/ADF, 1980-2017
  - Source for official income statistics
- **Consumption Data**
  - Consumer Expenditure (CE) Survey 1980-2017
  - Consumption = Nondurable expenditures + flow value of consuming housing and cars
  - Well-measured consumption is components that compare well to NIPA totals over time
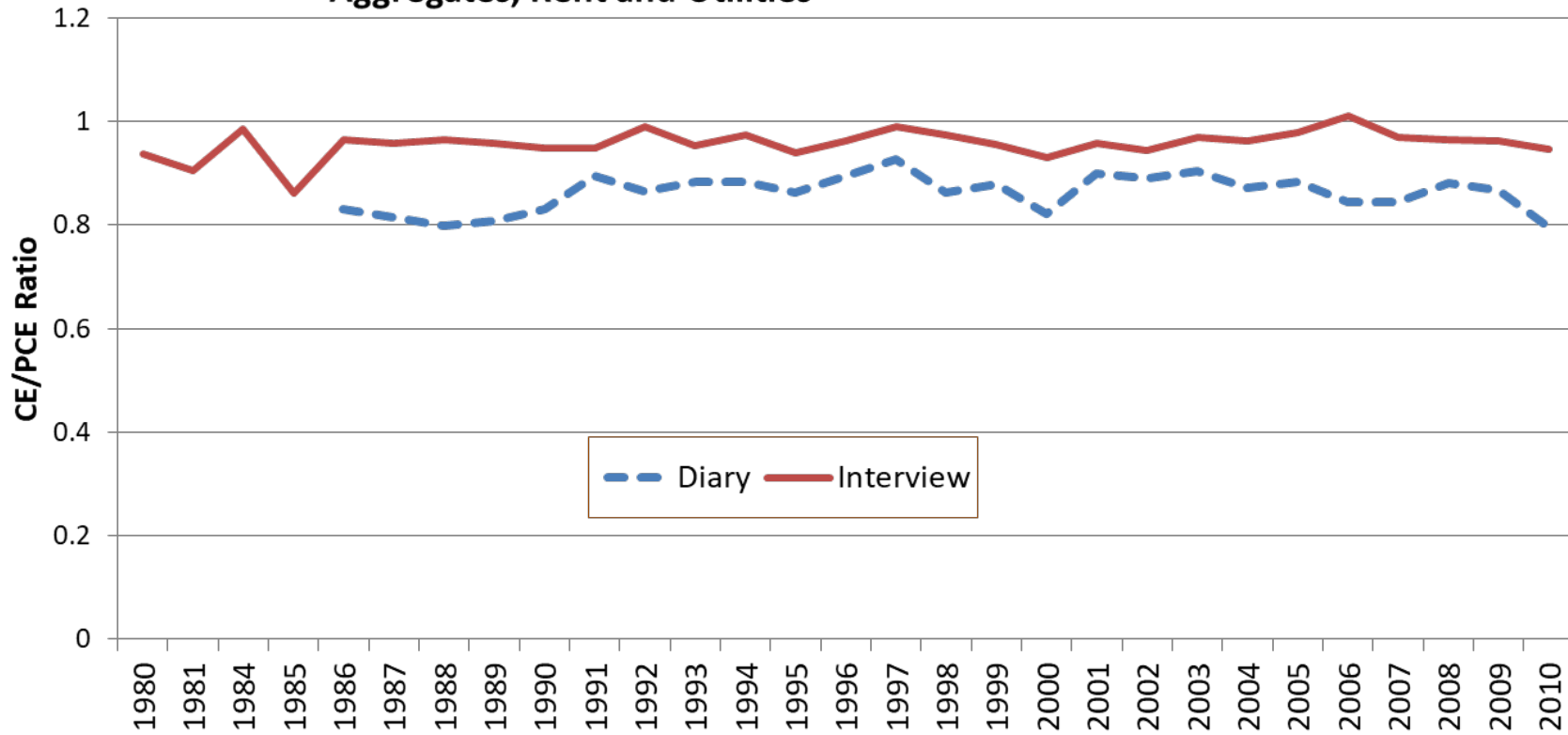   - Similar change in prices, income elasticity close to one

Surveys Understate Income from Government Programs

Source: Meyer, Mok, and Sullivan (2015), by program and survey, 2000-2012
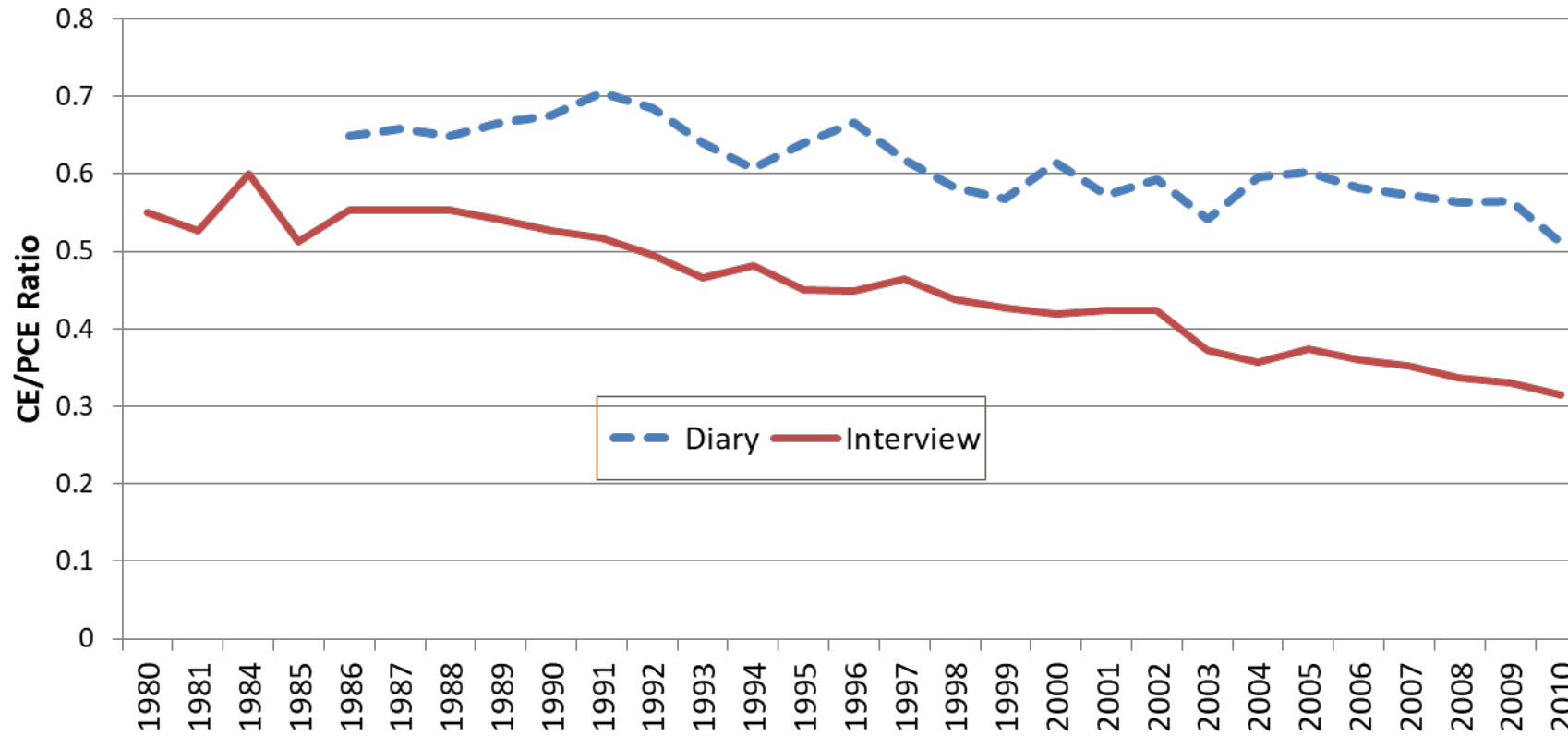
Rent and Utilities

Figure 1b: Comparisons of CE Diary and CE Interview Aggregates to PCE Aggregates, Rent and Utilities

Source: Bee, Meyer and Sullivan (2015)

Clothing and Shoes

Figure 1f: Comparisons of CE Diary and CE Interview Aggregates to PCE Aggregates, Clothing and Shoes

Source: Bee, Meyer and Sullivan (2015)

VI. Results

- How do official and conceptually better **income** and **consumption** based measures of the 10th percentile and median resources change over time?

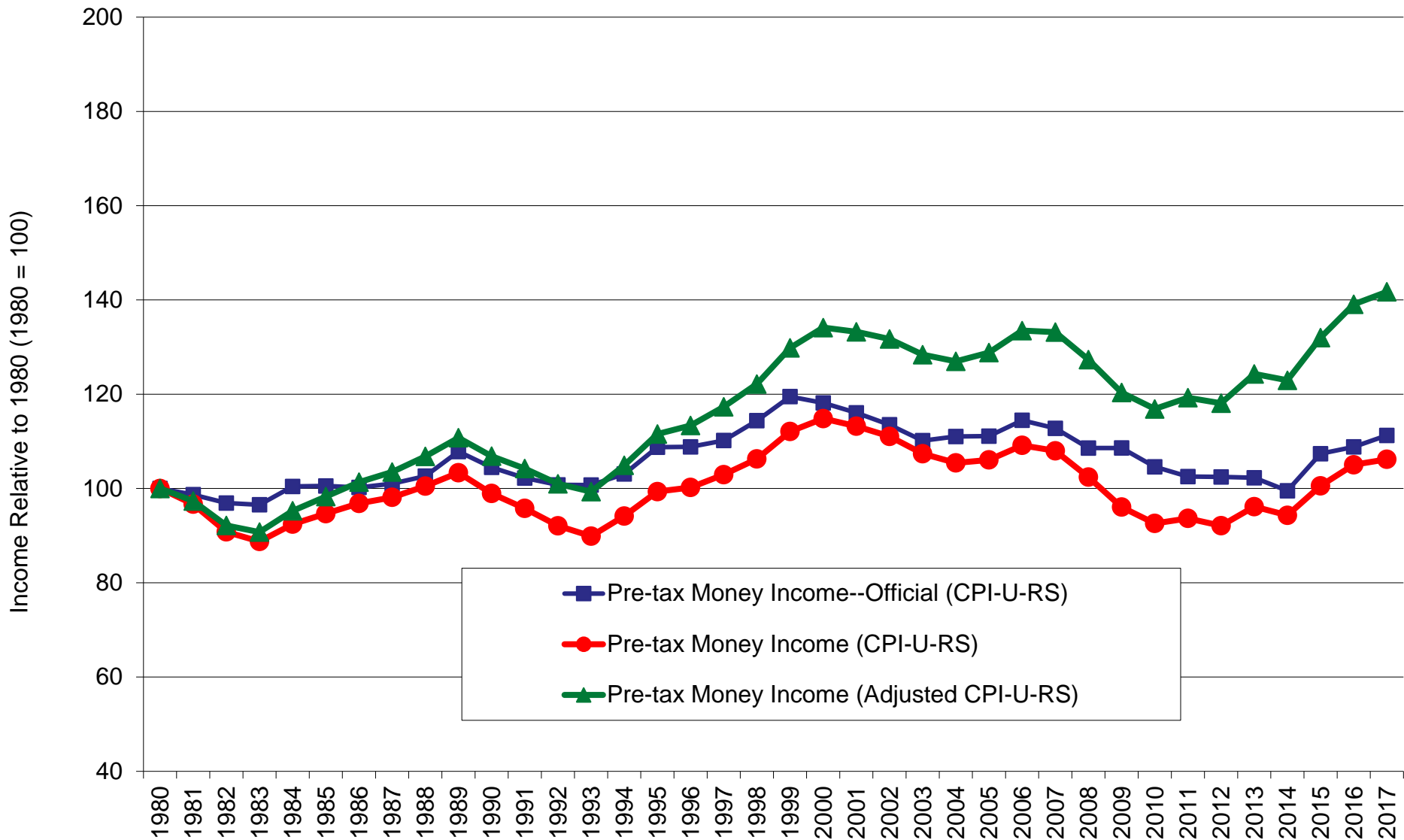Figure 3: 10th Percentile of Income, 1980-2017

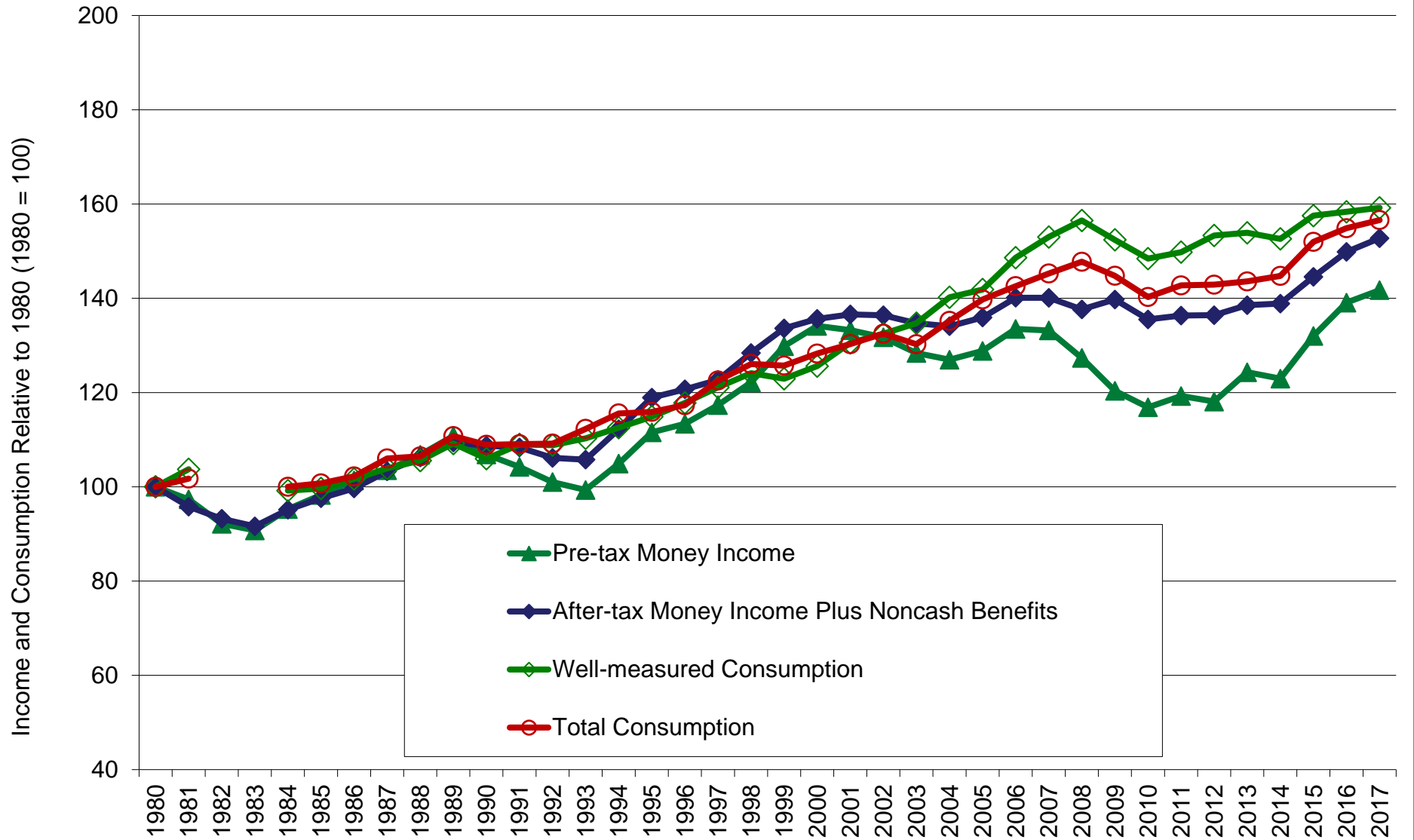Figure 4: 10th Percentile of Income and Consumption, 1980-2017
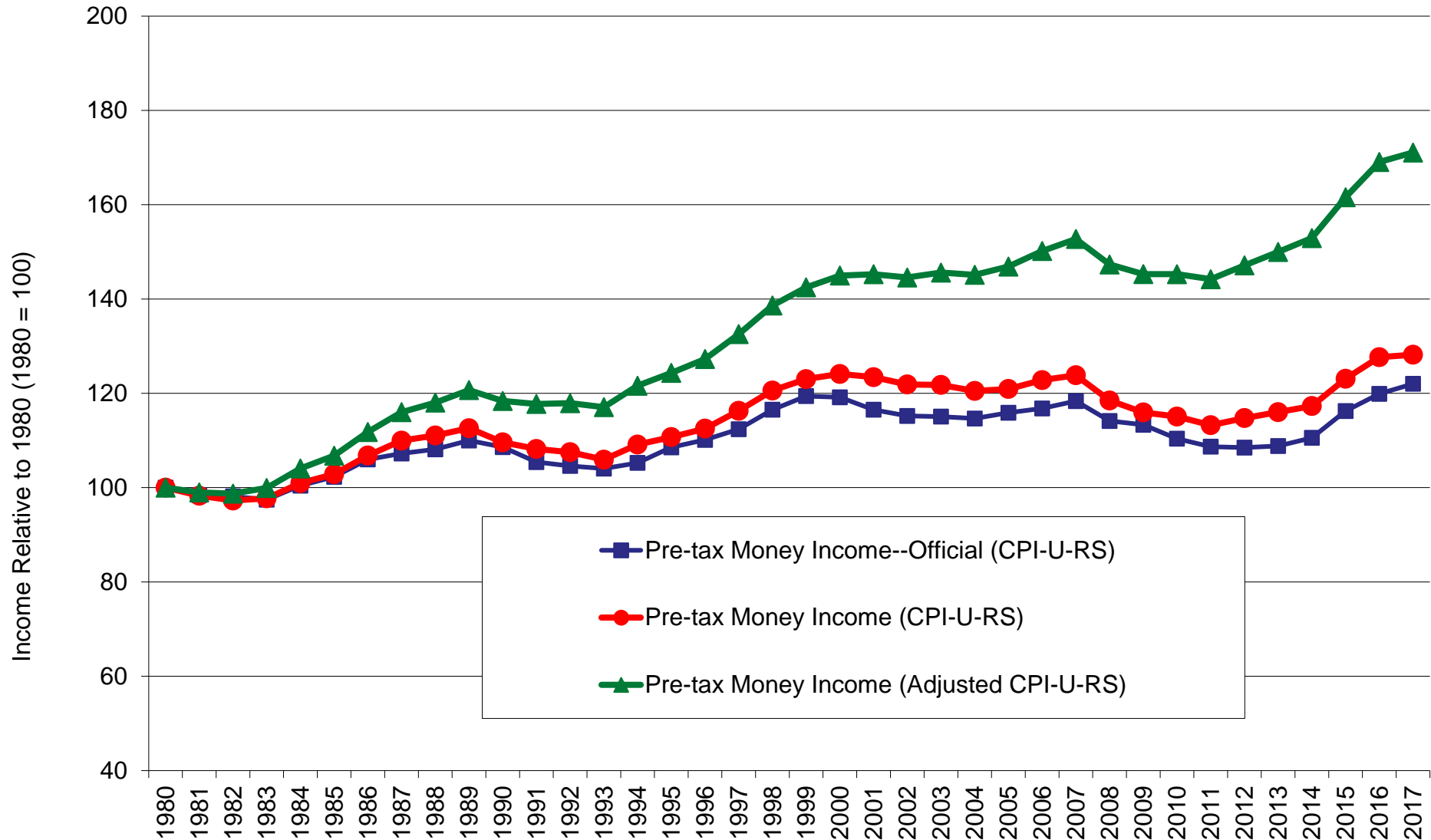
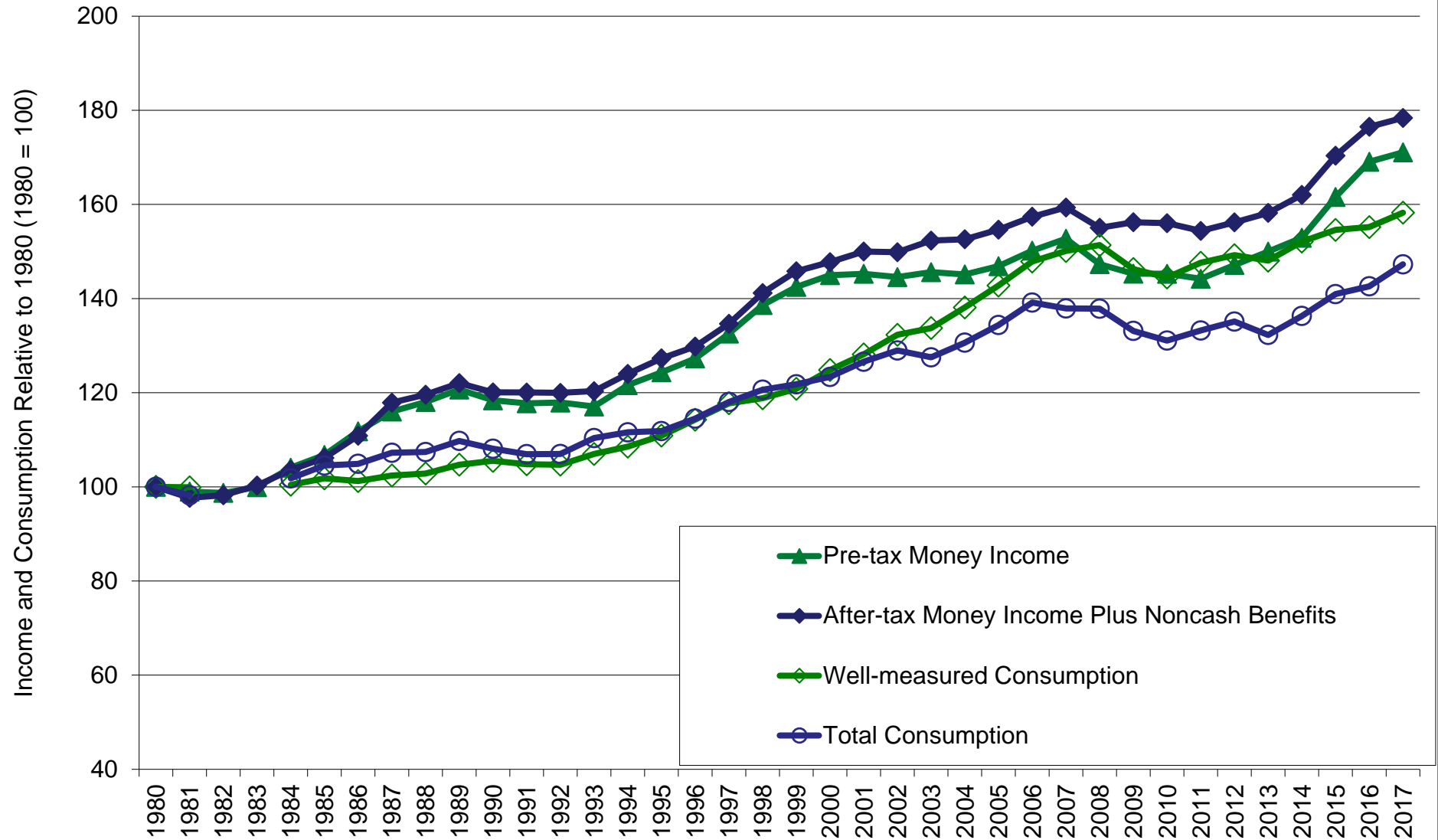Figure 1: Median Pre-tax Money Income, 1980-2017

Figure 2: Median Income and Consumption, 1980-2017

VI. Results

- Do these patterns agree with other measures of well-being?

Table 2: Mean Housing and Vehicle Characteristics for Households in the Bottom Twenty Percent of the Income Distribution, 1981-2017

	2017	Differences			
		1989-1981	1999-1989	2009-1999	2017-2009
Housing Characteristics (American Housing Survey)					
Number of people in household	3.547	-0.186	-0.196	0.100	-0.146
Number of rooms in unit	5.312	0.006	0.023	0.126	0.031
Number of rooms (adjusted for household size)	5.844	0.264	0.175	0.053	0.122
Square footage of unit	1455	-	70.0	-2.0	-42.0
Square footage (adjusted for household size)	1606	-	131.0	-28.0	-24.0
Water leak from inside in last 6 months	0.109	-	-0.043	-0.025	0.002
Water leak from outside in last 6 months	0.117	-	-0.060	-0.007	-0.003
Unit has central or room air conditioning	0.885	0.132	0.174	0.115	0.054
Unit has central air conditioning	0.586	0.084	0.164	0.146	0.042
Unit has a dishwasher	0.514	-	0.088	0.112	0.091
Unit has a clothes dryer	0.716	-	0.087	0.111	0.037
Unit has a clothes washer	0.756	-	0.020	0.067	0.017

Table 1: Mean Housing and Vehicle Characteristics for Households in the Middle Twenty Percent of the Income Distribution, 1981-2017

	2017	Differences			
		1989-1981	1999-1989	2009-1999	2017-2009
Housing Characteristics (American Housing Survey)					
Number of people in household	3.448	-0.260	-0.136	0.072	-0.014
Number of rooms in unit	6.037	0.116	-0.030	0.162	0.006
Number of rooms (adjusted for household size)	6.370	0.380	0.190	0.137	-0.016
Square footage of unit	1867	-	16.0	69.0	-79.0
Square footage (adjusted for household size)	1943	-	79.0	63.0	-85.0
Water leak from inside in last 6 months	0.085	-	-0.026	-0.010	-0.006
Water leak from outside in last 6 months	0.116	-	-0.062	-0.027	0.011
Unit has central or room air conditioning	0.917	0.134	0.100	0.065	0.035
Unit has central air conditioning	0.722	0.139	0.137	0.124	0.051
Unit has a dishwasher	0.761	-	0.077	0.090	0.063
Unit has a clothes dryer	0.896	-	0.031	0.057	0.014
Unit has a clothes washer	0.904	-	0.007	0.044	0.006

VII. Proximate Causes of Changes

- Taxes very important for poverty, fairly important for median

- Cash Transfers, particularly Social Security (UI in Great Recession)

- Noncash transfers have little effect on changes over time since 1980
  - Caveat: transfers important for level and are underreported

- Demographics can explain little

- Rise in earnings tells much of the story. Employment flat for men, rises sharply for women

- Economic growth

VII. Conclusions

- Unlike official measures, better measures of material well-being indicate considerable improvement for both the bottom twenty percent and middle class over the past 4 decades
  - Median income and consumption rose > 50%
  - 10th percentile income and consumption rose > 50% as well
- Price adjustment very important
- Other indicators of well-being also show improvement-- housing and vehicle characteristics have noticeably improved

End

Table 2: Mean Housing and Vehicle Characteristics for Households in the Bottom Twenty Percent of the Income Distribution, 1981-2017

	2004[1]	2017	1989-1981	1999-1989	2004 - 1999	2009 - 1999	2017 - 2009
					Differences		
Automobile Characteristics (Consumer Expenditure Survey)							
Whether own a car	-	0.765	0.035	0.031	-	0.016	-0.002
Whether own multiple cars	-	0.376	0.029	0.018	-	-0.032	0.007
Auto transmission	0.862	-	0.011	0.048	0.049	-	-
Power breaks	0.898	-	0.174	0.115	0.010	-	-
Air conditioning	0.773	-	0.161	0.112	0.031	-	-
Power steering	0.918	-	0.138	0.107	0.037	-	-
Sun roof	0.071	-	-	0.029	0.003	-	-
Turbo charger	0.017	-	-	0.011	0.002	-	-
Four wheel drive	0.083	-	-	0.037	0.007	-	-

Table 1: Mean Housing and Vehicle Characteristics for Households in the Middle Twenty Percent of the Income Distribution, 1981-2017
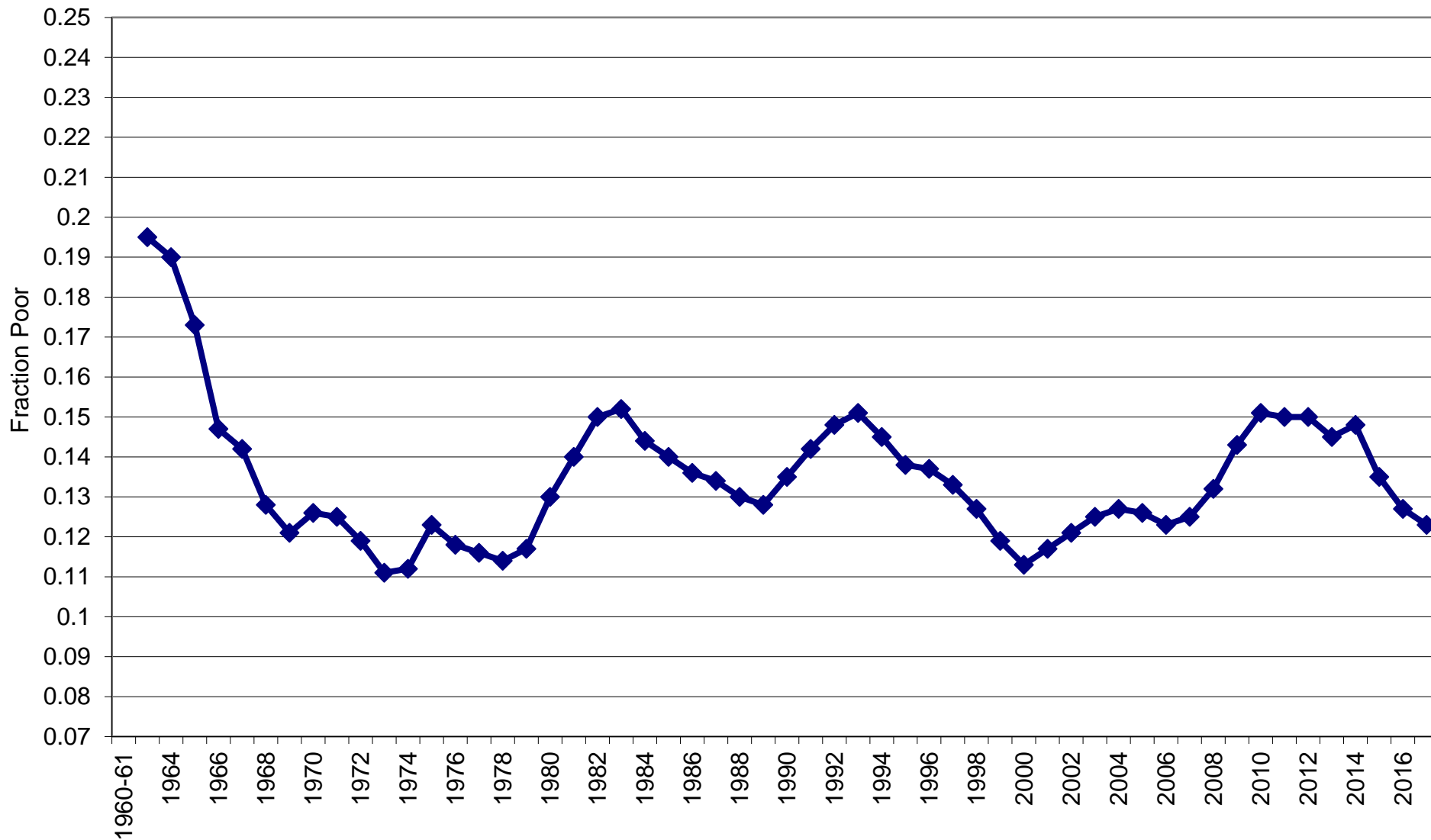
| | 2004[1] | 2017 | Differences | | | | |
			1989-1981	1999-1989	2004-1999	2009-1999	2017-2009
Automobile Characteristics (Consumer Expenditure Survey)							
Whether own a car	0.956	0.927	0.003	-0.019	-	0.009	-0.025
Whether own multiple cars	0.739	0.687	0.010	-0.035	-	-0.005	0.021
Auto transmission	0.814	-	-0.068	0.065	0.055	-	-
Power breaks	0.905	-	0.147	0.145	0.026	-	-
Air conditioning	0.828	-	0.136	0.154	0.044	-	-
Power steering	0.917	-	0.060	0.144	0.039	-	-
Sun roof	0.103	-	-	0.032	0.016	-	-
Turbo charger	0.012	-	-	0.013	-0.008	-	-
Four wheel drive	0.141	-	-	0.051	0.047	-	-

I. Introduction

Conventional Wisdom Affects Policy Prescriptions

- "Government has spent $5.3 trillion on welfare since the war on poverty began, the most expensive war in the history of this country, and the Census Bureau tells us we have lost the war."

  -- Bill Archer, 1995

- "My friends, some years ago the Federal Government declared a war on poverty and poverty won."   -- Ronald Reagan, 1988
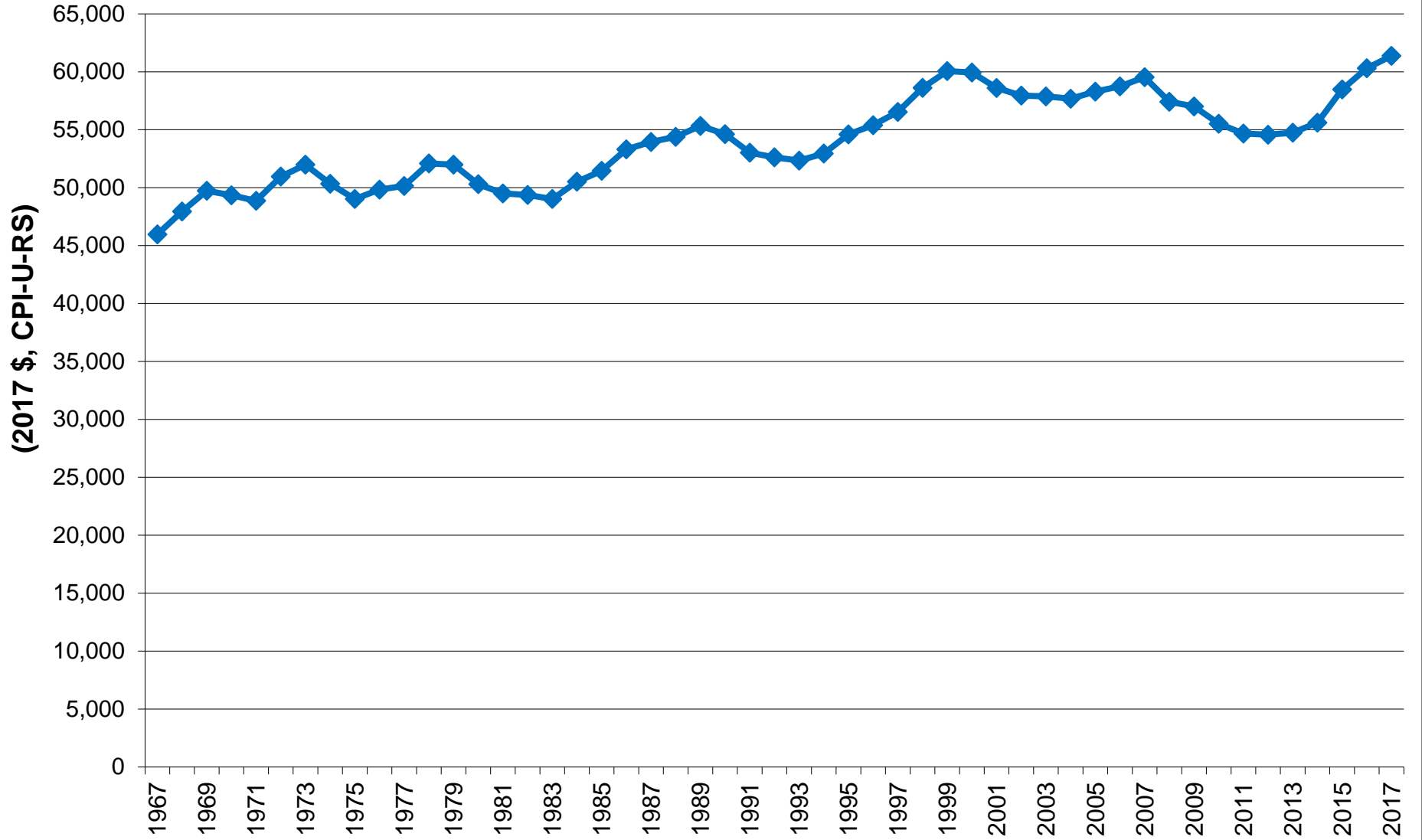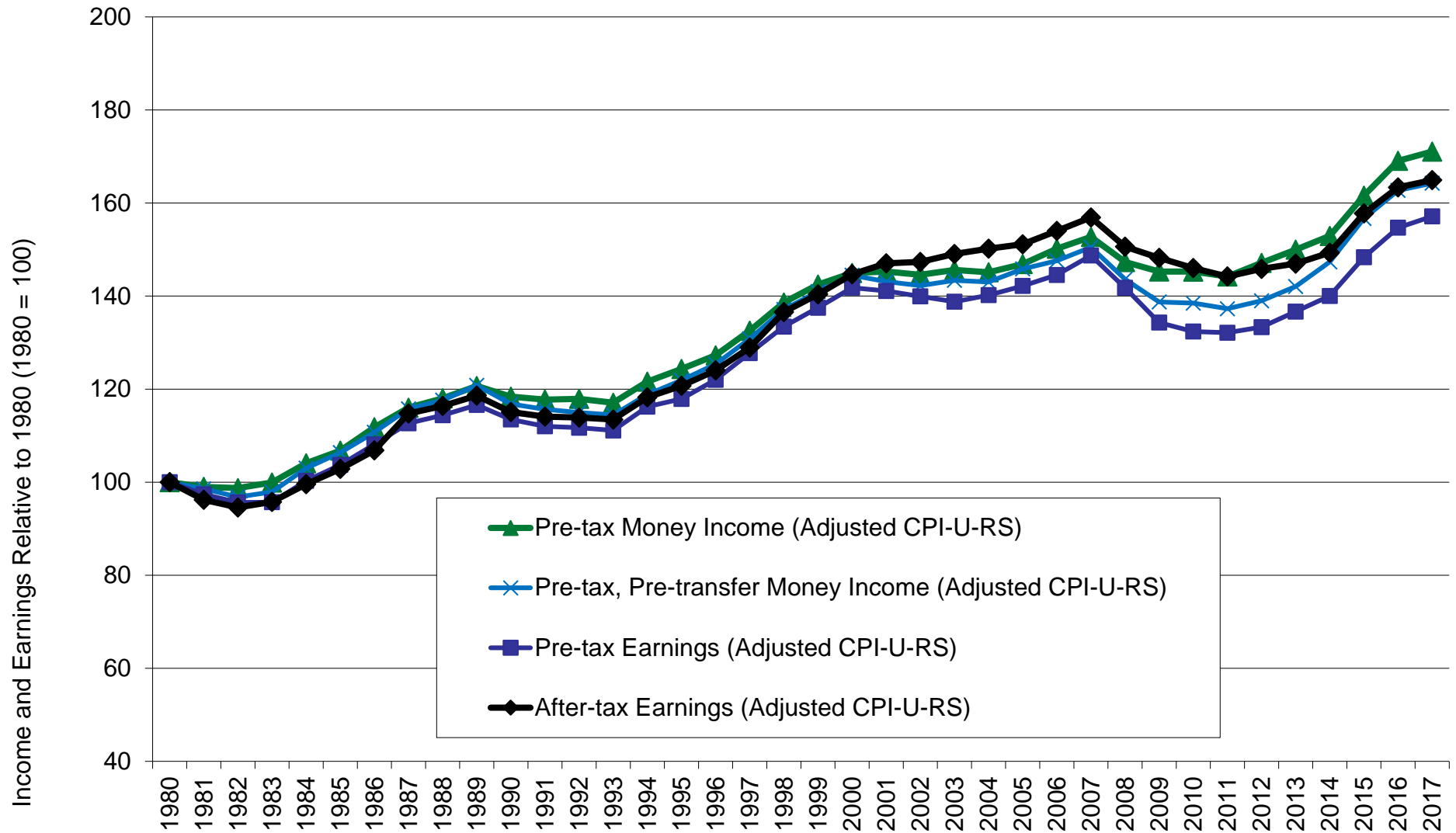
Median Pre-Tax Income, 1967-2017

Figure 5a: Median Pre-tax Money Income with and without Transfers and Pre-tax and After-tax Earnings, 1980-2017

X. Income/Consumption Differences

- Consumption/Income differences due partly to saving/dissaving and durables, especially for older households.

- We suspect measurement error in income is a substantial part of the difference for other groups, such as single mothers.

Home, Car and Appliance Ownership of Income Poor, CE Survey, 1960-2005

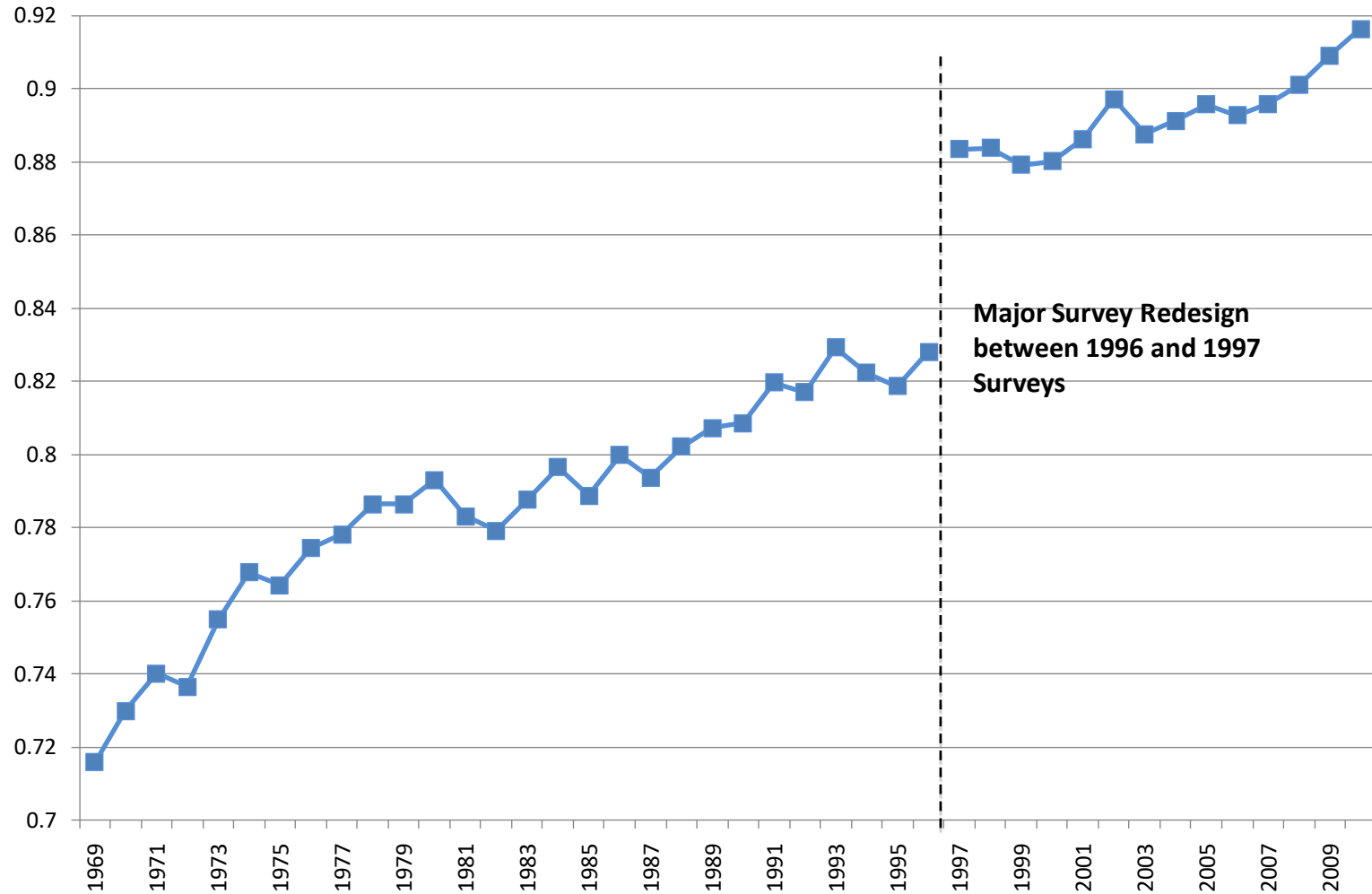|	1960-1961	1972-1973	1980-1989	1990-1999	2000-2005
	(11)	(12)	(13)	(14)	(15)
Homeowner	0.409	0.393	0.399	0.361	0.385
Own a car	0.545	0.602	0.645	0.671	0.687
# of rooms	.	5.077	5.255	5.160	5.156
# of Bedrooms			2.571	2.567	2.608
# of Bathrooms			1.419	1.235	1.336
Appliances					
Microwave			0.253	0.639	0.845
Freezer			0.298	0.257	0.236
Disposal			0.158	0.226	0.271
Dishwasher			0.194	0.237	0.314
Window Air Conditioning	.	0.156	0.216	0.243	0.272
Central Air Conditioning	.	0.053	0.156	0.258	0.382
Washer			0.597	0.603	0.635
Dryer			0.394	0.463	0.538
Television			0.623	0.923	0.957
Computer			0.043	0.140	0.392
Stereo			0.307	0.508	0.639
VCR			0.265	0.592	0.770

Table 3: The Effect of Changes in Demographic Characteristics on Changes in Median and 10th Percentile of Income and Consumption, 1980-2009

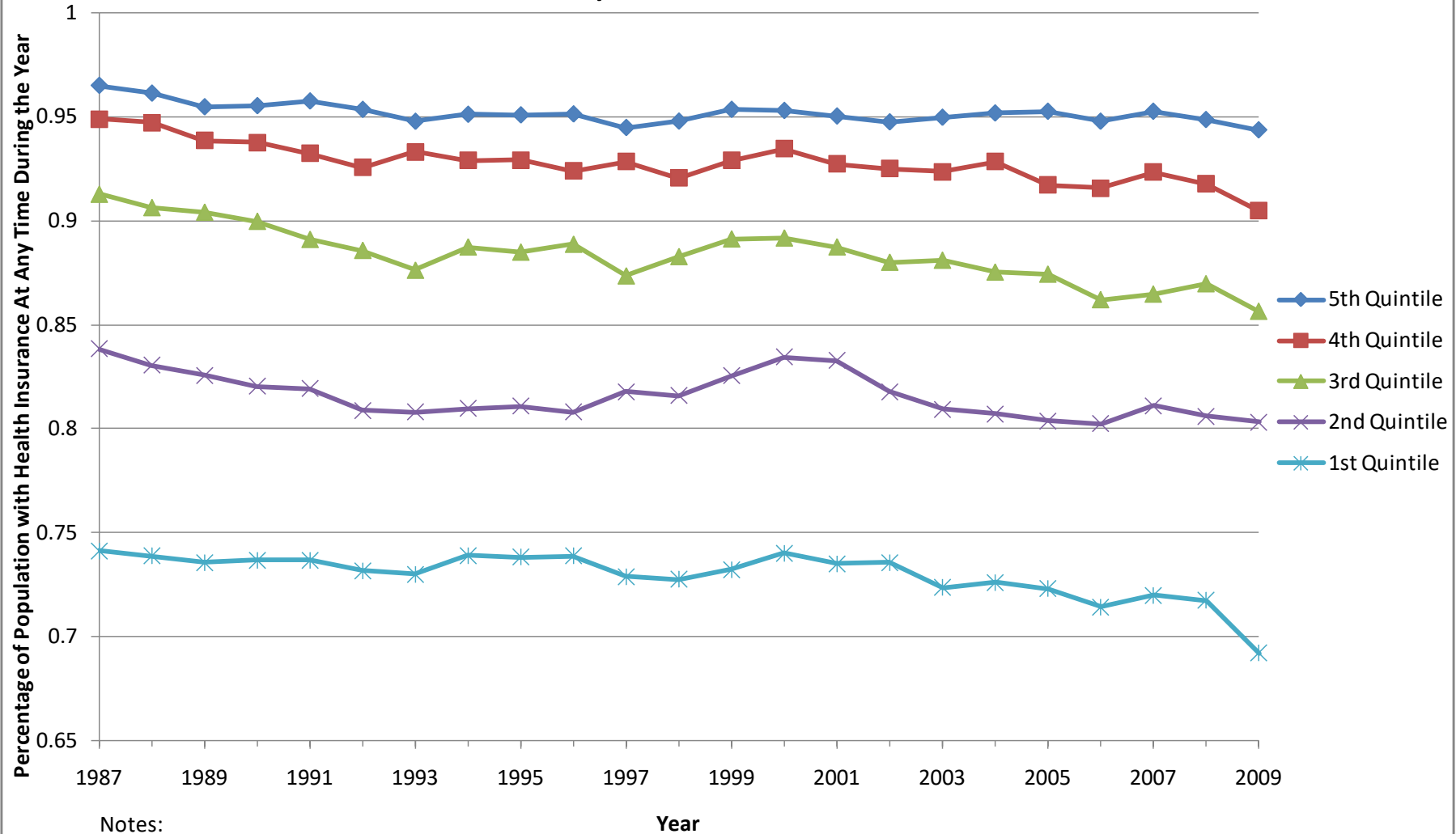|	Change 1980-2000	Change 2000-2009
A. Consumption		
10th Percentile		
Actual Change	23.3%	16.8%
Change due to demographic characteristics	3.4%	0.5%
Median		
Actual Change	28.6%	15.2%
Change due to demographic characteristics	3.3%	2.6%
B. After-tax Income Plus Noncash Benefits		
10th Percentile		
Actual Change	31.4%	1.9%
Change due to demographic characteristics	3.5%	-3.6%
Median		
Actual Change	39.9%	7.2%
Change due to demographic characteristics	3.0%	0.0%

Table 4: The Effect of Changes in Demographic Characteristics on Changes in Poverty, 1980-2009

	1980	2000	2009	Change 1980-2009
A. Consumption Poverty				
Actual Poverty	0.130	0.056	0.031	-0.099
Predicted poverty holding within group poverty at 1980 rate				
Changes in family type	0.130	0.141	0.142	0.012
Changes in family type and employment	0.130	0.138	0.145	0.016
Changes in family type and race	0.130	0.153	0.162	0.032
Changes in family type, education, and employment	0.130	0.104	0.103	-0.027
B. After-tax Income Plus Noncash Benefits Poverty				
Actual Poverty	0.130	0.063	0.067	-0.063
Predicted poverty holding within group poverty at 1980 rate				
Changes in family type	0.130	0.139	0.143	0.013
Changes in family type and employment	0.130	0.137	0.155	0.025
Changes in family type and race	0.130	0.148	0.158	0.028
Changes in family type, education, and employment	0.130	0.115	0.124	-0.006

Share of Children Under Age 15 With A Doctor Visit in the Last 12 Months, 1969-2010

Major Survey Redesign between 1996 and 1997 Surveys
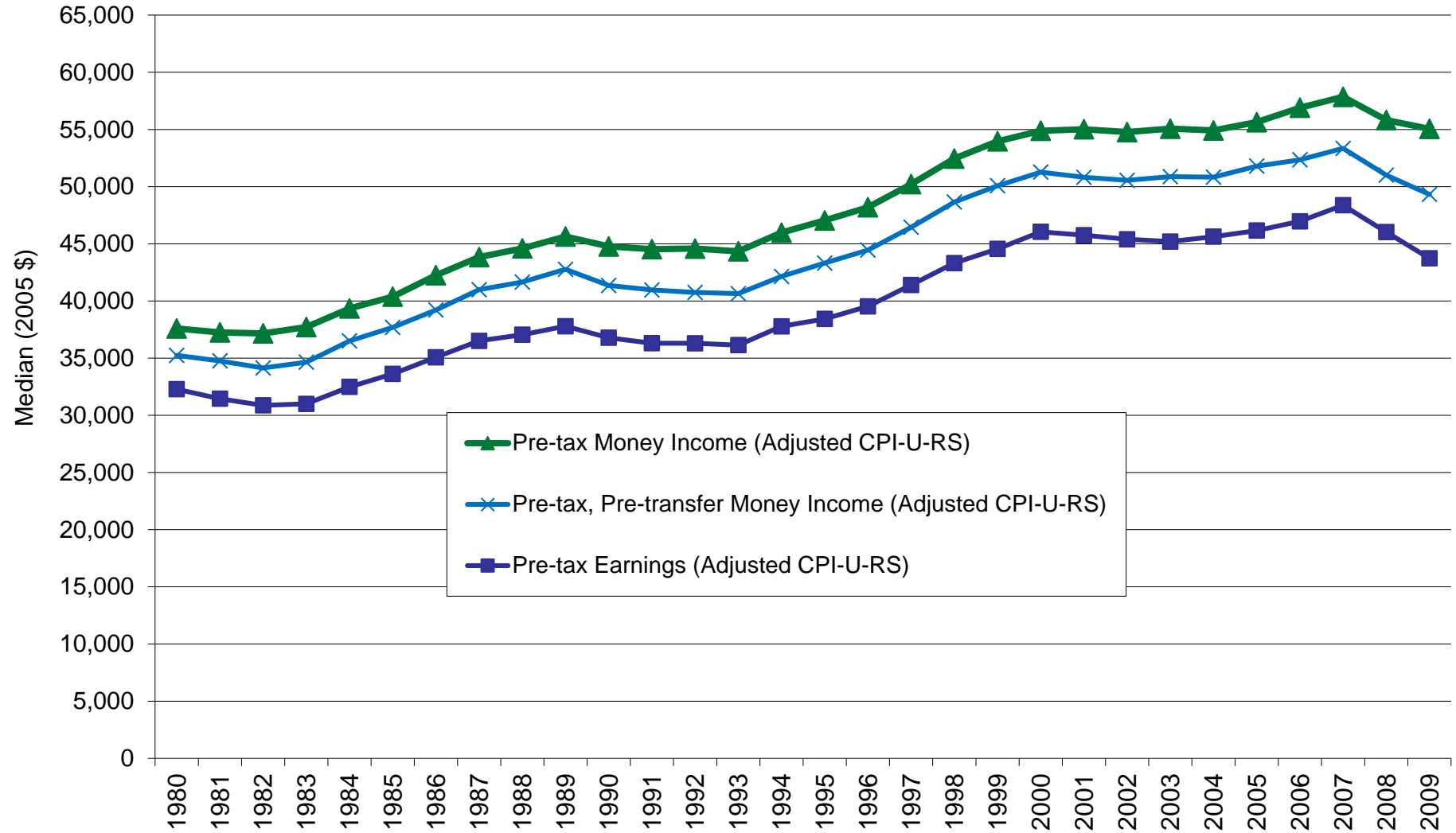
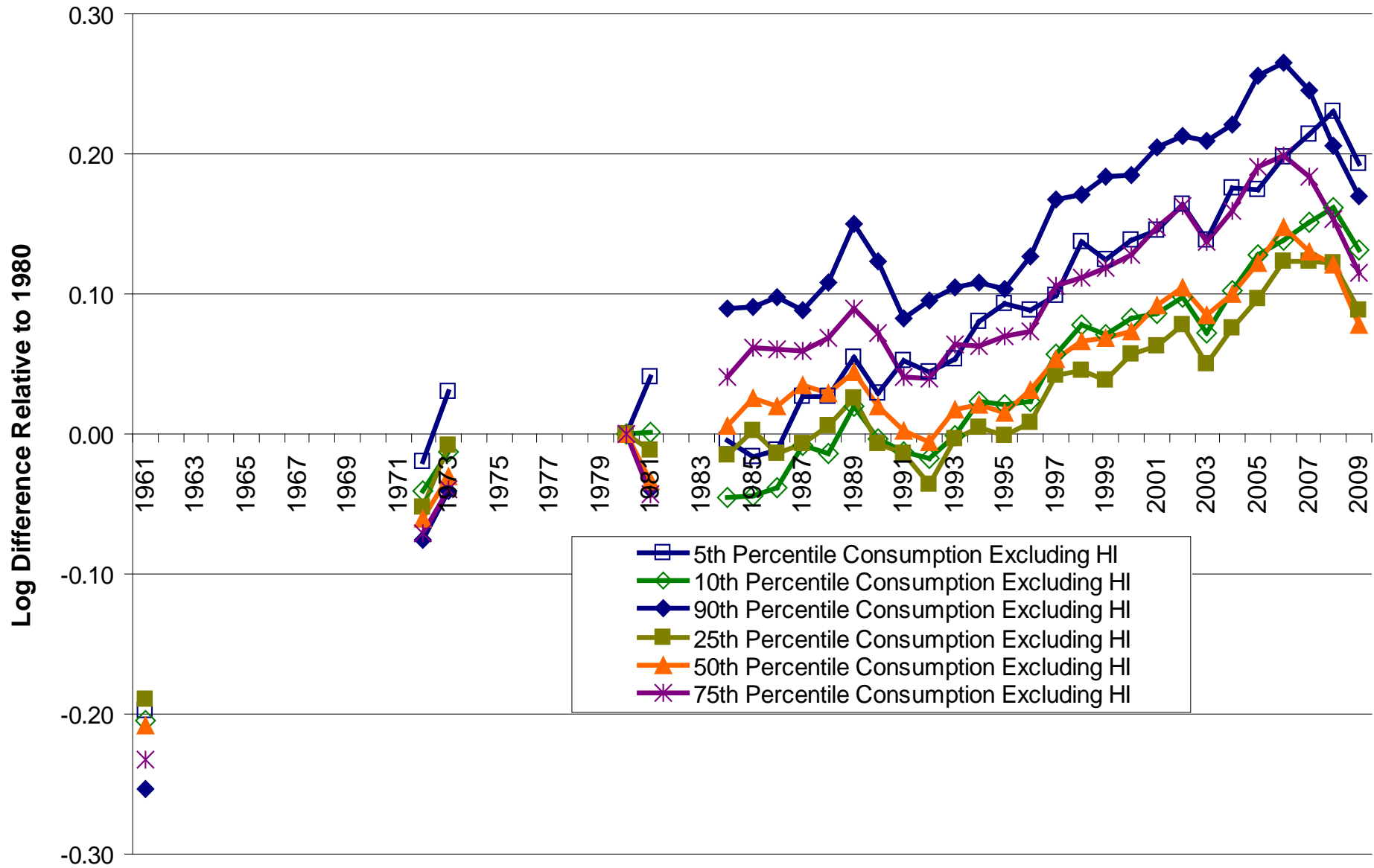Health Insurance Coverage by Quintile of After-Tax Income Plus Non-Cash, Non-Health Benefits

Figure 8a: Median Pre-tax Money Income with and without Transfers and Pre-tax and After-tax Earnings, 1980-2009

Real Changes in Consumption at Various Percentiles, 1961-2009

Legend:
- 5th Percentile Consumption Excluding HI
- 10th Percentile Consumption Excluding HI
- 90th Percentile Consumption Excluding HI
- 25th Percentile Consumption Excluding HI
- 50th Percentile Consumption Excluding HI
- 75th Percentile Consumption Excluding HI

Y-axis: Log Difference Relative to 1980

V. Consumption Data

- Subtract OOP medical spending. Main measure excludes value of health insurance.
    - Estimated average cost of public and employer sponsored HI by state or region and year. Use NMES, NMCES, and Foster-Higgins data (also compared to Kaiser data). Used Medicaid and Medicare spending by state/year.
    - Conceptually unclear how to translate cost into value. We use cost, but only up to 1/3 of total consumption. This is a compromise.
    - Health insurance coverage, public housing, unavailable in some years.