

The Evolution of Women's Total Income Near Retirement: Evidence from Matched Survey-Administrative Data

Josh Mitchell and Adam Bee

U.S. Census Bureau

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This presentation is released to inform interested parties of ongoing research and to encourage discussion of work in progress. This presentation reports the results of research and analysis undertaken by Census Bureau staff. It has undergone more limited review than official publications.

Outline

- Briefly discuss highlights of related research validating five income components of 2013 CPS-ASEC with ADREC for population 65+
- Present new evidence comparing survey with ADREC income from matched SIPP panels covering nearly three decades
- Examine how women's incomes have evolved
 - Within cohort (transition to retirement)
 - Across cohorts

Motivation

- Broad concern about well-being of Americans as they near and enter retirement
 - Have people saved enough?
- Data quality concerns as well
 - Discrepancies between survey income aggregates and other data sources such as National Income and Product Accounts and administrative records (ADREC)
 - By themselves, aggregate discrepancies cannot address questions about the distribution of income

Related Work: Validating Five Types of Income in CPS ASEC

- Earnings (wages and self-employment)
- Social Security (OASDI)
- Supplemental Security Income (SSI)
- Dividends and Interest
- RSDP (excludes Social Security)
 - Retirement
 - Survivor
 - Disability

Data I: 2013 CPS ASEC

- Approximately 75,000 households
 - 15,000 households with householder age 65+
- Represents civilian noninstitutionalized population
- Source for official 2012 Income and Poverty Report
 - Uses traditional income questions
- PVS Process to assign PIK
 - Logit to estimate inverse probabilities and reweight PIK sample

2013 CPS-ASEC Retirement Income Question

During 2012 did (you/ anyone in this household) receive any pension or retirement income from a previous employer or union, or any other type of retirement income (other than Social Security/ other than VA benefits/ other than Social Security or VA benefits) ?

What was the source?

- 1 Company or union pension (INCLUDE PROFIT SHARING)
- 2 Federal Government (CIVIL SERVICE) retirement
- 3 U.S. Military retirement
- 4 State or Local government pension
- 5 U.S. Railroad Retirement
- 6 Regular payments from annuities or paid up insurance policies
- 7 Regular payments from IRA, KEOGH, 401(k), 403(b), and 457(b) and (f) accounts
- 8 Other sources or don't know

Data II: SSA Detailed Earnings Records (DER)

- Wage and salary earnings from all W-2 jobs
 - Includes uncovered and uncapped earnings since 1978
- Medicare-covered self-employment earnings from Schedule SE
 - Uncapped since 1994

Data III: SSA Payment History Update System (PHUS)

- Includes Social Security retirement, survivor, spousal, and disability benefits
- Monthly benefit amounts paid by SSA for all OASDI programs, includes Medicare premium deductions
- Available since 1984
- Actual amount paid, unlike MBR

Data IV: SSA Supplemental Security Record (SSR)

- Monthly benefit amounts paid for SSI
- Includes federal payments and state supplements
- Available since 1974

Data V: IRS 1040 Returns Transactions File

- Universe files
- Limited income variables currently available
 - Total dividend income, taxable and tax-exempt interest income
 - No total or taxable pension/IRA income currently available
- Assigning asset income
 - Split for joint filers
 - No asset income assigned to dependents
- Issue of non-filers
 - Use CPS values for interest and dividends

Data VI: IRS Form 1099-R

- Gross distributions from pensions, annuities, retirement or profit-sharing plans, IRAs etc. (DB and DC income)
- Available even if do not file 1040
- We receive universe of information returns that
 - INCLUDES
 - Early distributions
 - Normal distributions
 - Disability and death distributions
 - Roth account distributions
 - EXCLUDES
 - Direct rollovers
 - Conversions and recharacterizations
 - Excess contributions
 - Section 1035 exchanges

More on Form 1099-R

- Do not have underlying distribution codes
- Two categories
 - IRA (Roth, traditional, SIMPLE, SEP)—Reported on line 15 of Form 1040
 - Pension and Annuities (all other) –Reported on line 16 of Form 1040
- Sum up all accounts for a person in a given year
- Alternative income concept
 - When receive distribution and is available for consumption
 - Short and Skog (2014), Iams and Purcell (2013)
- May not be able to exclude *indirect* rollovers
 - Under 3% of aggregate gross for age 55+ according to Argento et al. (2013)

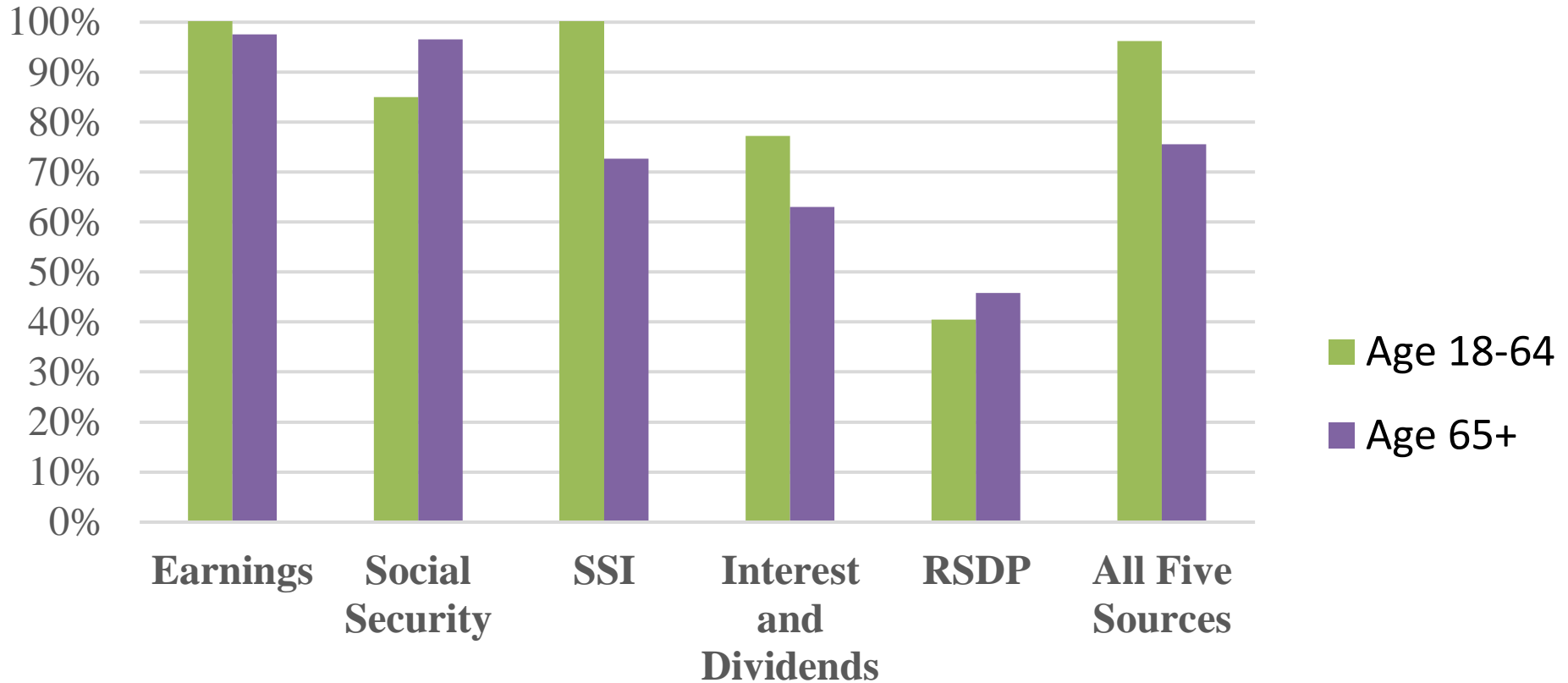
Income Correspondence

Income Type	CPS-ASEC Variables*	ADREC
Earnings	WSAL_VAL, SEMP_VAL, FRSE_VAL	DER Wages and self-employment
Social Security	SS_VAL	PHUS OASDI benefits
SSI	SSI_VAL	SSR Federal and State payments
Interest and Dividends	INT_VAL, DIV_VAL	1040 Dividends, taxable and tax-exempt interest
RSDP	RTM_VAL, SRVS_VAL, DSAB_VAL, VET_VAL (retirement only)	1099-R Pension and IRAs
	*Other income also allocated	

Constructing New Income Variables

- Merge on PIK to assign ADREC income to CPS at person-level
 - Complication with 1040s (joint returns and non-filers)
 - Replace CPS income amounts with corresponding ADREC amounts
- Those without PIK keep CPS values
- Outside of five sources of validated income just using CPS values
- Sum up to family and household levels as needed

CPS Income as Percent of ADREC

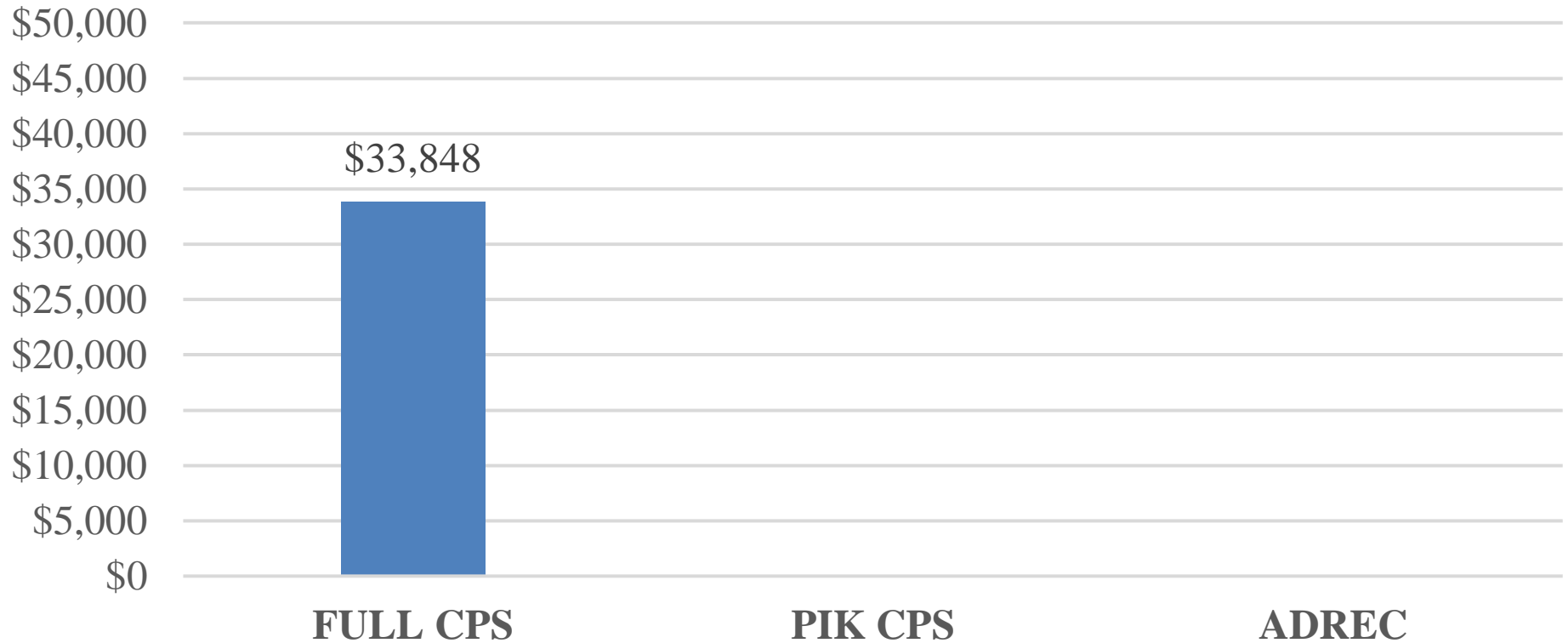


Source: 2013 CPS ASEC-ADREC

What are Distributional Implications?

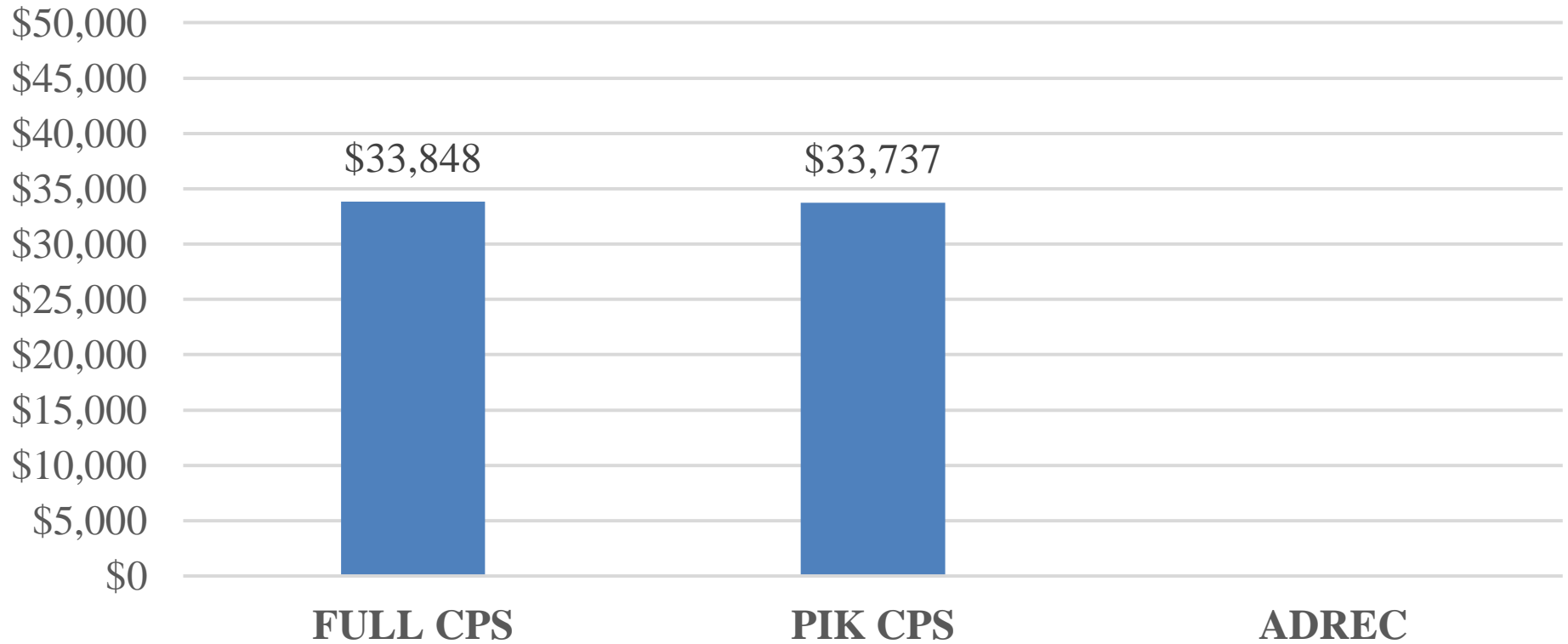
- Median household income
 - Householders age 65+
 - Linear interpolation of income quantiles (avoids heaping)
 - Explore subgroups classified by demographic characteristics of householder
- Poverty
 - Persons age 65+
 - Compare family income to threshold which varies by family size
- Three samples in analysis
 - **Full CPS sample** (N=23,000 persons, 15,000 households)
 - **PIK reweighted sample** (N=21,000 persons, 13,500 households)
 - **ADREC sample** (same as PIK sample but replaced with ADREC income)

Median Household Income (Householder Age 65+)



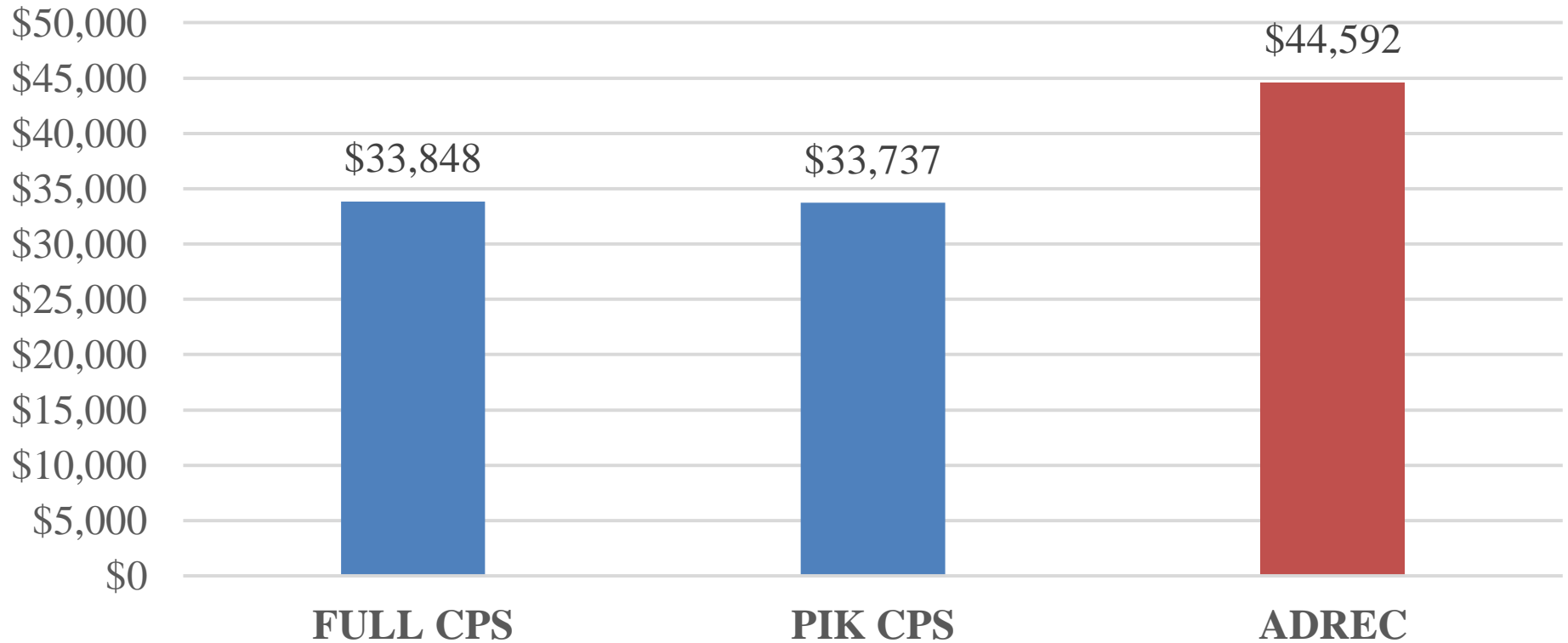
Source: 2013 CPS ASEC-ADREC

Median Household Income (Householder Age 65+)



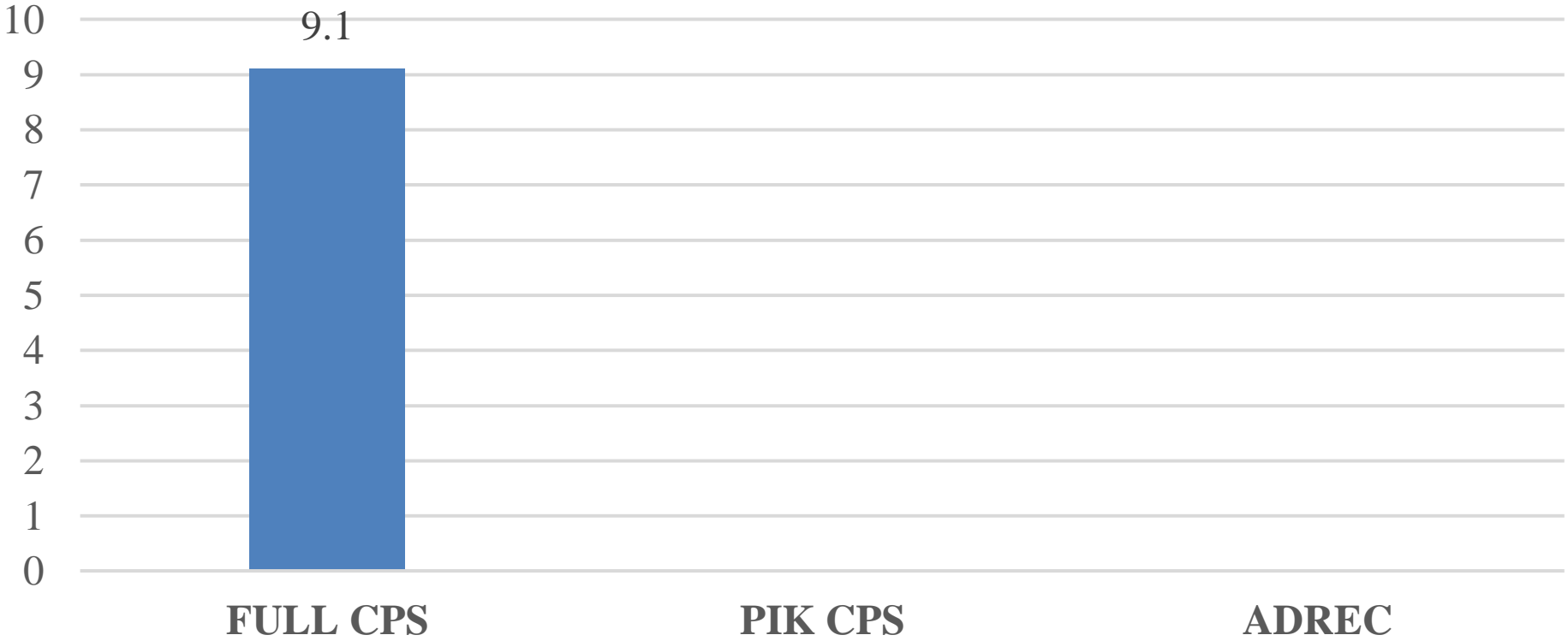
Source: 2013 CPS ASEC-ADREC

Median Household Income (Householder Age 65+)



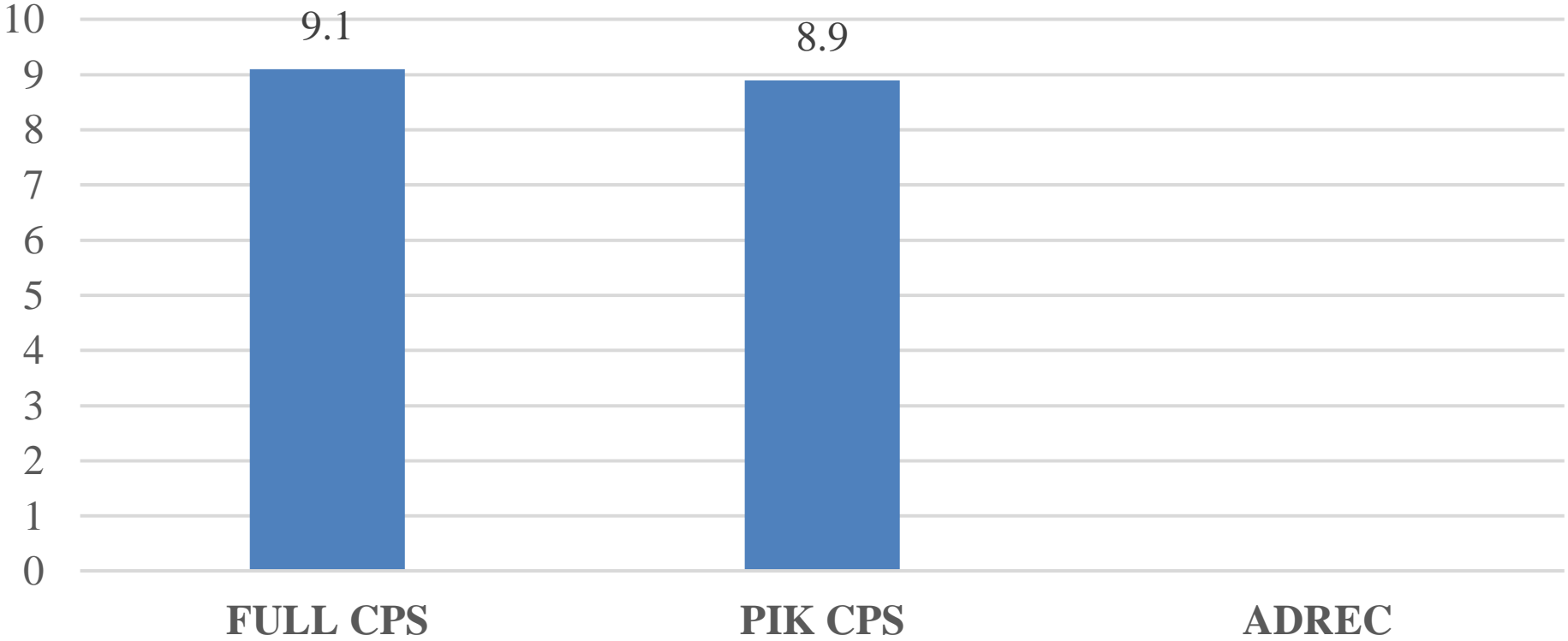
Source: 2013 CPS ASEC-ADREC

Poverty Rate (Persons Age 65+)



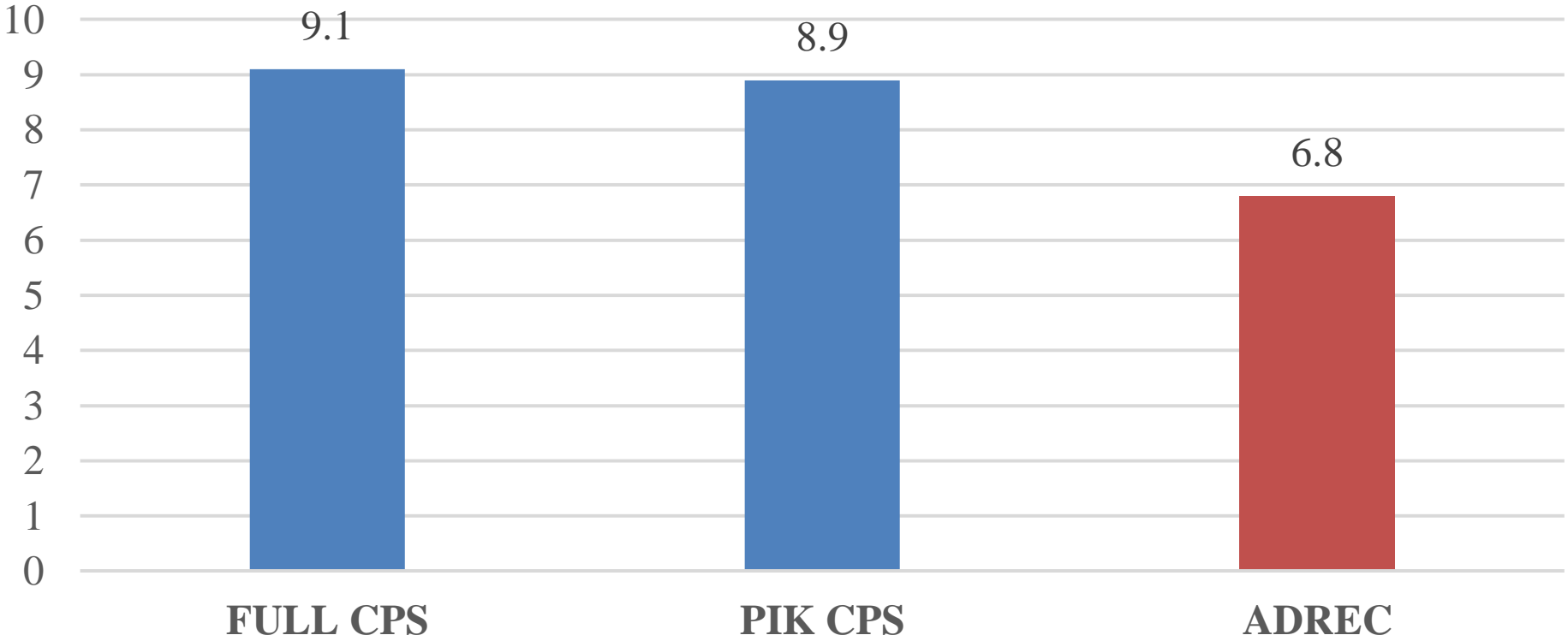
Source: 2013 CPS ASEC-ADREC

Poverty Rate (Persons Age 65+)



Source: 2013 CPS ASEC-ADREC

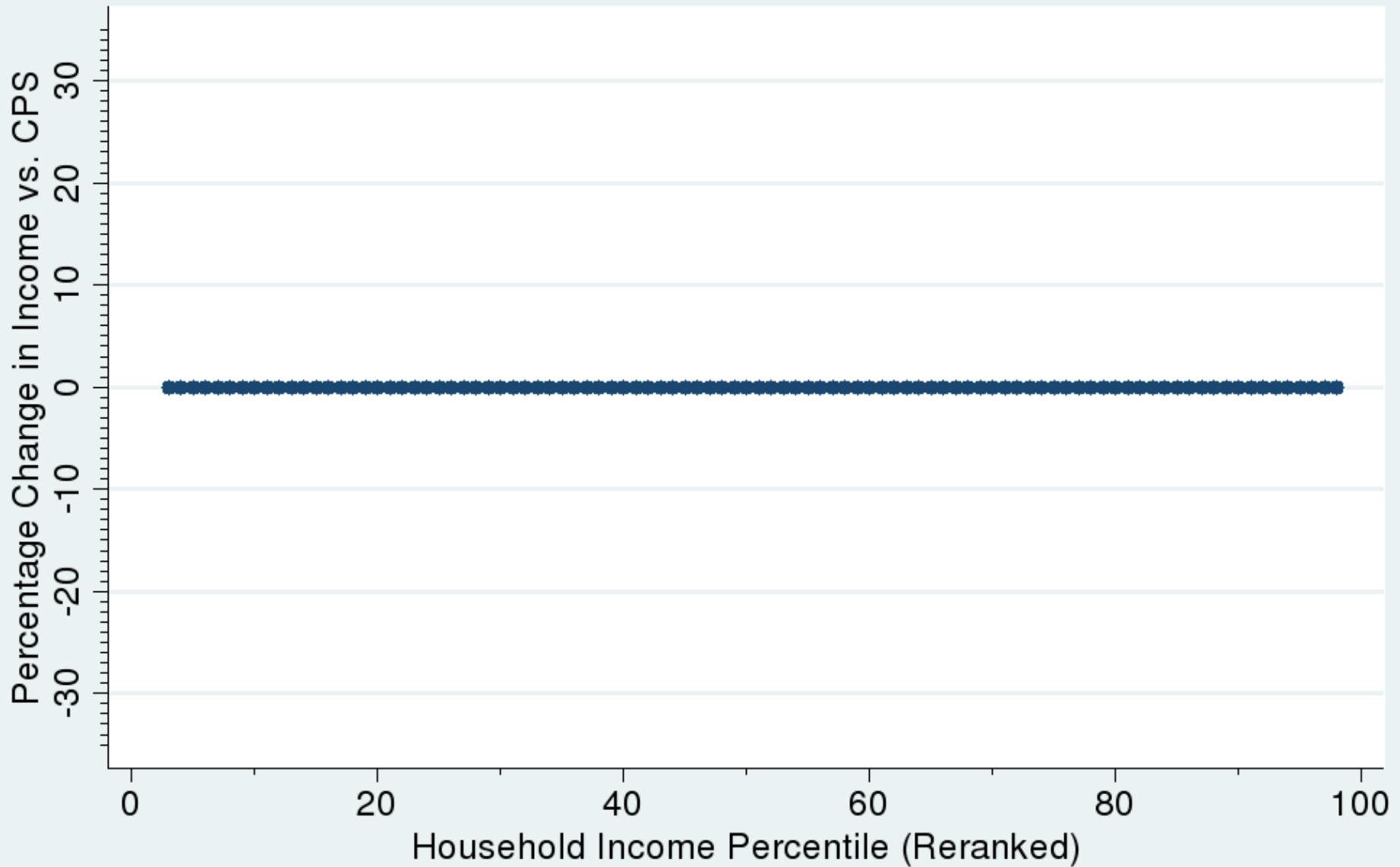
Poverty Rate (Persons Age 65+)



Source: 2013 CPS ASEC-ADREC

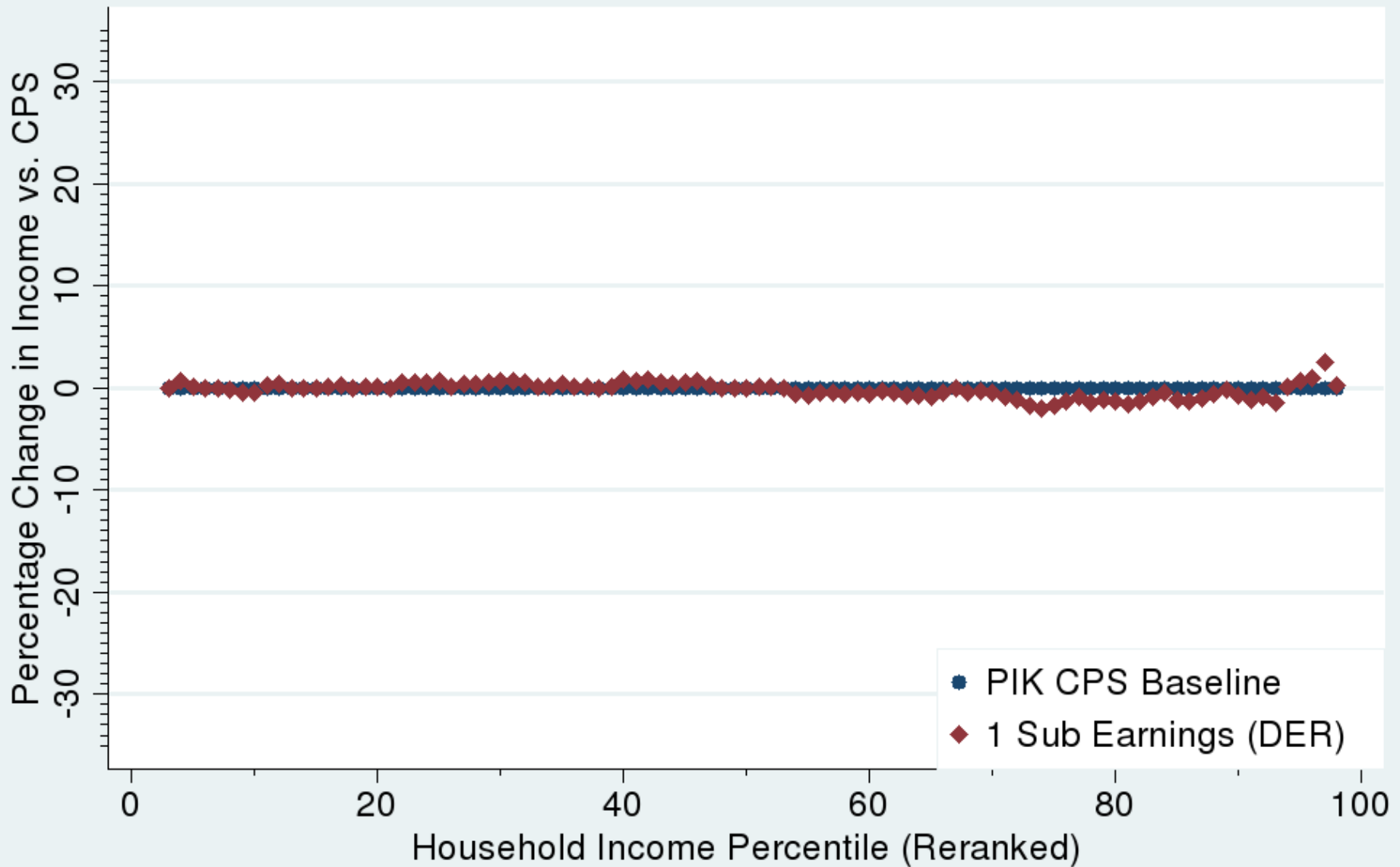
Household Income Percentile (ADREC vs. CPS)

Households with householder 65+



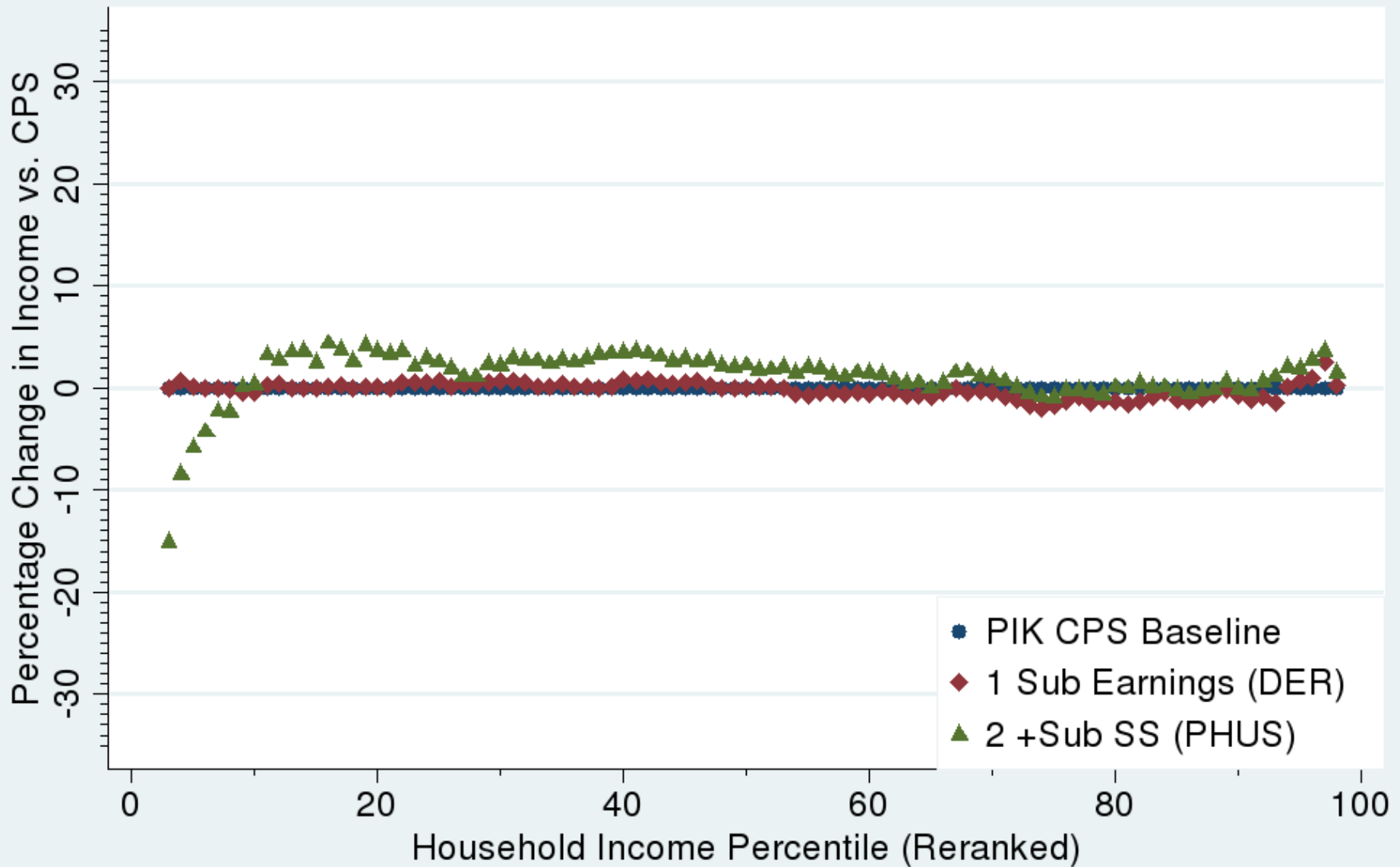
Household Income Percentile (ADREC vs. CPS)

Households with householder 65+



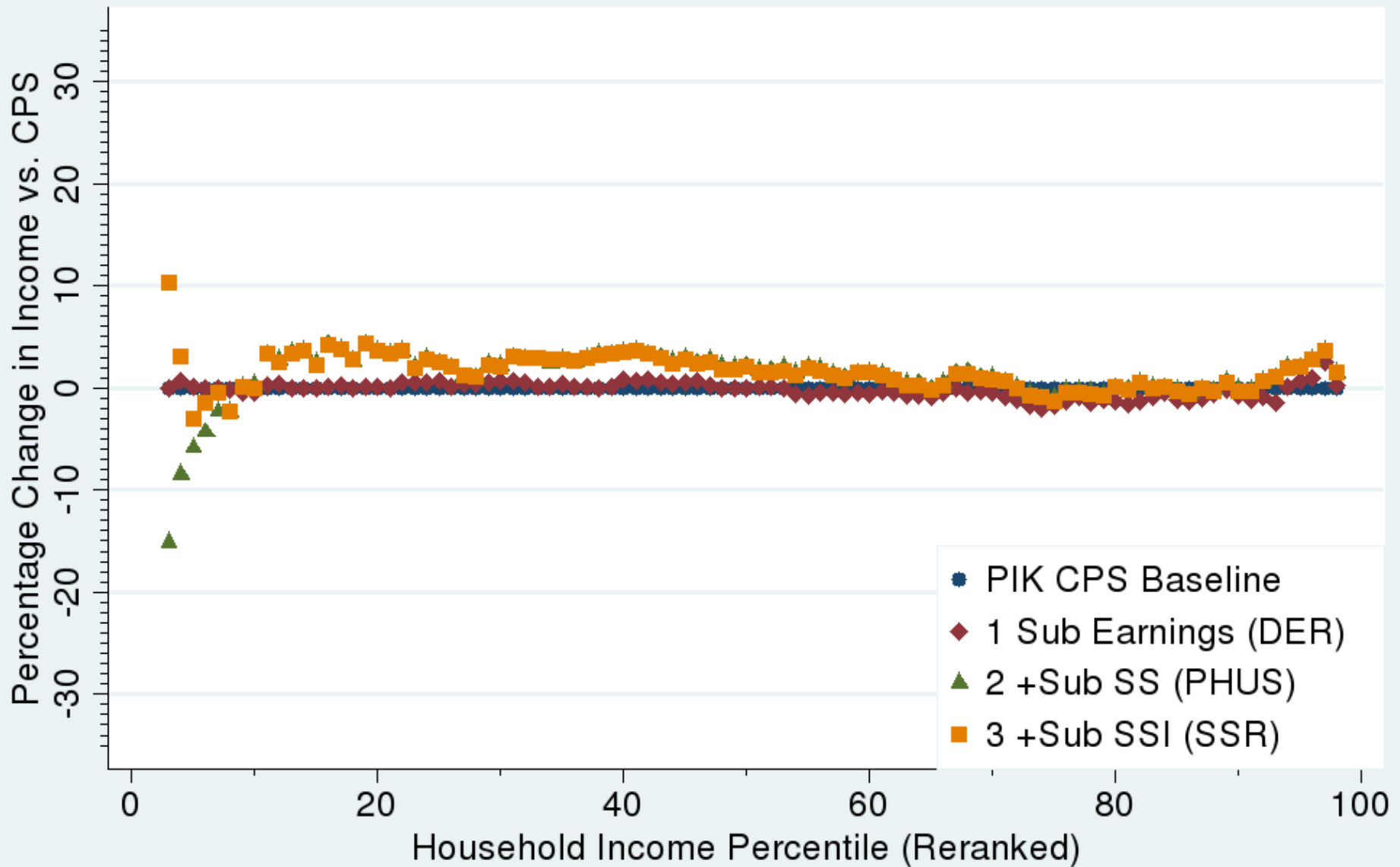
Household Income Percentile (ADREC vs. CPS)

Households with householder 65+



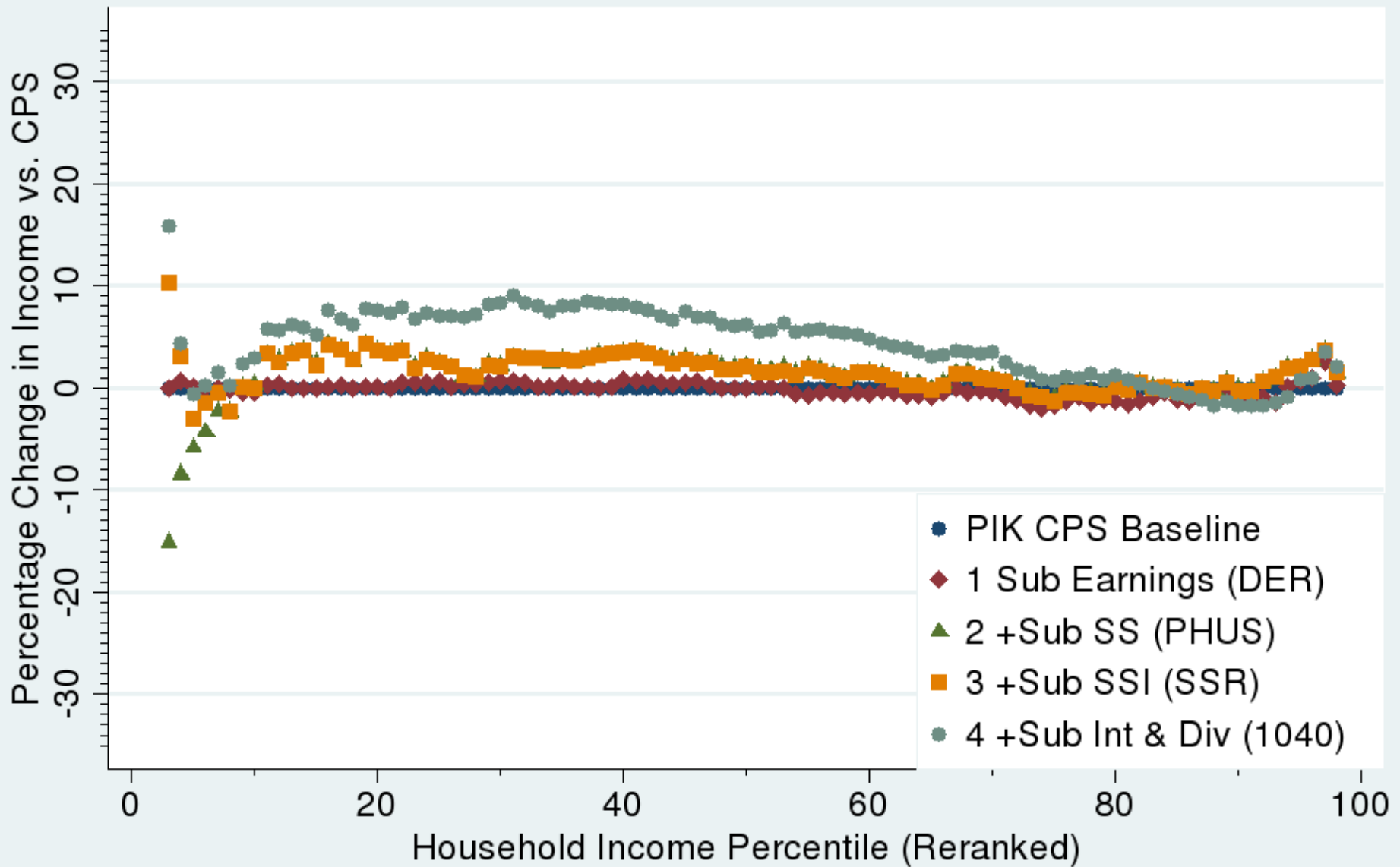
Household Income Percentile (ADREC vs. CPS)

Households with householder 65+



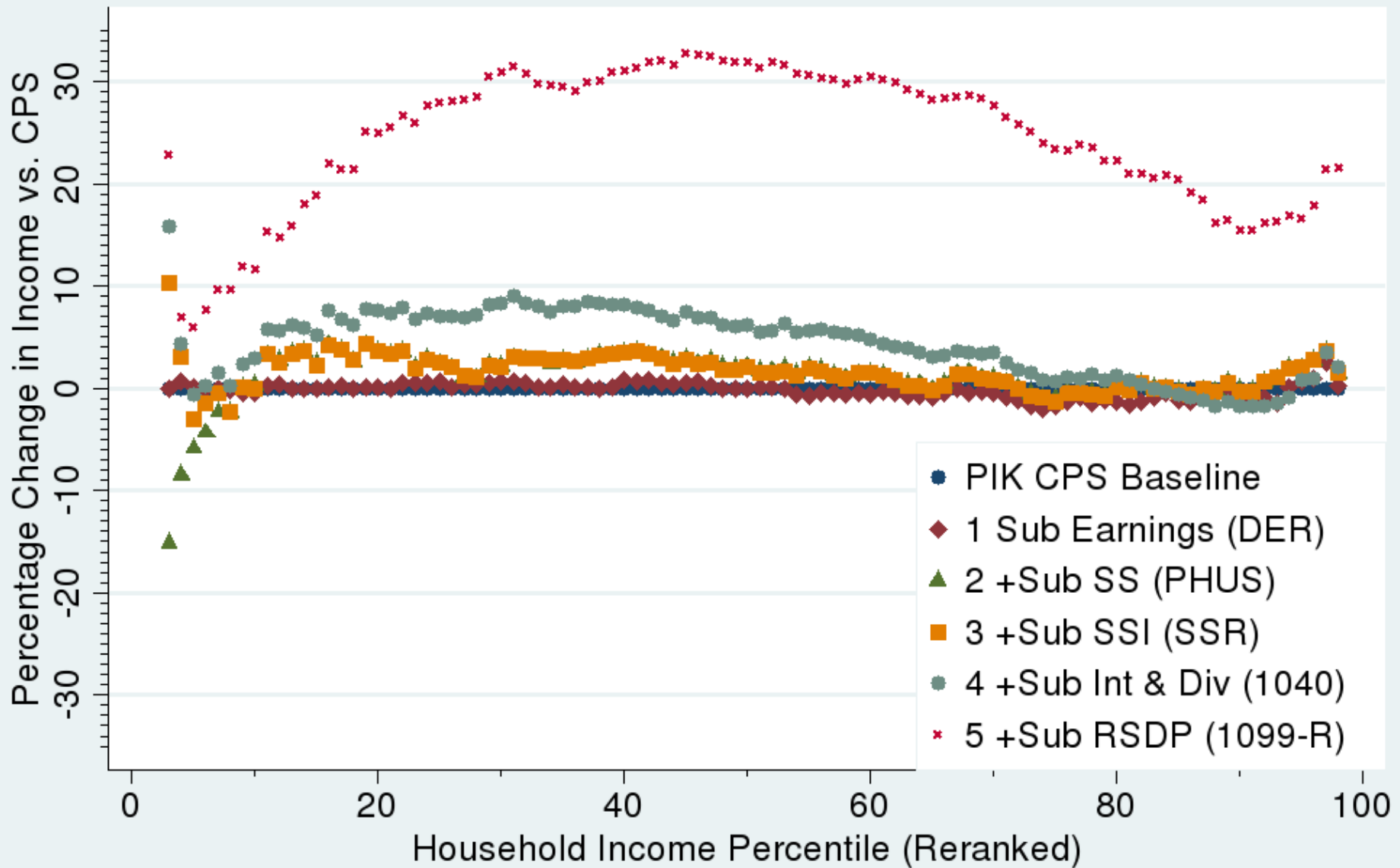
Household Income Percentile (ADREC vs. CPS)

Households with householder 65+

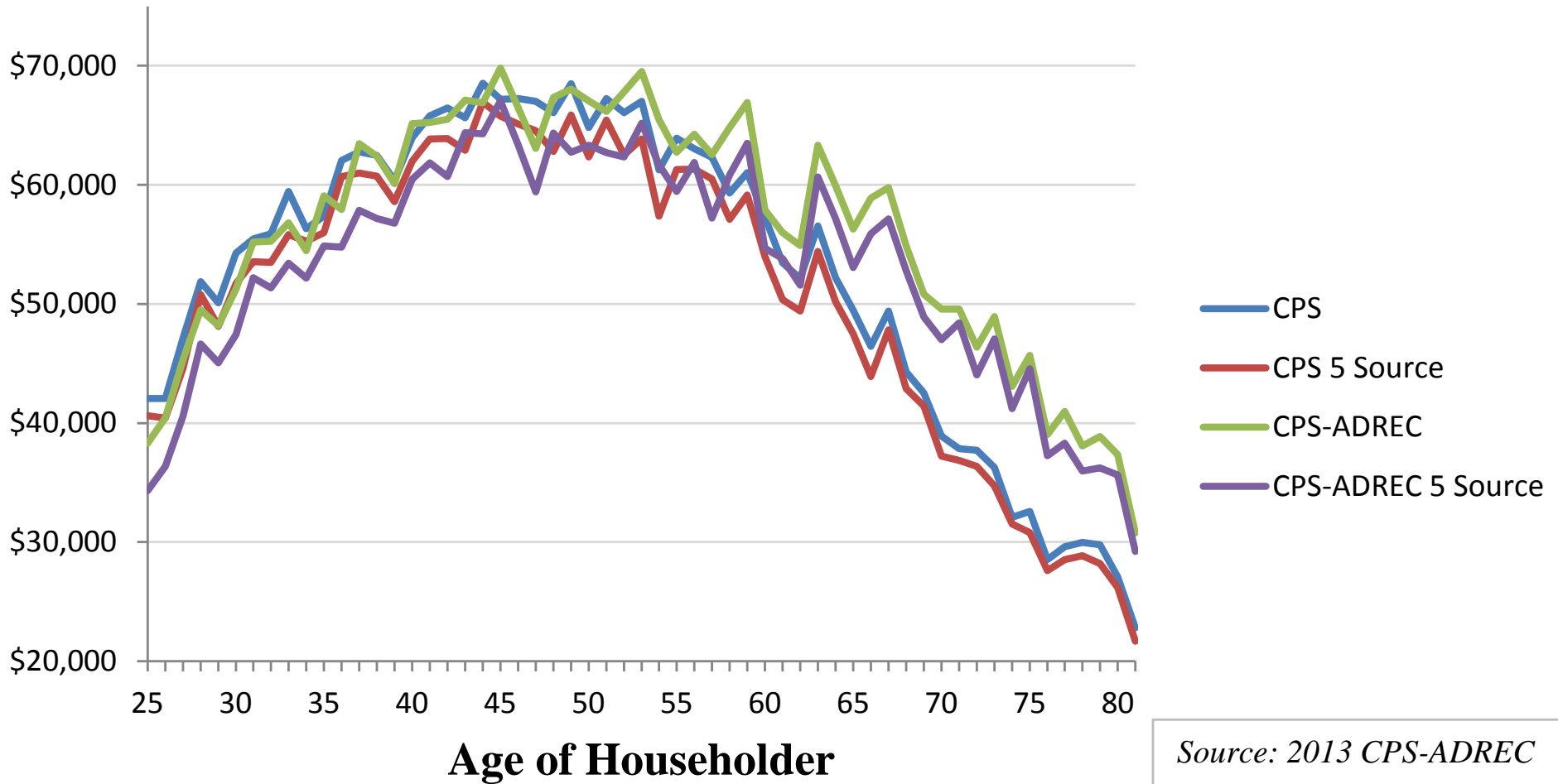


Household Income Percentile (ADREC vs. CPS)

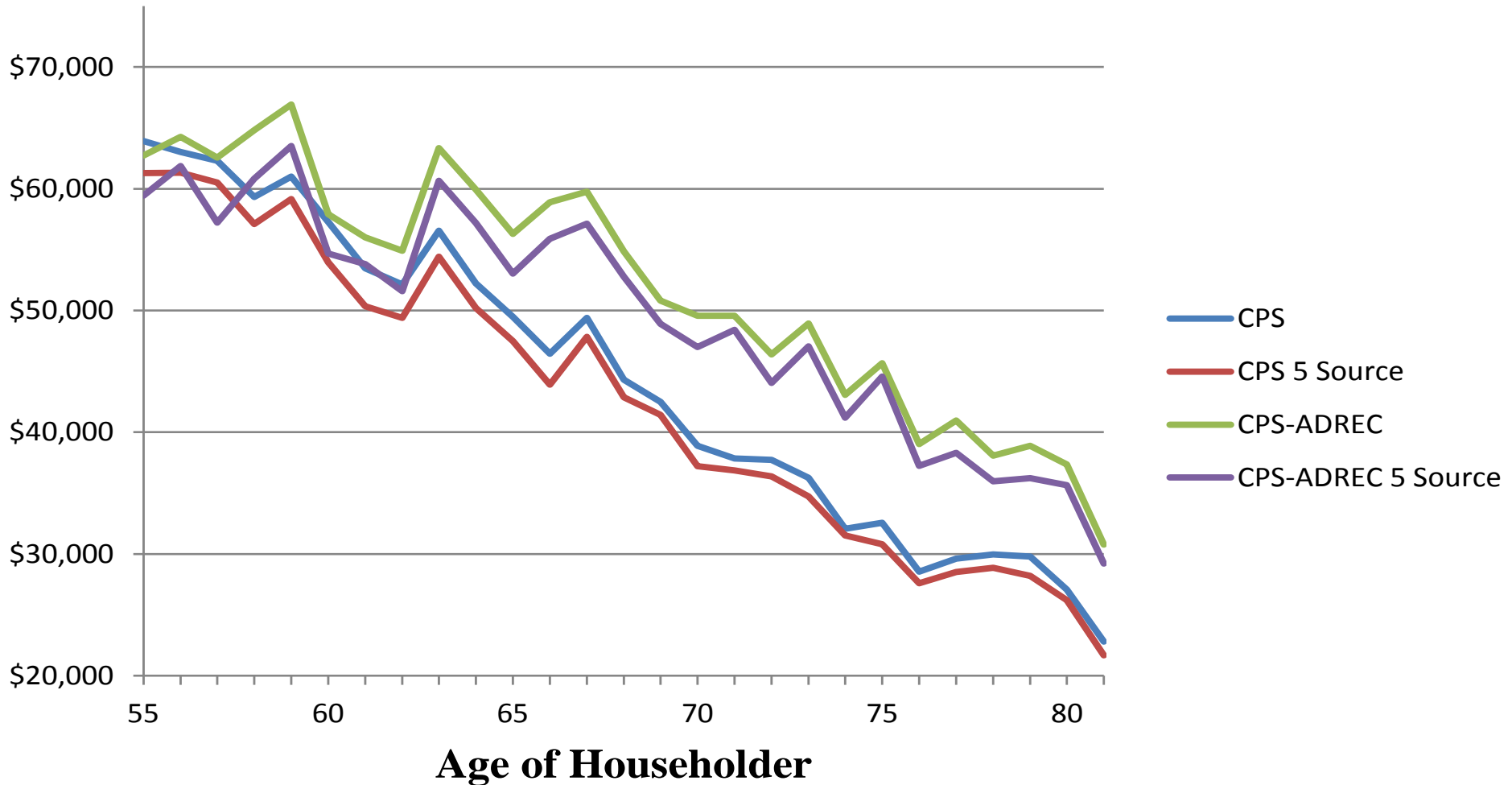
Households with householder 65+



Median Household Income by Age of Householder (2012)



Median Household Income by Age of Householder (2012)



Limitations of Single Cross-Section Analysis

- How are income trends over longer periods of time affected?
- Cohort versus age effects?
- What happens to the same group of people as they transition into retirement?

➔ Construct survey-ADREC panels spanning nearly three decades

Use of SIPP

- Panels 1984, 1990, 1996, 2001, 2004, and 2008
- Advantages
 - Possible to link data going further back in time than CPS
 - Higher PIK rates than CPS
- Disadvantages
 - Not easy to validate annual amounts (won't do today)
- Use wave 1 cross sections
 - Basic demographics, household relationships
- “Total income” from five sources only, comes from ADREC
- Panel dimension comes from ADREC

What about early years of ADREC?

- Data from SSA (DER, PHUS/MBR, SSR) already matched to SIPP
- Interest and dividends from 1040s
 - Received regularly from late 1990s onward
 - Uncovered earlier universe files for this analysis
- 1099-R
 - Received regularly 1995 onward
 - For earlier years made a potentially important discovery...

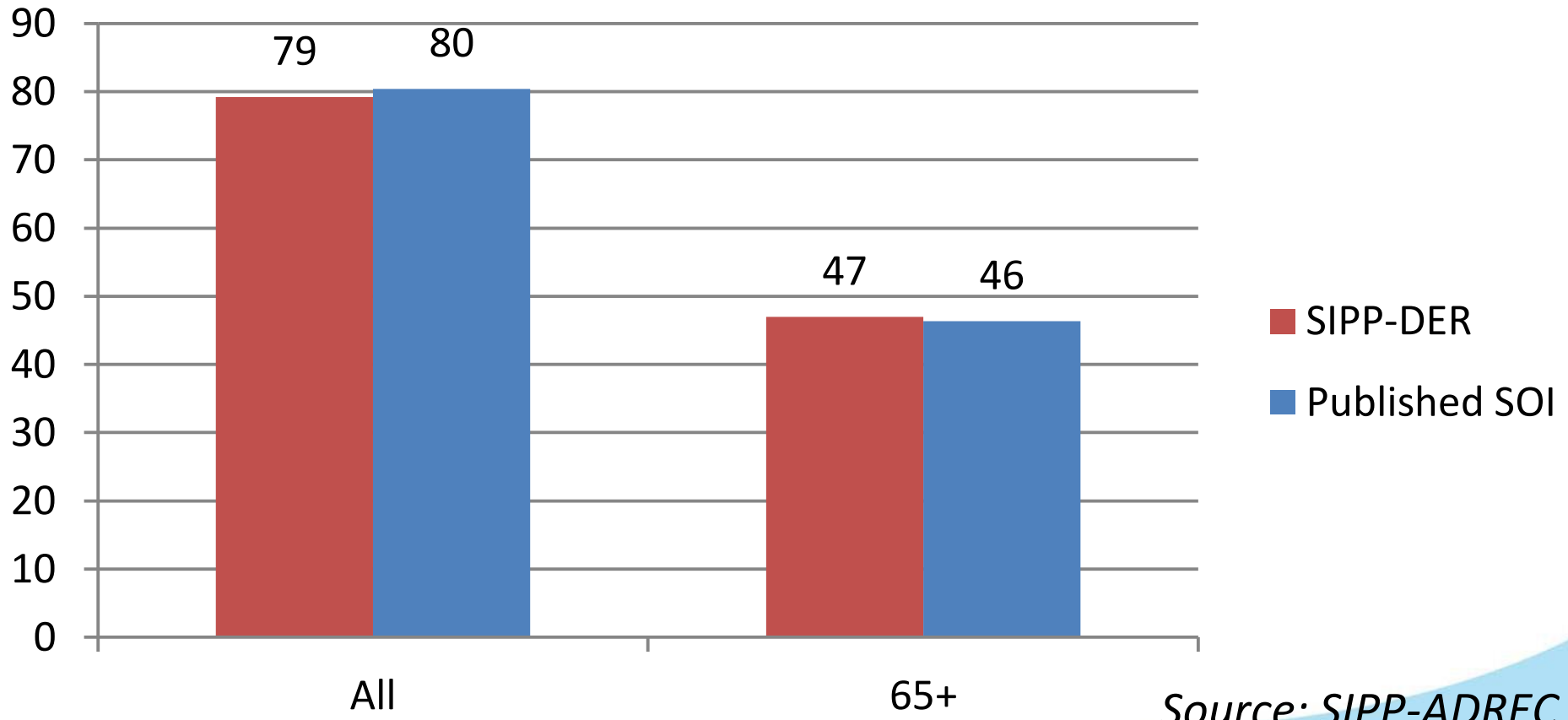
Form W-2P: Periodic Annuities, Pensions, Retired Pay or IRAs

- Old version of IRS Form 1099-R for periodic payments--Form 1099-R existed concurrently for total distributions only
- Under agreement SSA received and processed Form W-2P from 1978-1990
- After 1990 W-2P and 1099-R combine to become modern 1099-R
 - ➔ W-2P income variable already in the SSA DER file

Benchmarking W-2P Income

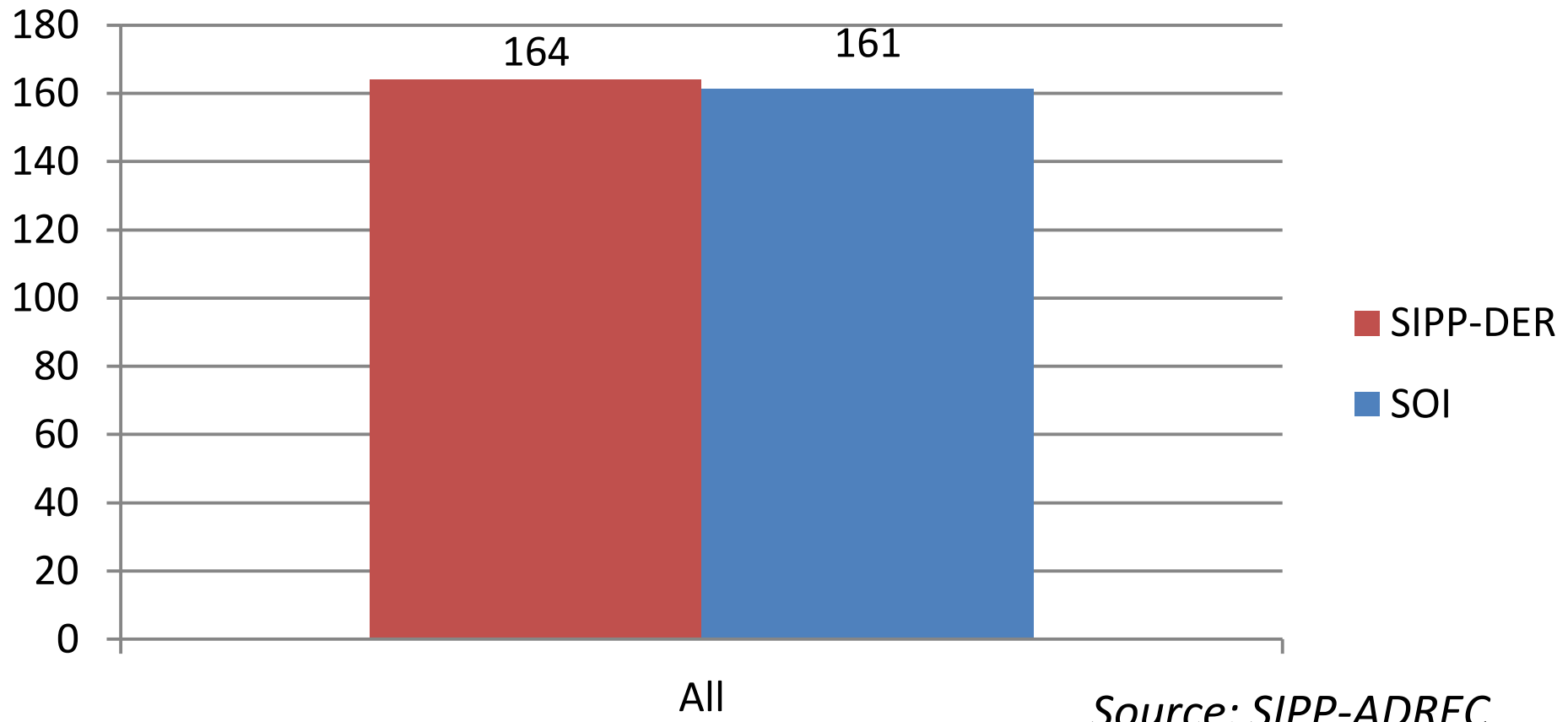
- Use 1984 and 1990 matched SIPP-DER panels
- Compare aggregates produced from SIPP-DER with published SOI totals
- Compare aggregates from large defined benefit plans with annual financial reports (Federal Civil Service, CALPERS)

1984 Taxable Pension, Annuity, IRA Income (Billions of Dollars)

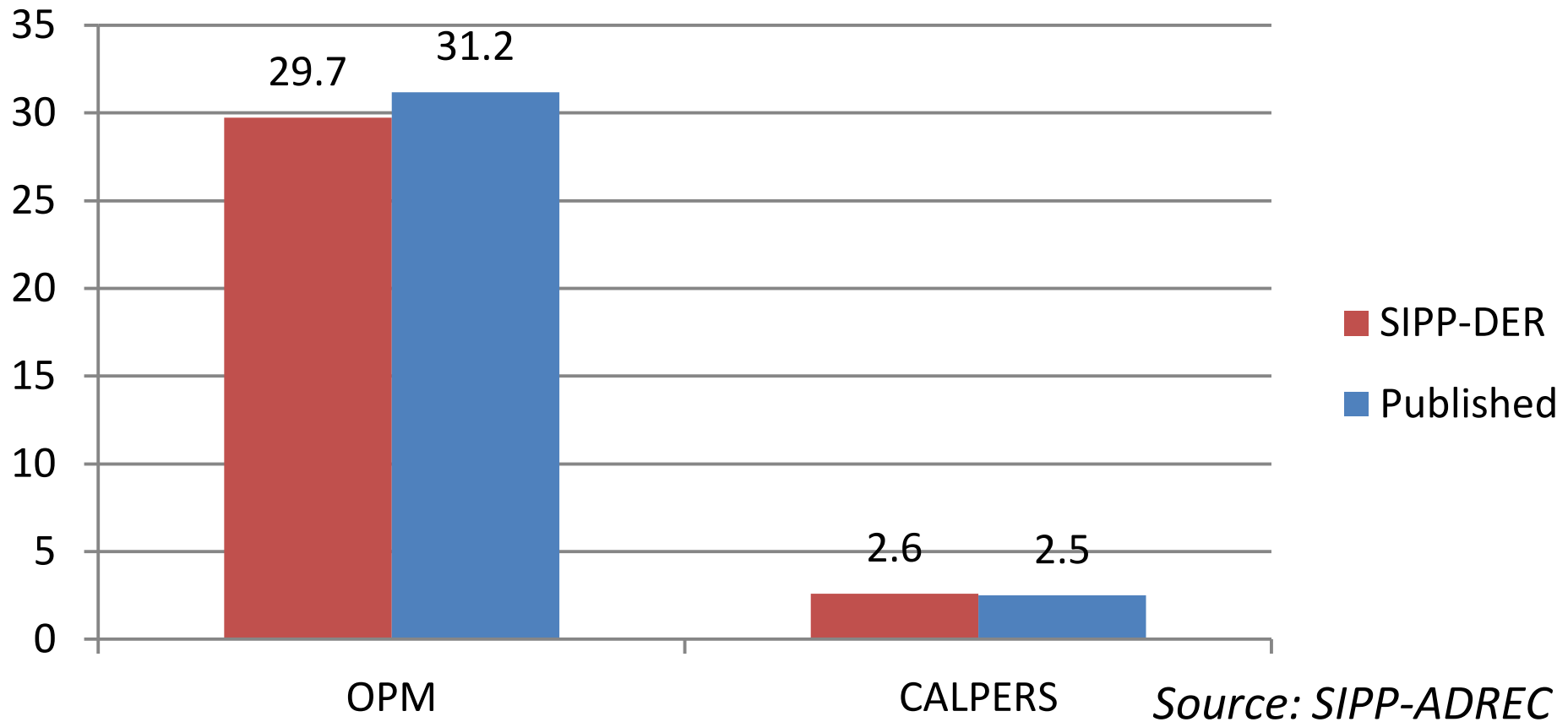


Source: SIPP-ADREC

1989 Taxable Pension, Annuity, IRA Income (Billions of Dollars)



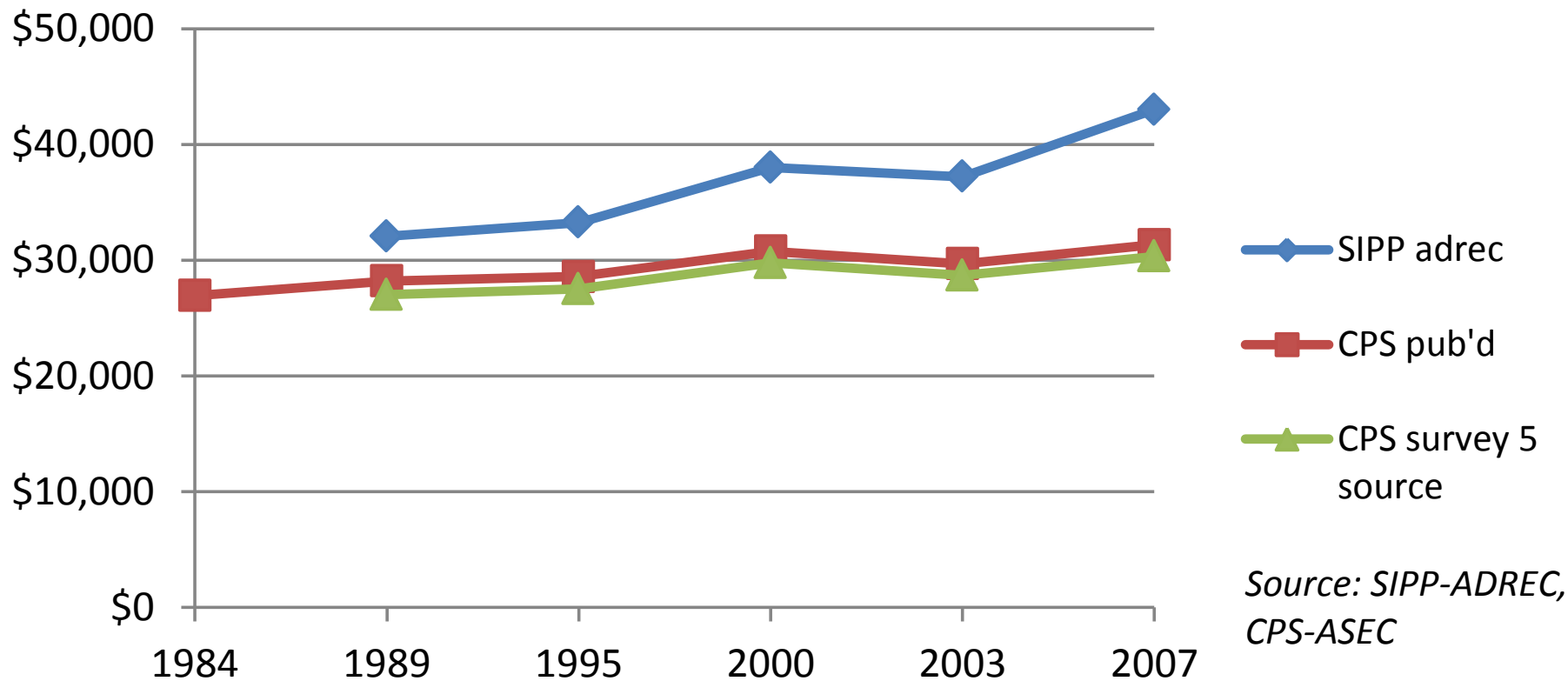
1990 Total Pension Fund Benefits Paid (Billions of Dollars)



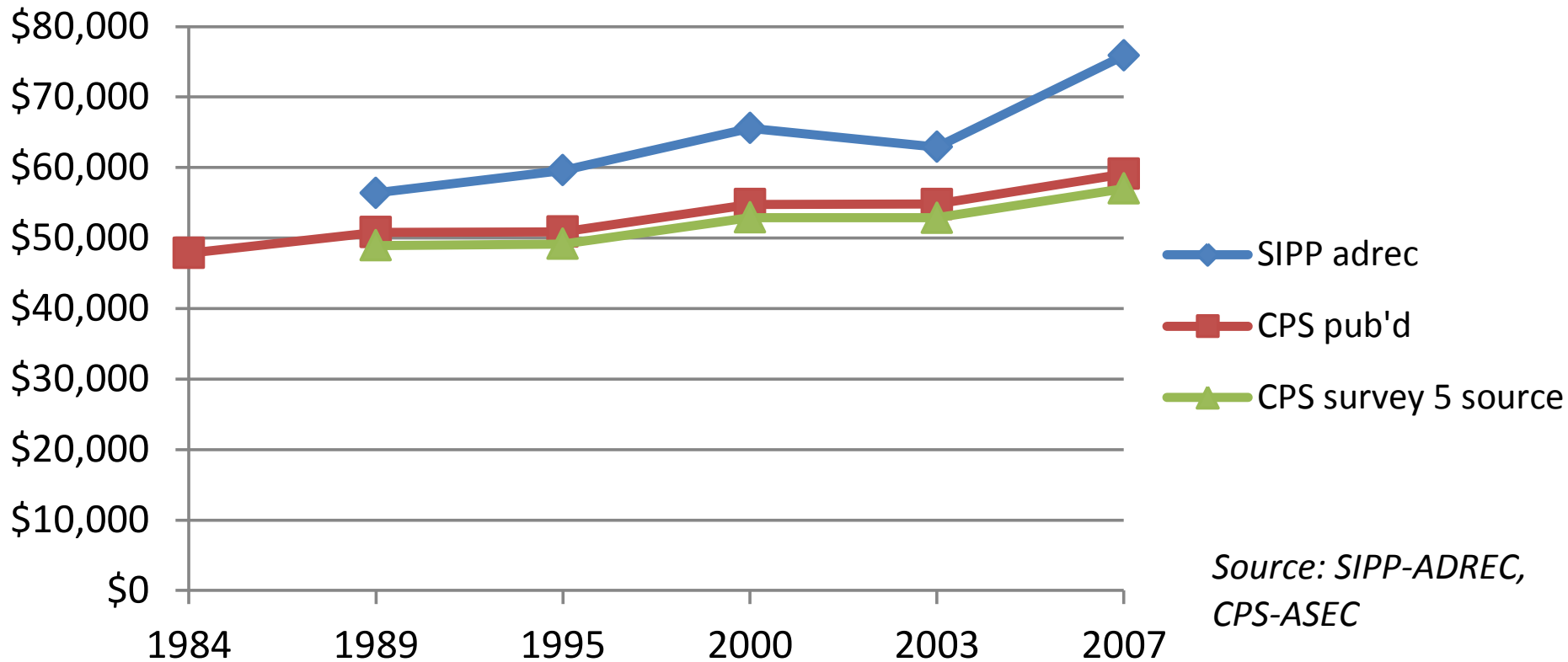
Repeated Cross-Sectional Analysis 1984-2007

- Use matched SIPP-ADREC panels to examine quantiles of household income for householders age 65+
- All numbers use CPI-U-RS to convert to 2012 dollars
- Compare to full CPS and to CPS as if only the five sources of income were available

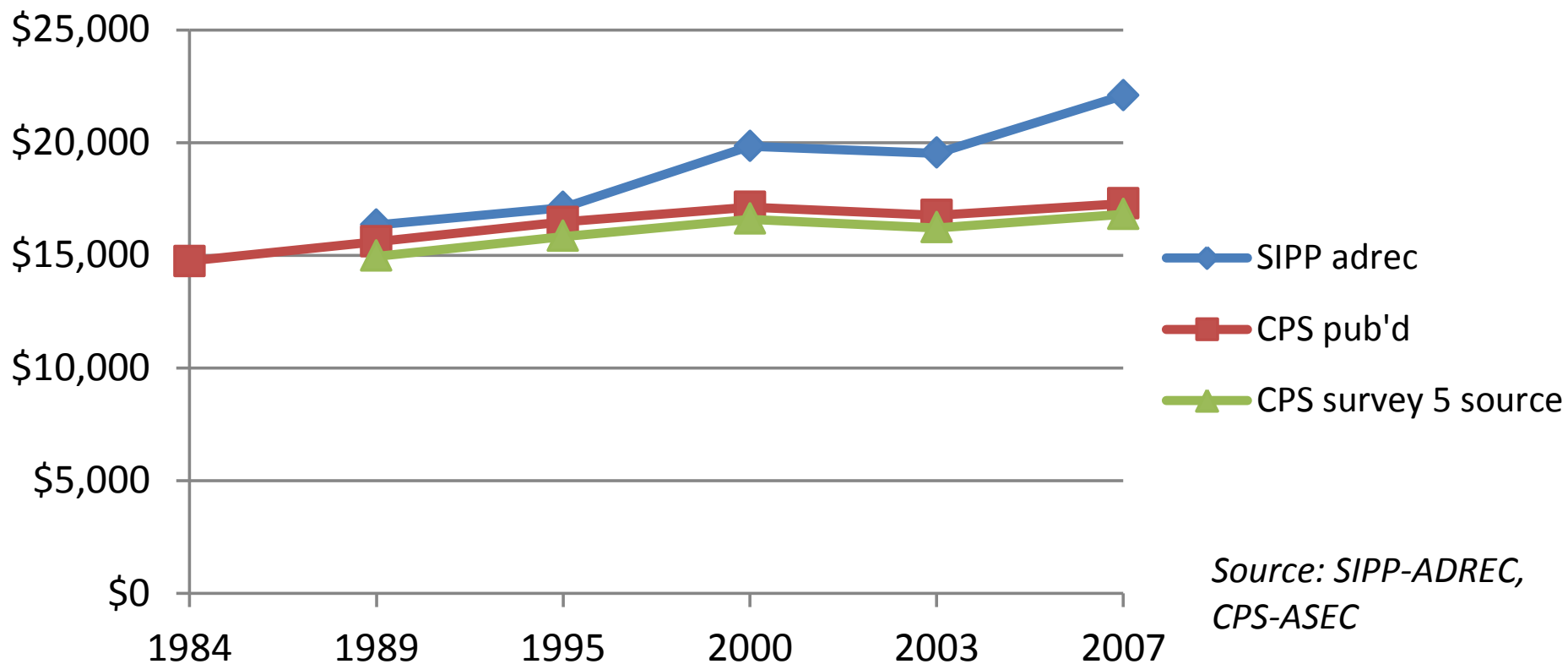
Real Median Household Income (Householder Age 65+)



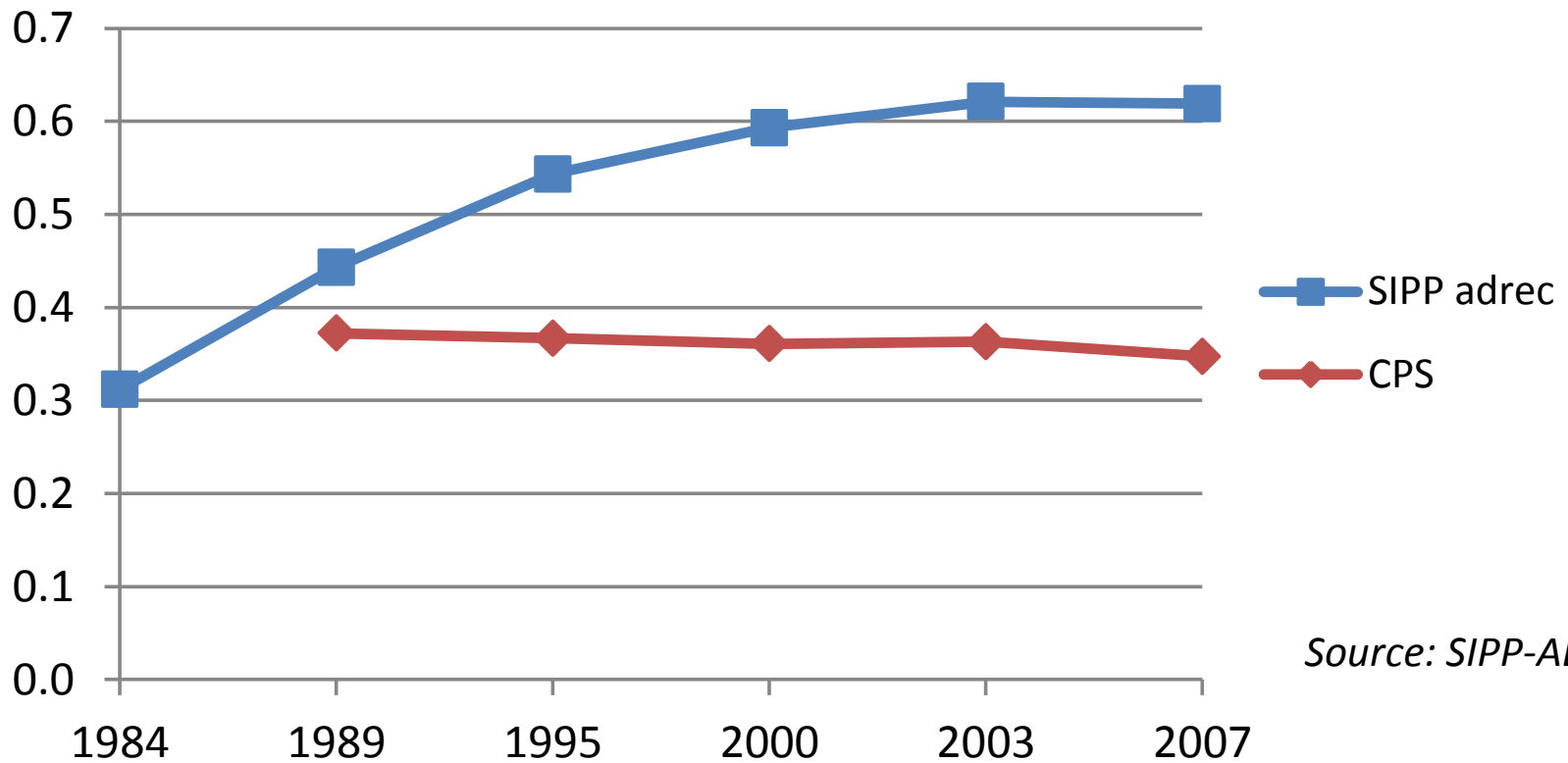
Real 75th Pctile Household Income (Householder Age 65+)



Real 25th Pctile Household Income (Householder Age 65+)



W-2P/1099-R Income Receipt (Age 65+)



Source: SIPP-ADREC

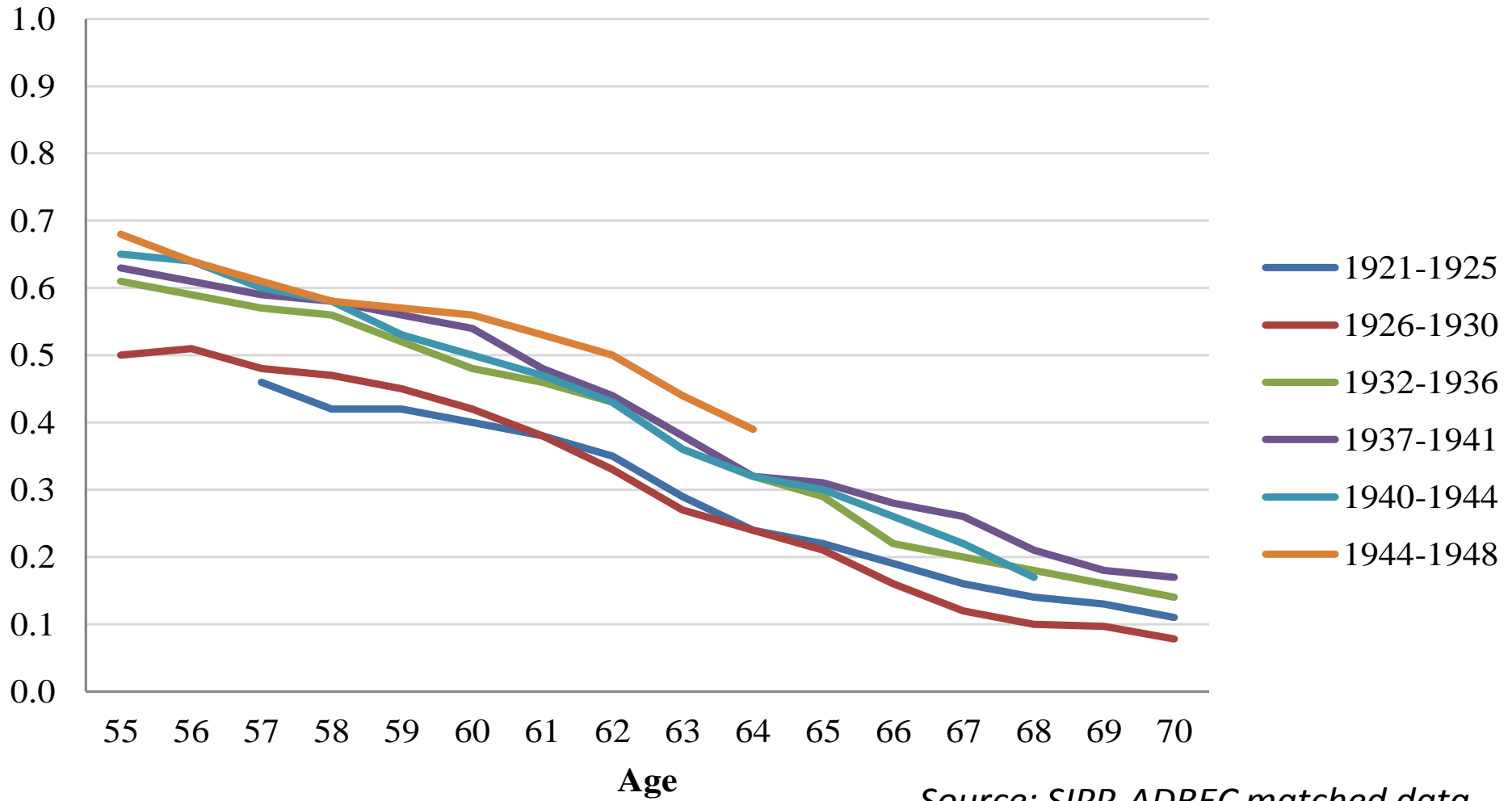
Panel Analysis of Women Age 55-70

- Sample of women age 60-64 at time of each SIPP wave 1 interview who are either householders or spouse of householder, and survive to age 70
 - No age or mortality restriction on husband
- Follow forwards and backwards in time with ADREC
 - Assuming family structure held constant
- Measure employment and pension/ social security receipt

Summary Statistics

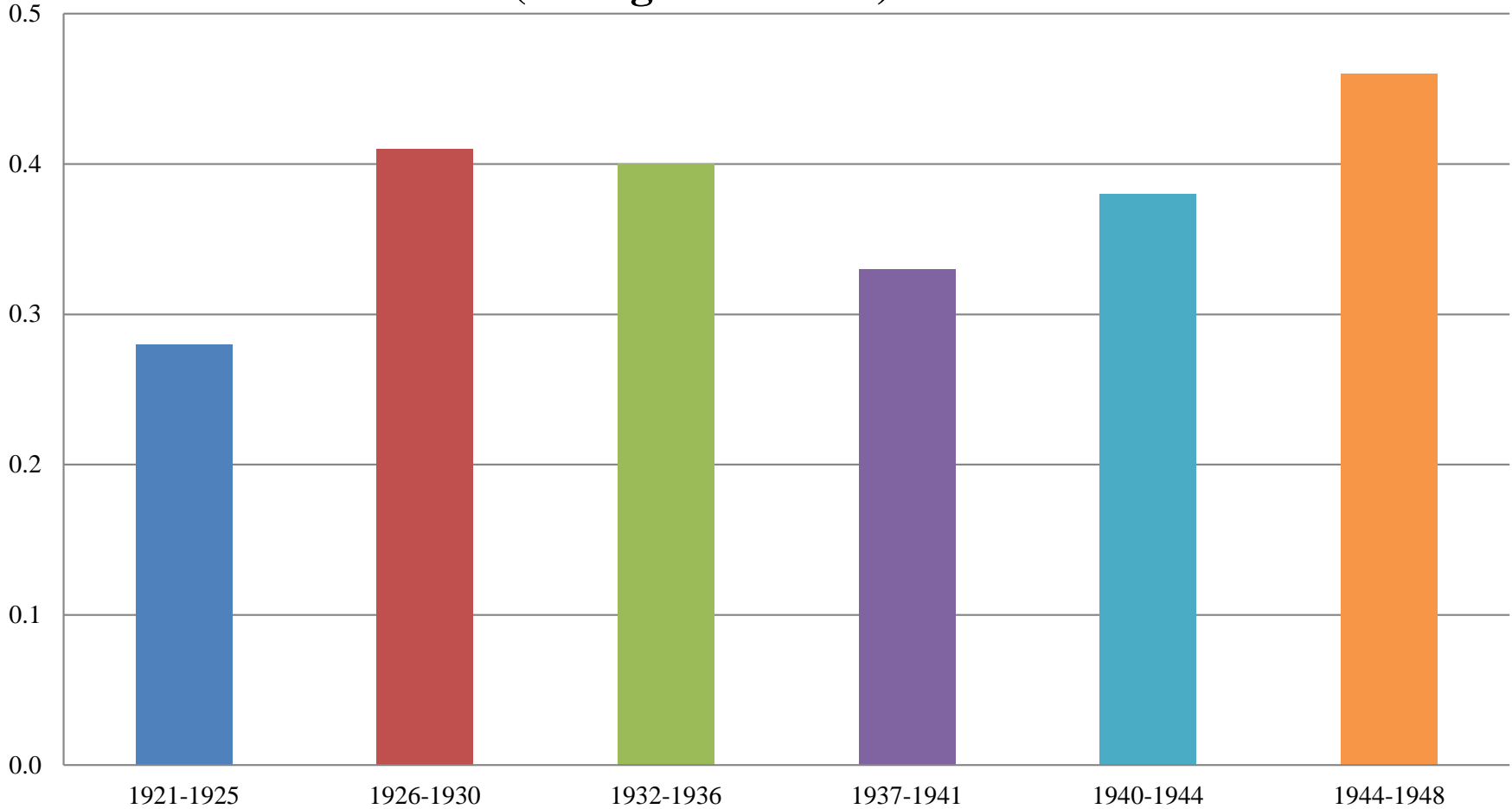
SIPP Panel	Birth Cohort Group	Approximate N	College Graduate	Married	Mean Husband Age	Diff
1984	1921-1925	900	0.12	0.72	1.82	
1990	1926-1930	900	0.11	0.70	2.34	
1996	1932-1936	1200	0.15	0.74	1.84	
2001	1937-1941	700	0.20	0.68	1.09	
2004	1940-1944	1800	0.24	0.68	1.92	
2008	1944-1948	2400	0.27	0.68	1.36	

EPOP (All Women)



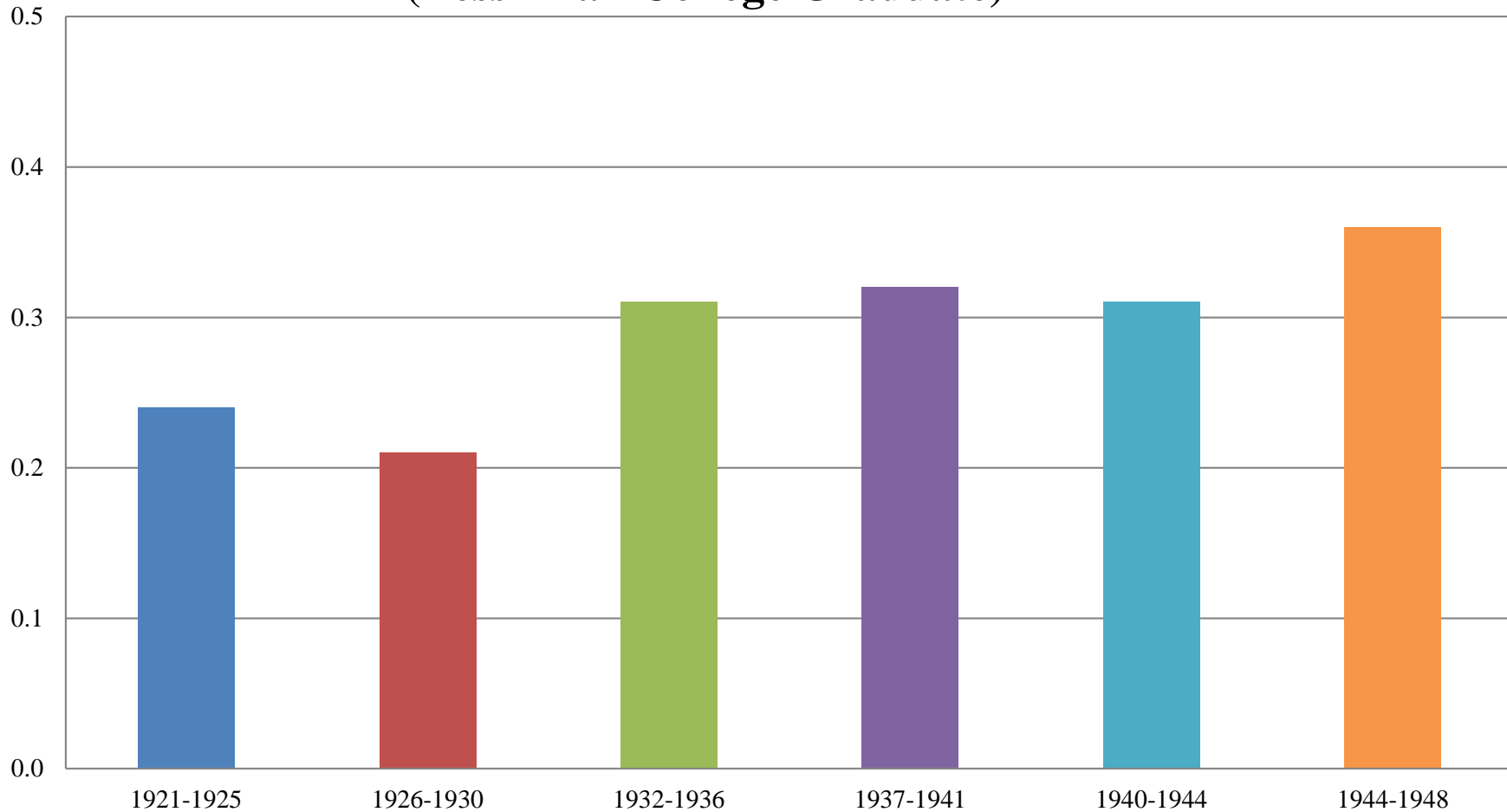
Source: SIPP-ADREC matched data

EPOP At Age 64 (College Graduate)



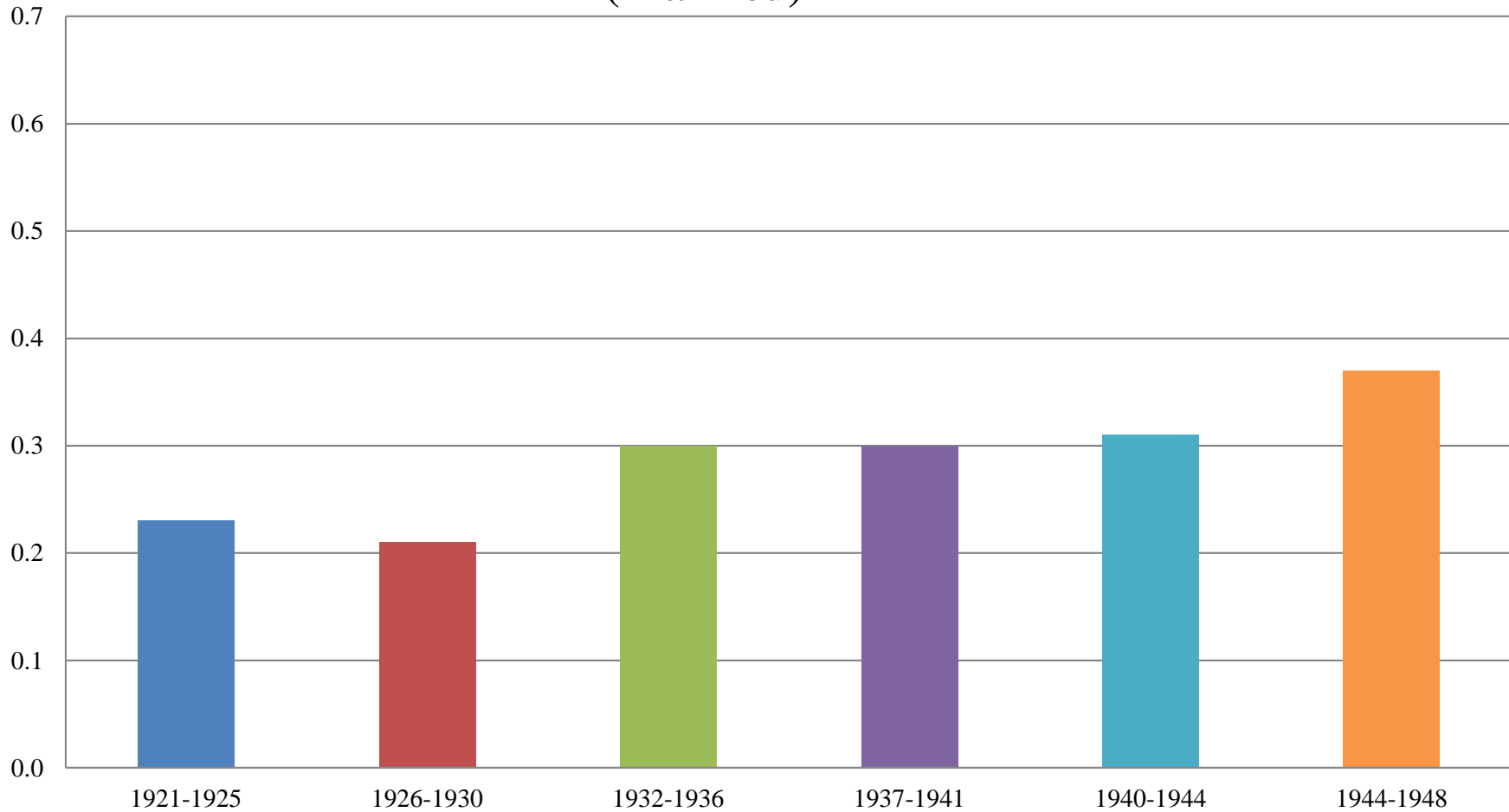
Source: SIPP-ADREC matched data

EPOP At Age 64 (Less Than College Graduate)



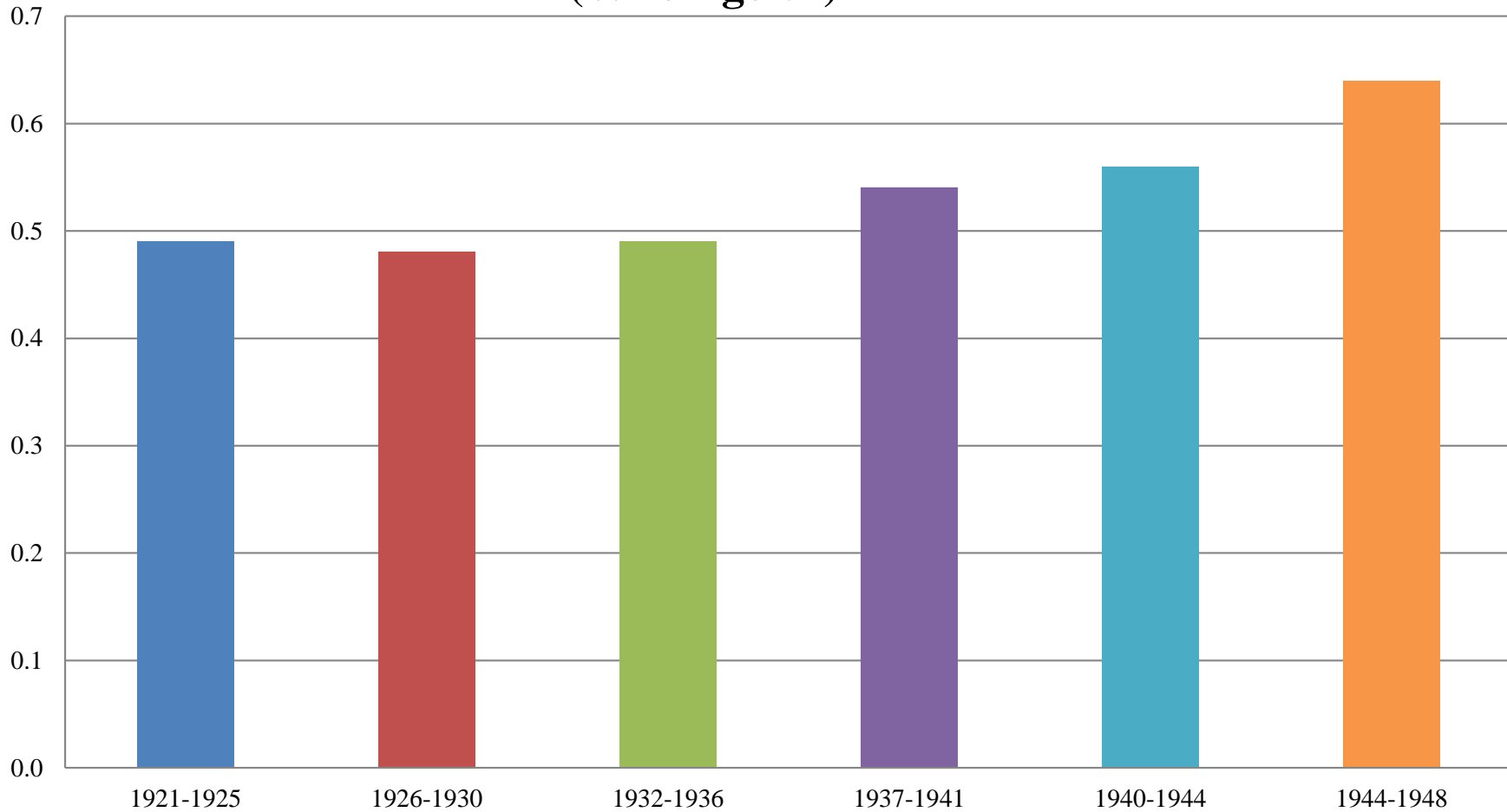
Source: SIPP-ADREC matched data

EPOP At Age 64 (Married)



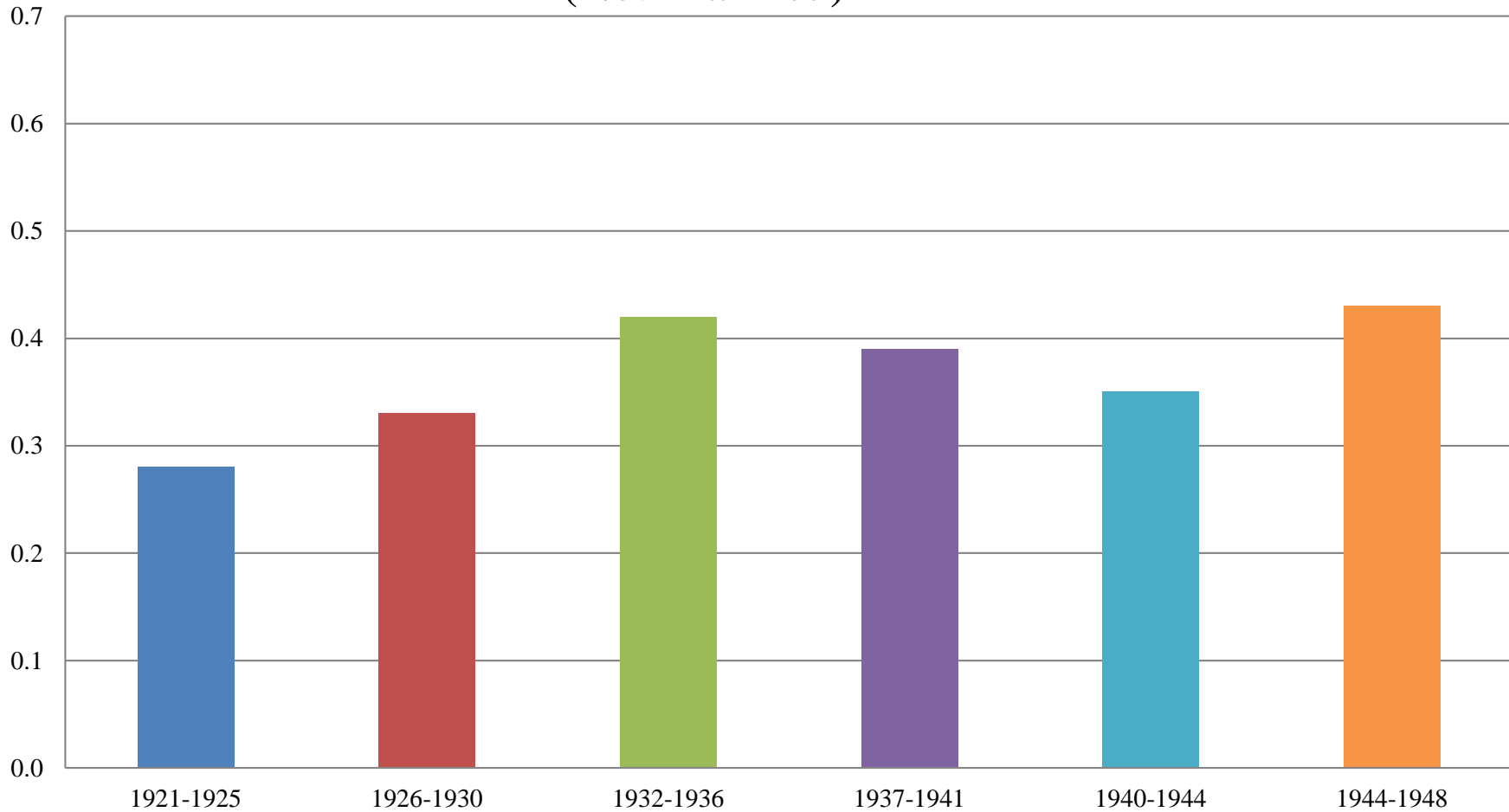
Source: SIPP-ADREC matched data

Either Spouse Work (Wife Age 64)



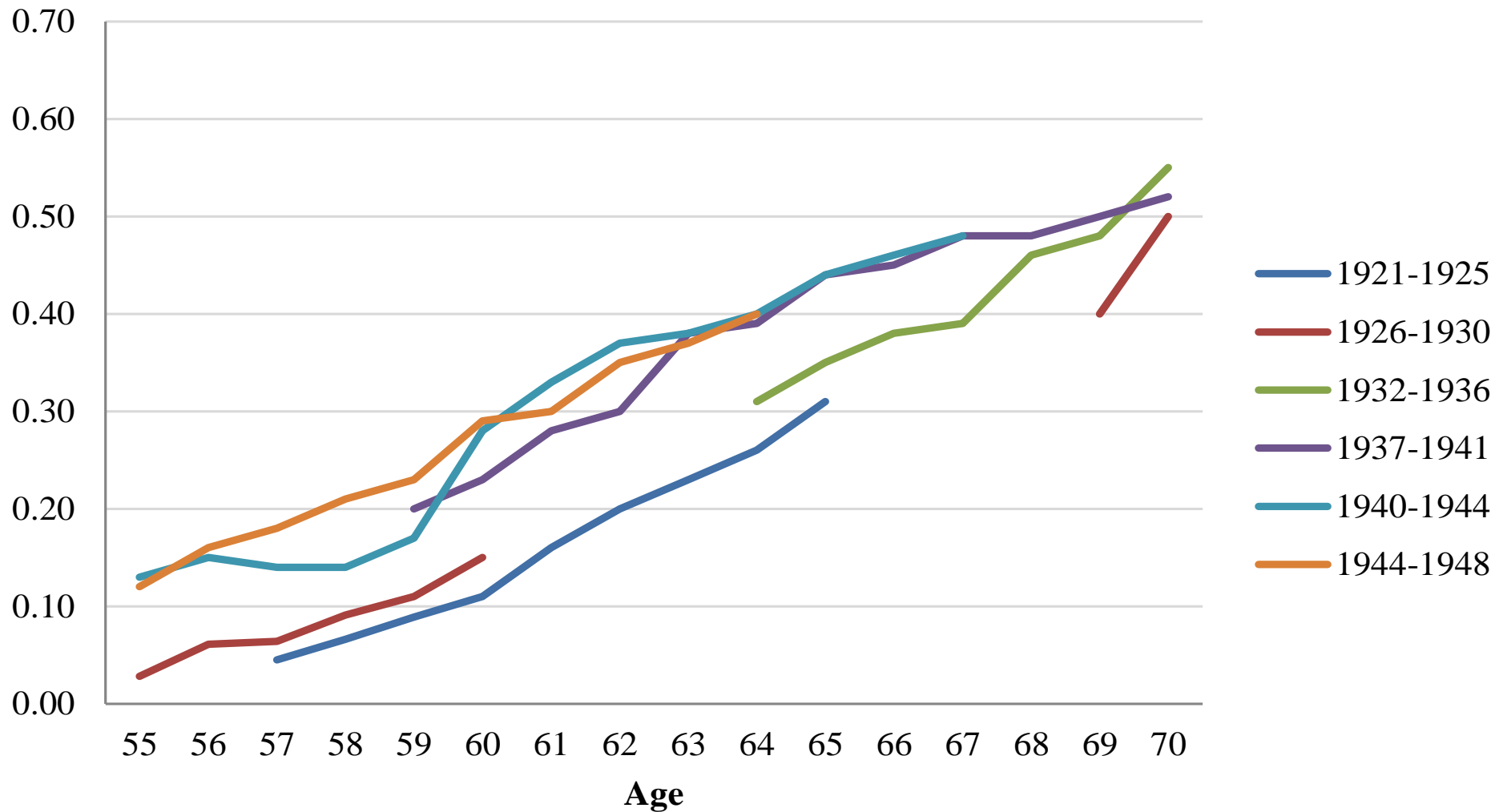
Source: SIPP-ADREC matched data

EPOP At Age 64 (Not Married)



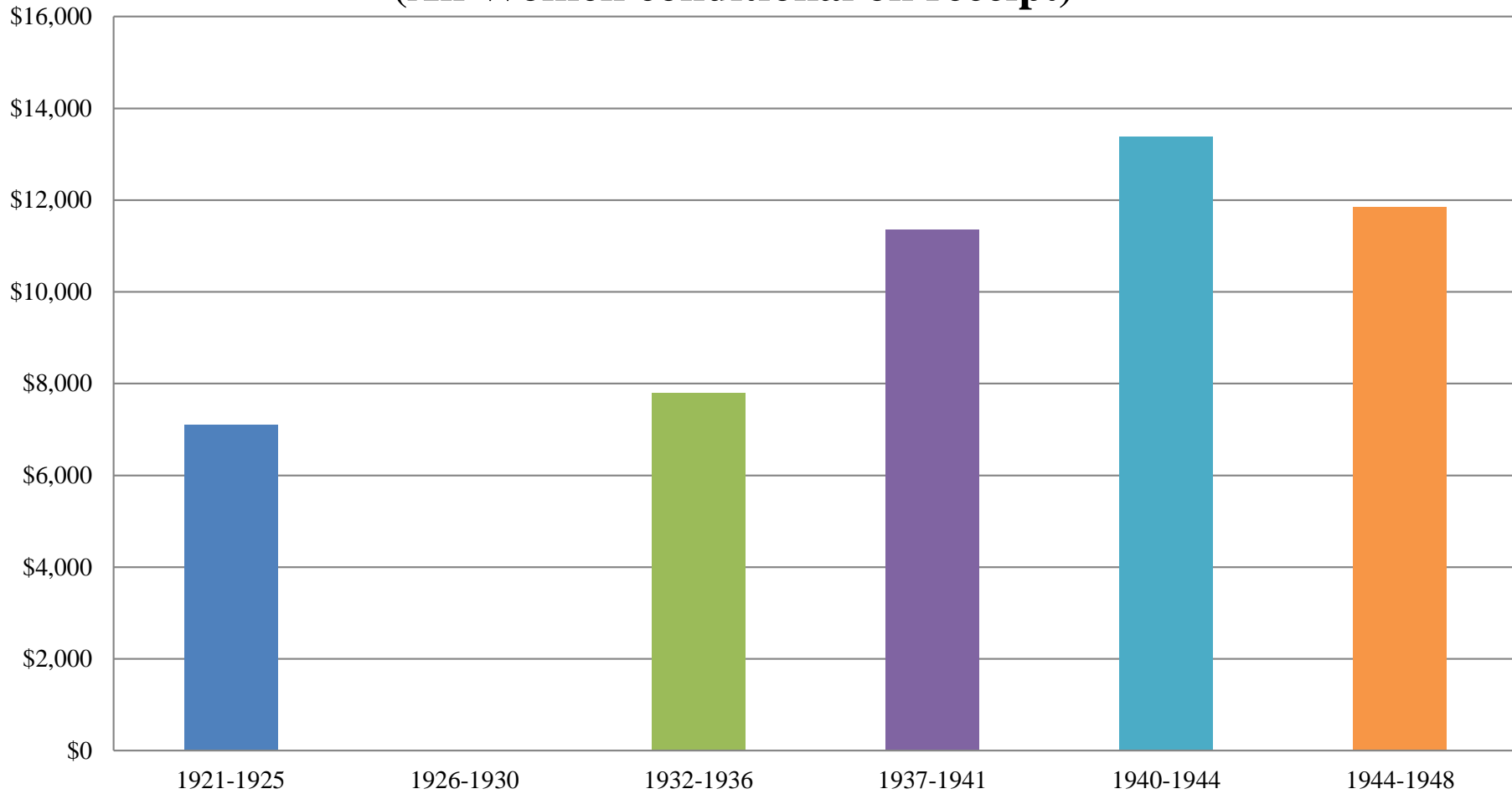
Source: SIPP-ADREC matched data

W2-P/1099-R Receipt (All Women)



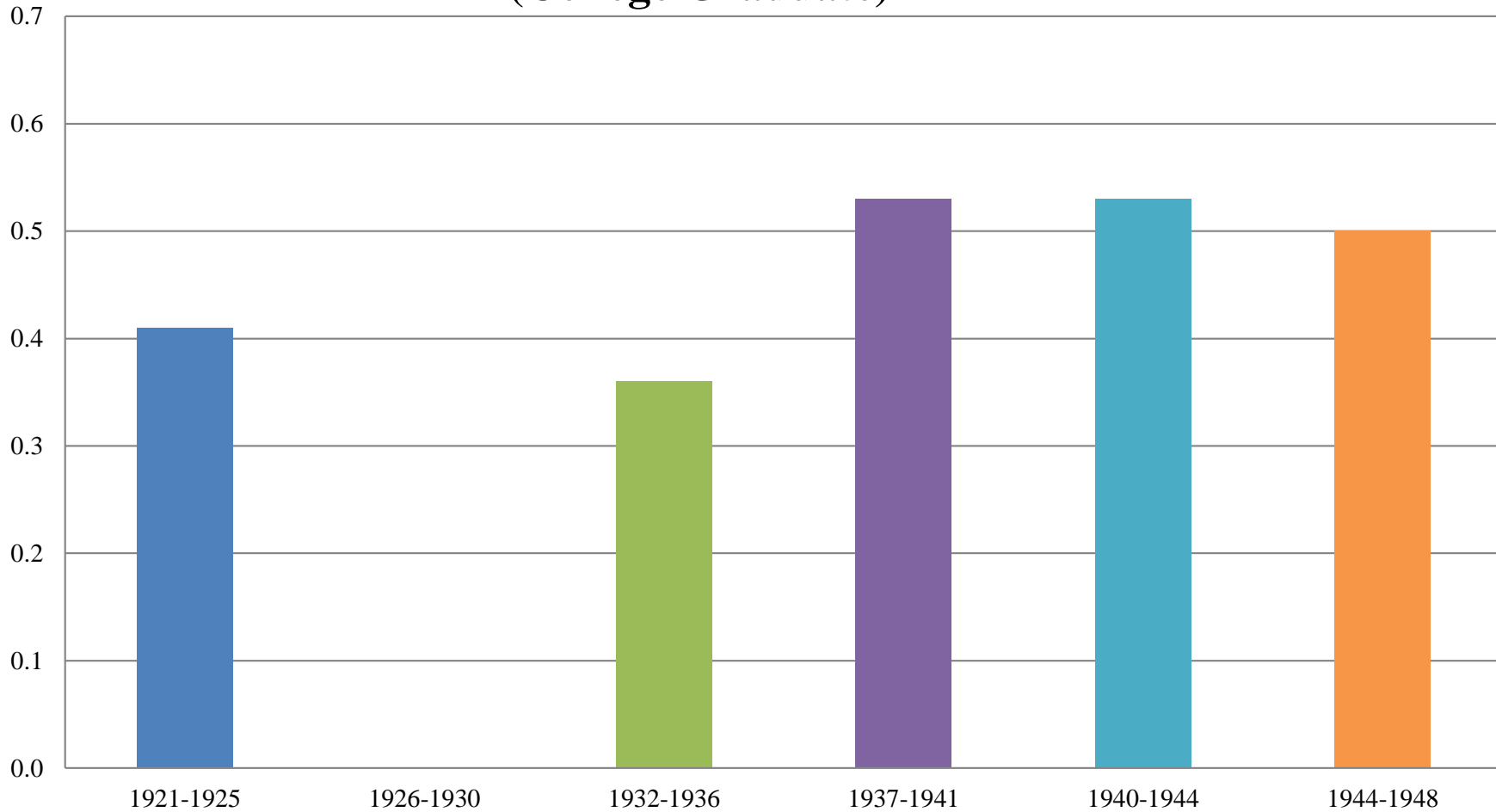
Source: SIPP-ADREC matched data

W2-P/1099-R Median Amount At Age 64 (All Women conditional on receipt)



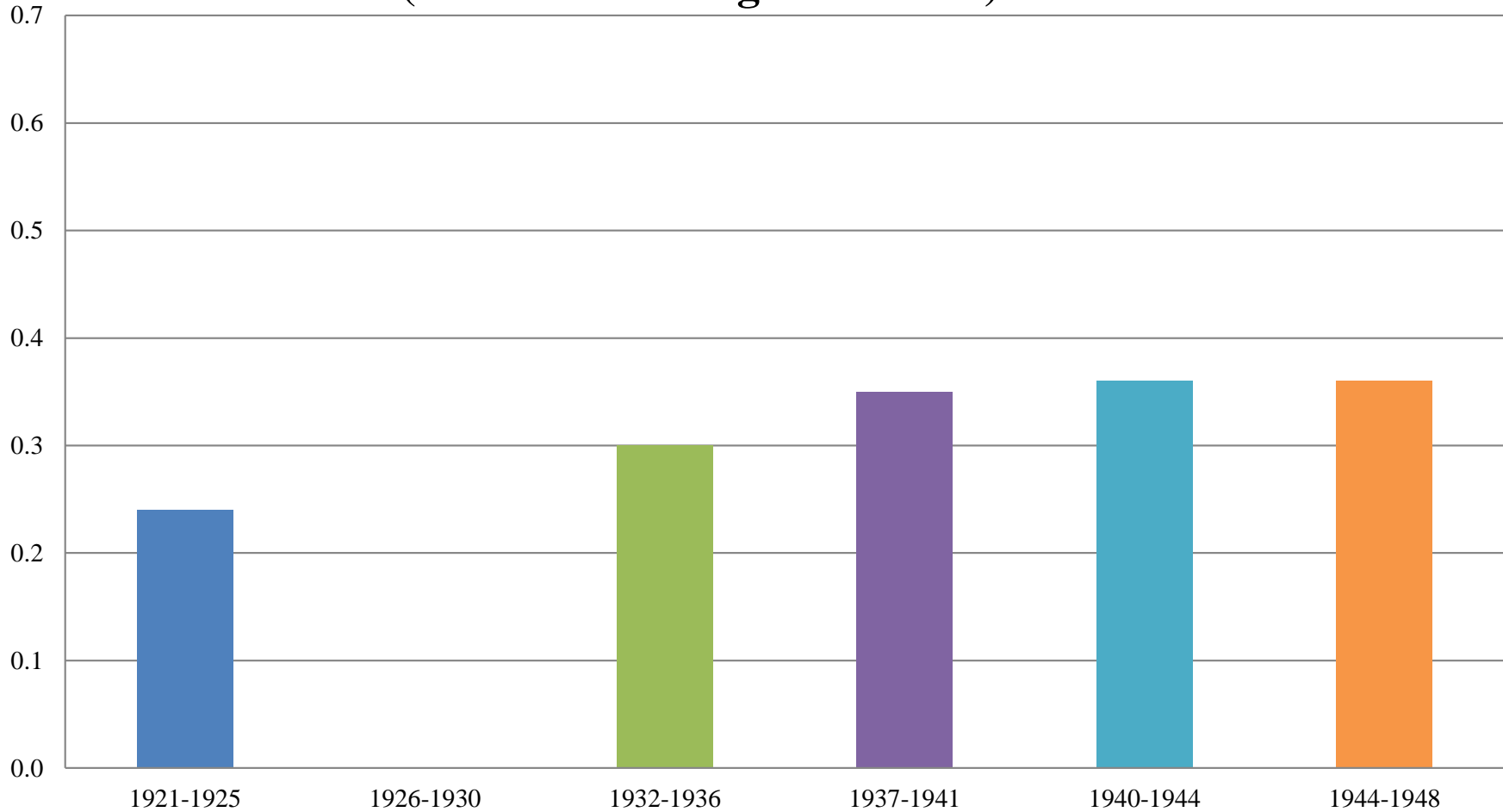
Source: SIPP-ADREC matched data

W2-P/1099-R Receipt At Age 64 (College Graduate)



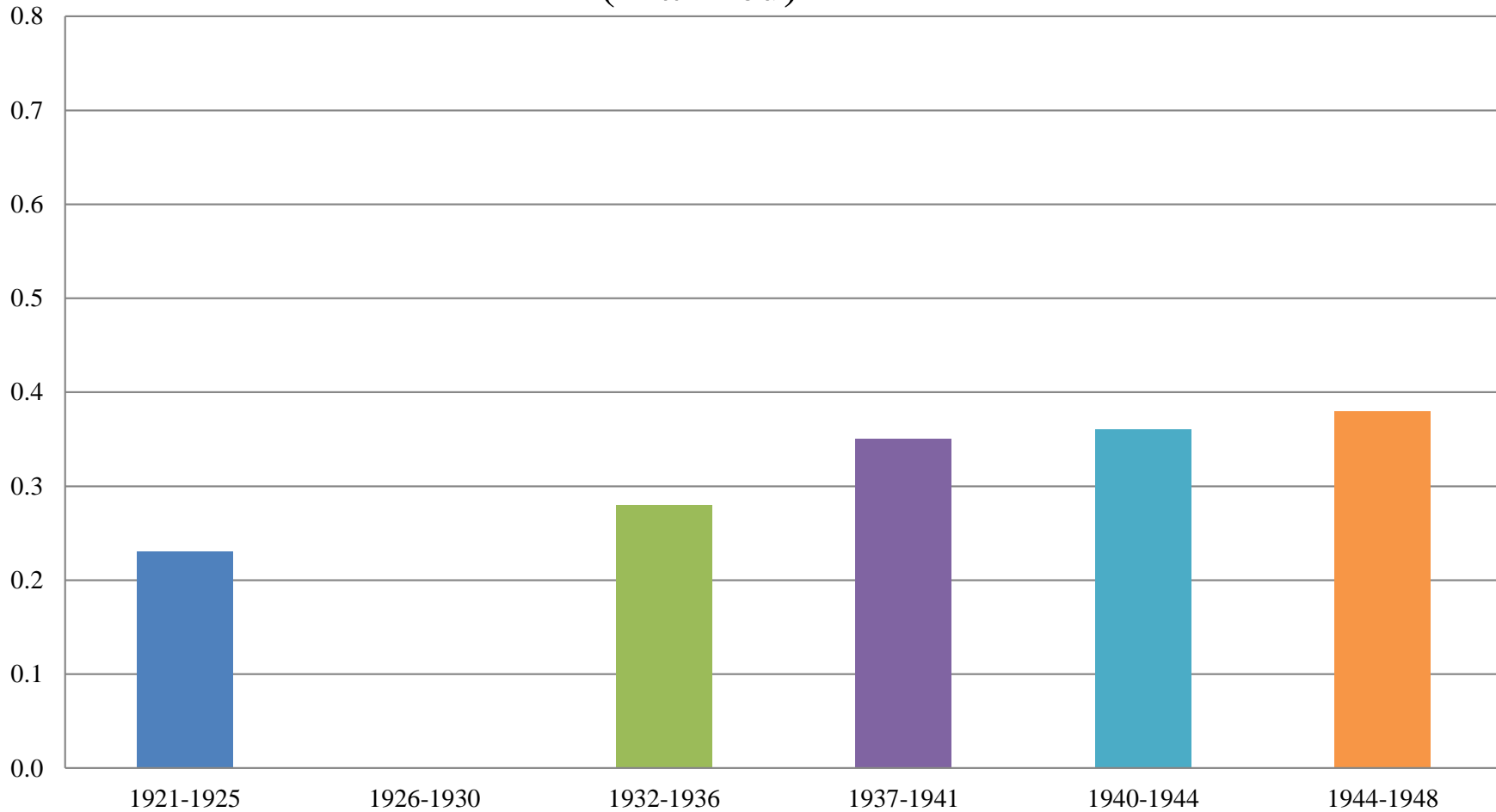
Source: SIPP-ADREC matched data

W2-P/1099-R Receipt At Age 64 (Less Than College Graduate)



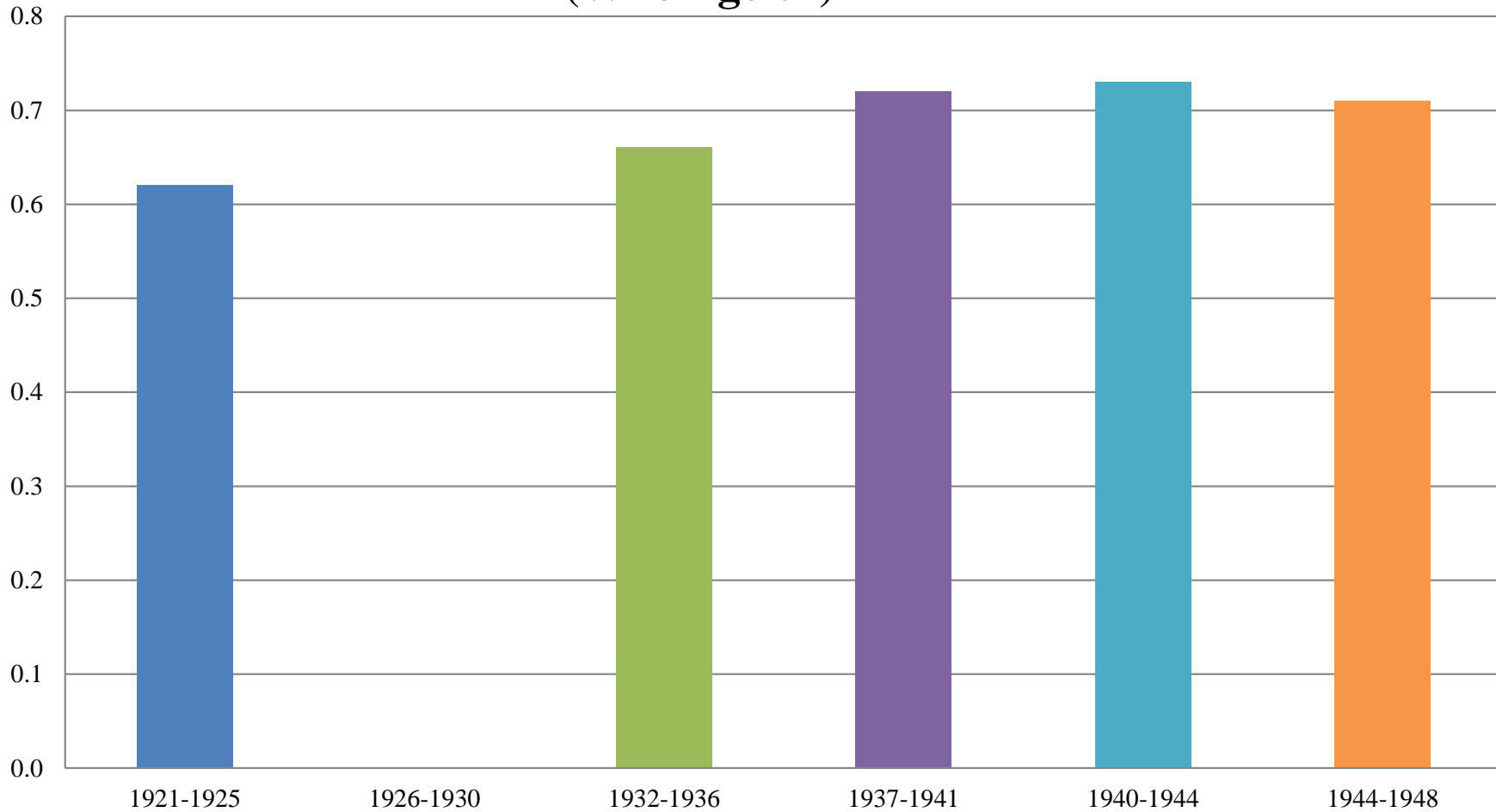
Source: SIPP-ADREC matched data

W2-P/1099-R Receipt At Age 64 (Married)



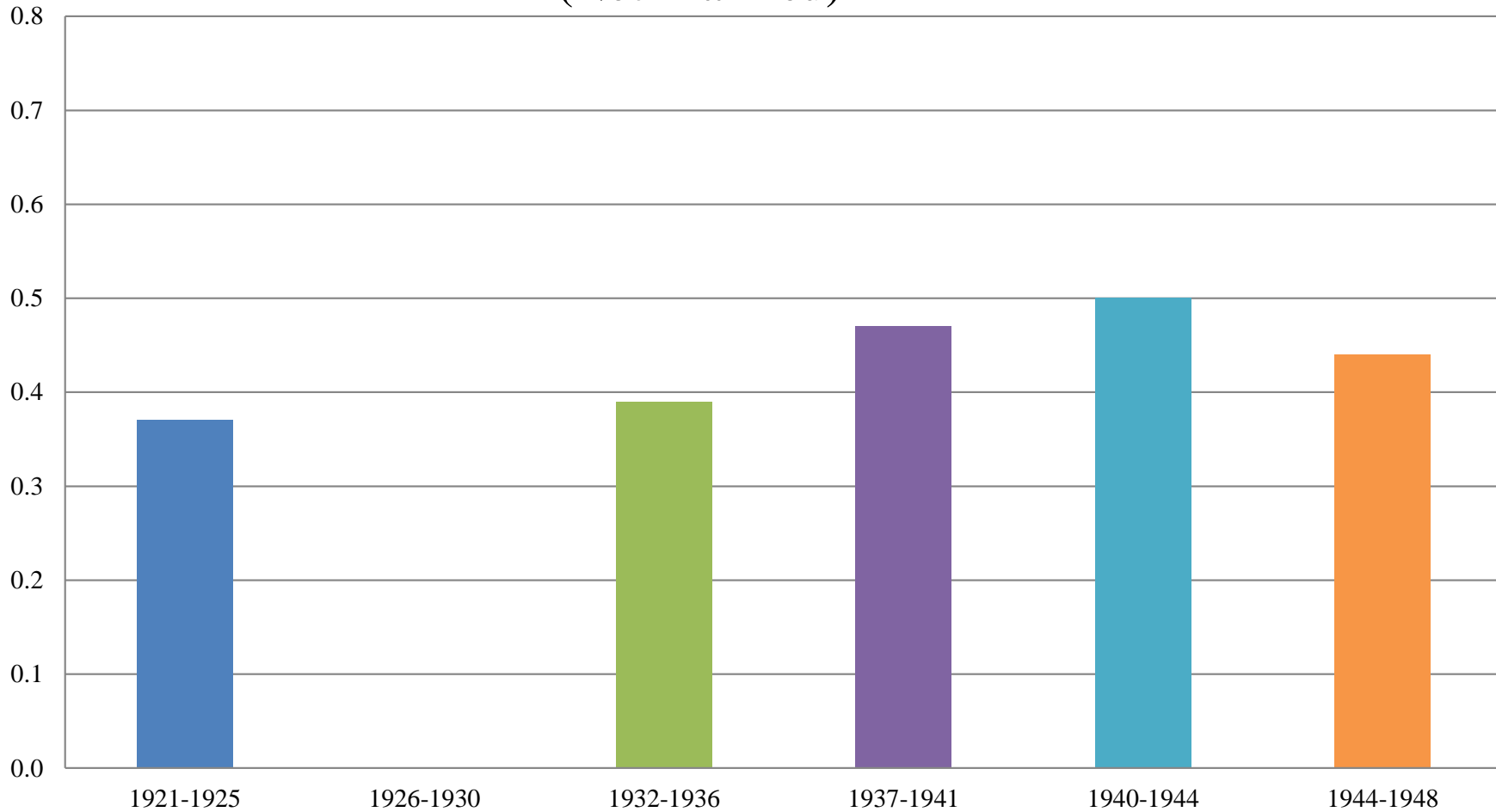
Source: SIPP-ADREC matched data

Either Spouse W2-P/1099-R Receipt (Wife Age 64)



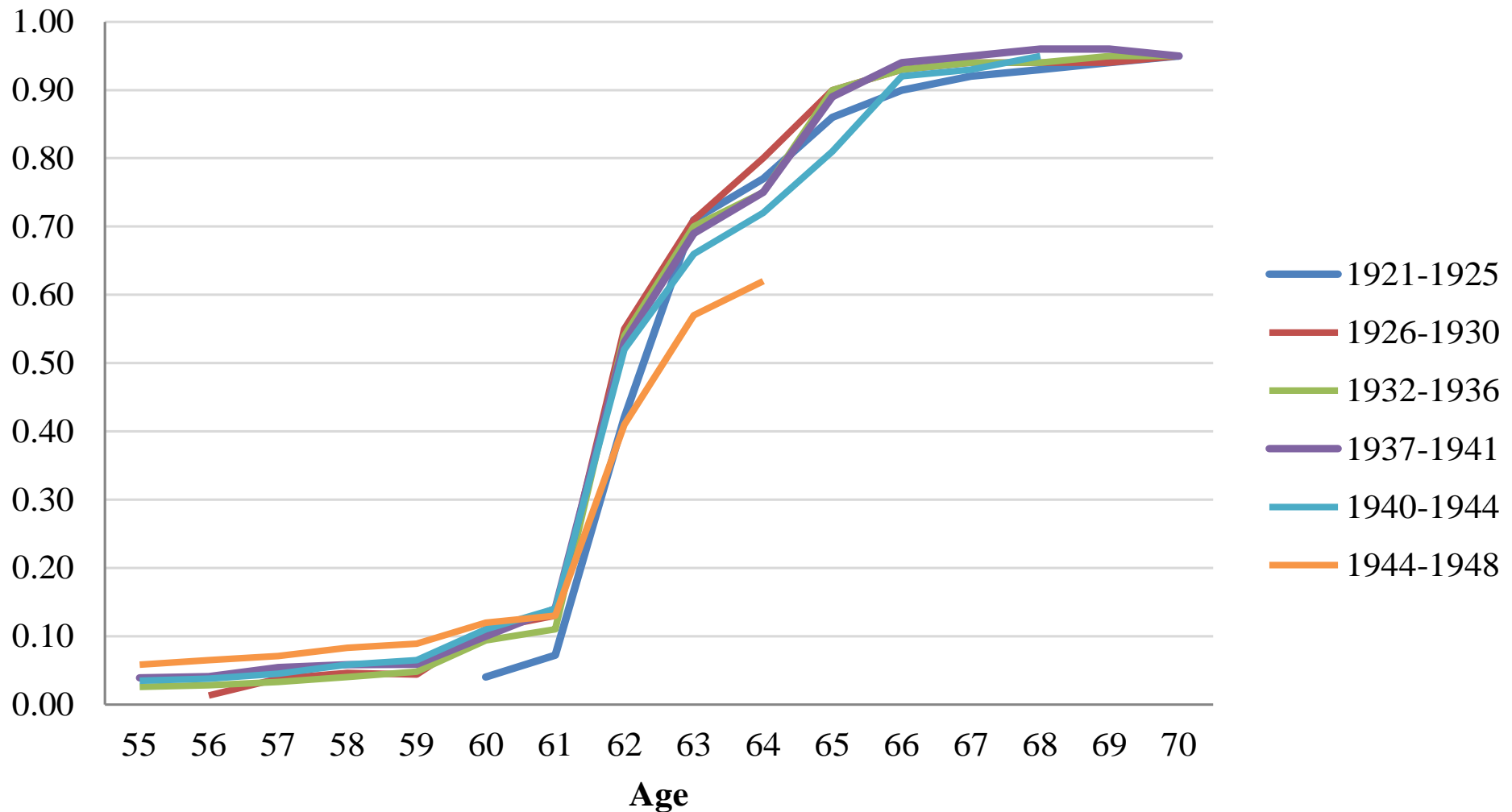
Source: SIPP-ADREC matched data

W2-P/1099-R Receipt At Age 64 (Not Married)



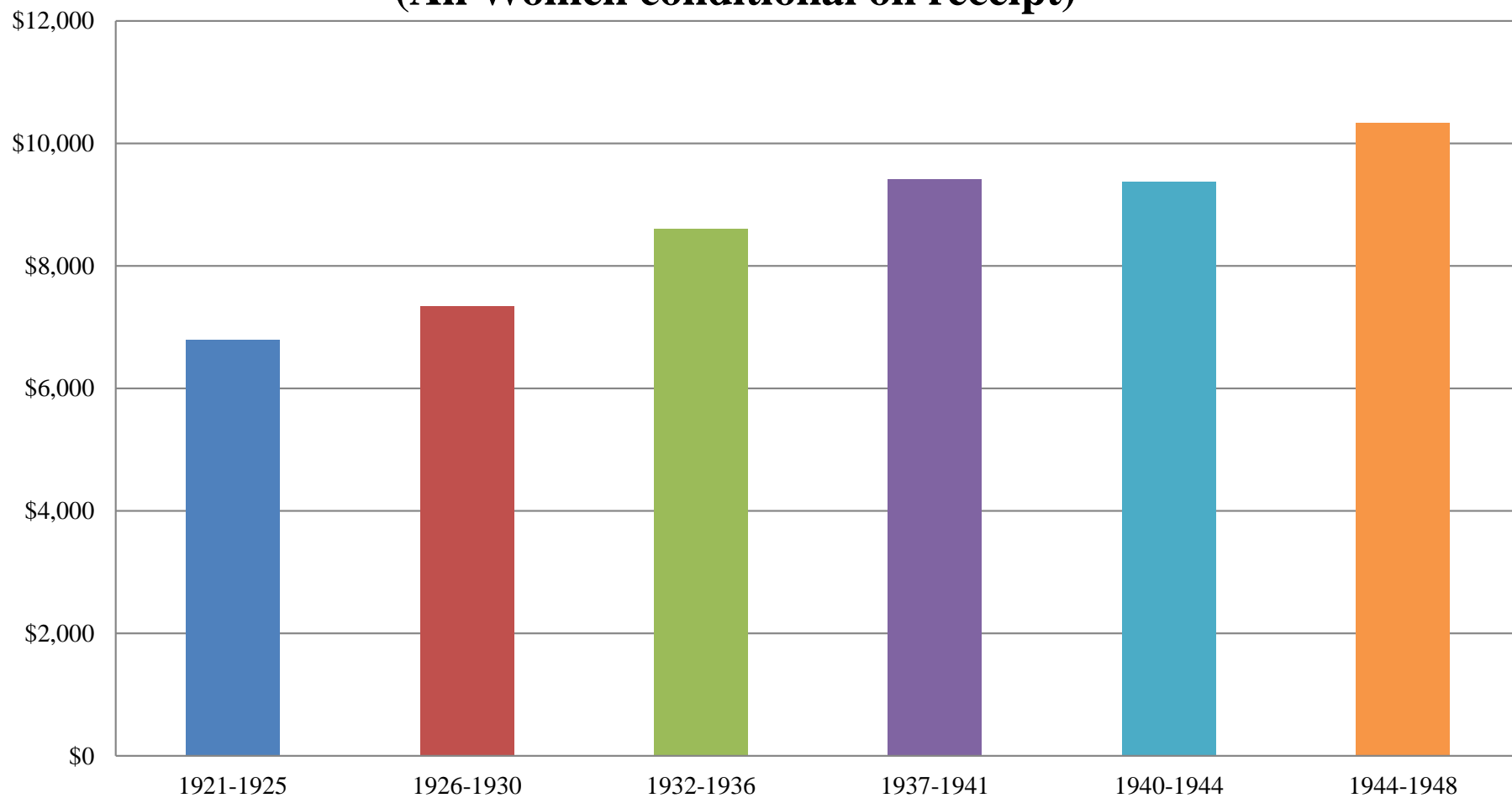
Source: SIPP-ADREC matched data

Social Security Receipt (All Women)



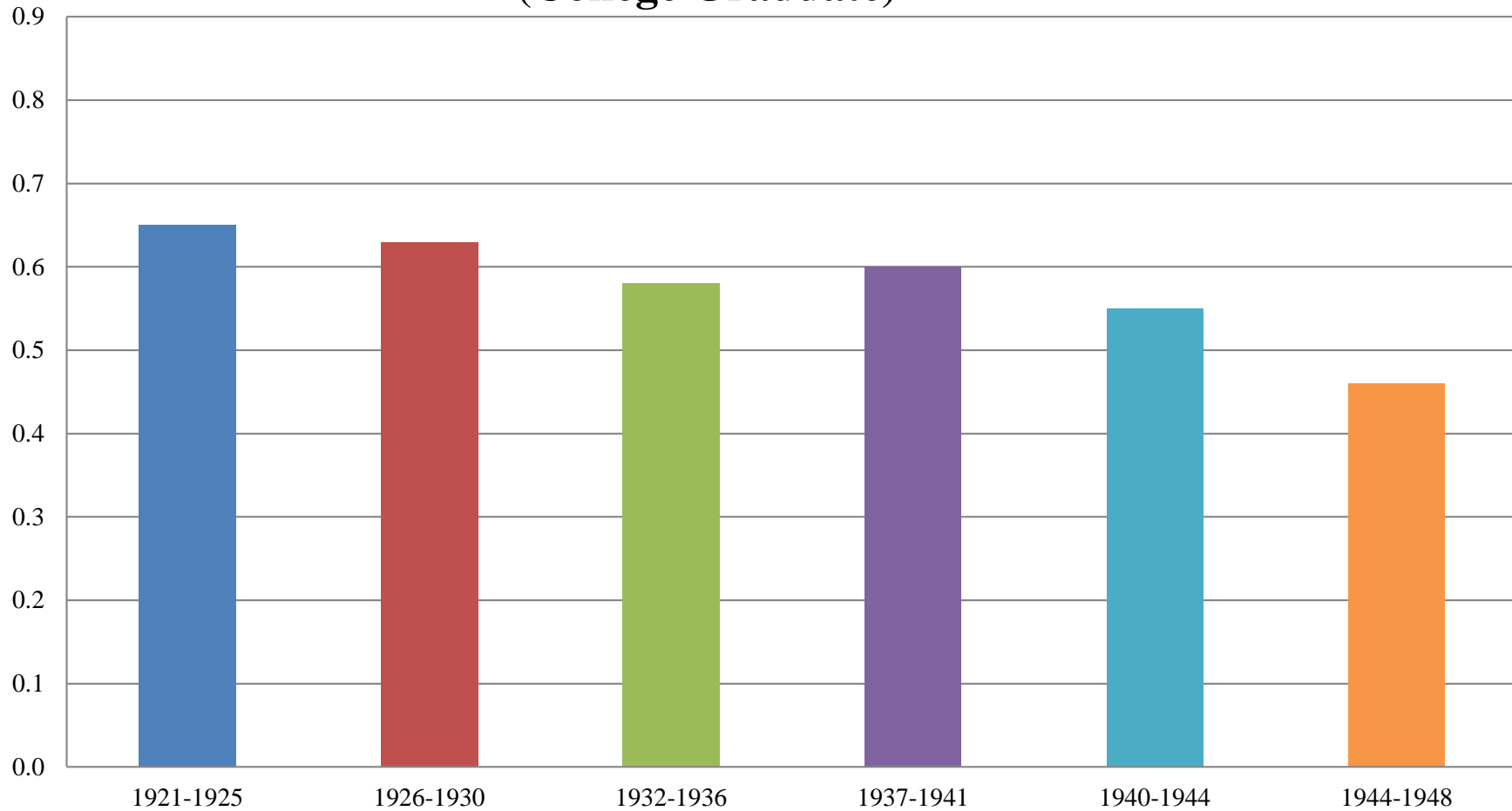
Source: SIPP-ADREC matched data

Social Security Median Amount At Age 64 (All Women conditional on receipt)



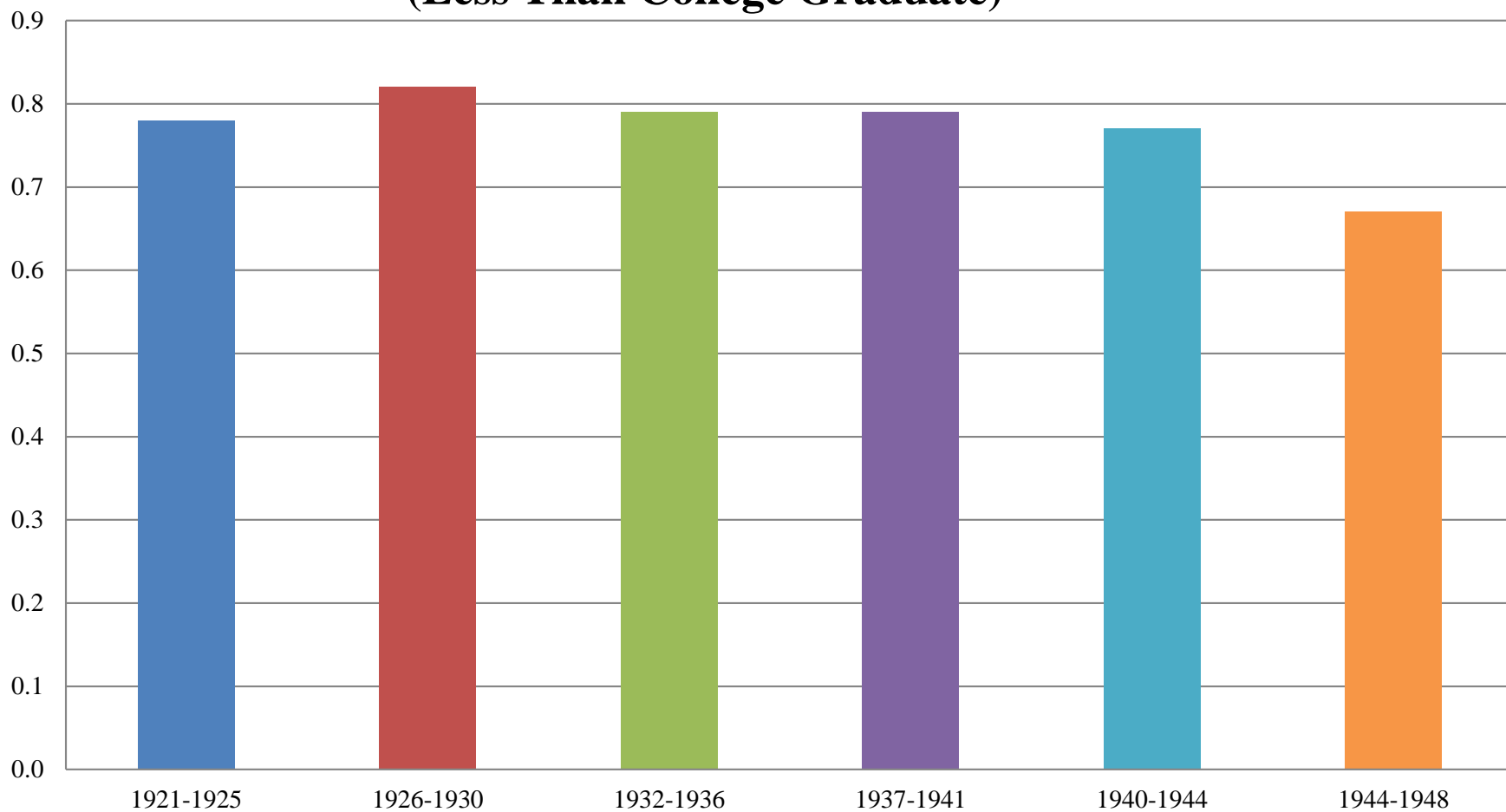
Source: SIPP-ADREC matched data

Social Security Receipt At Age 64 (College Graduate)



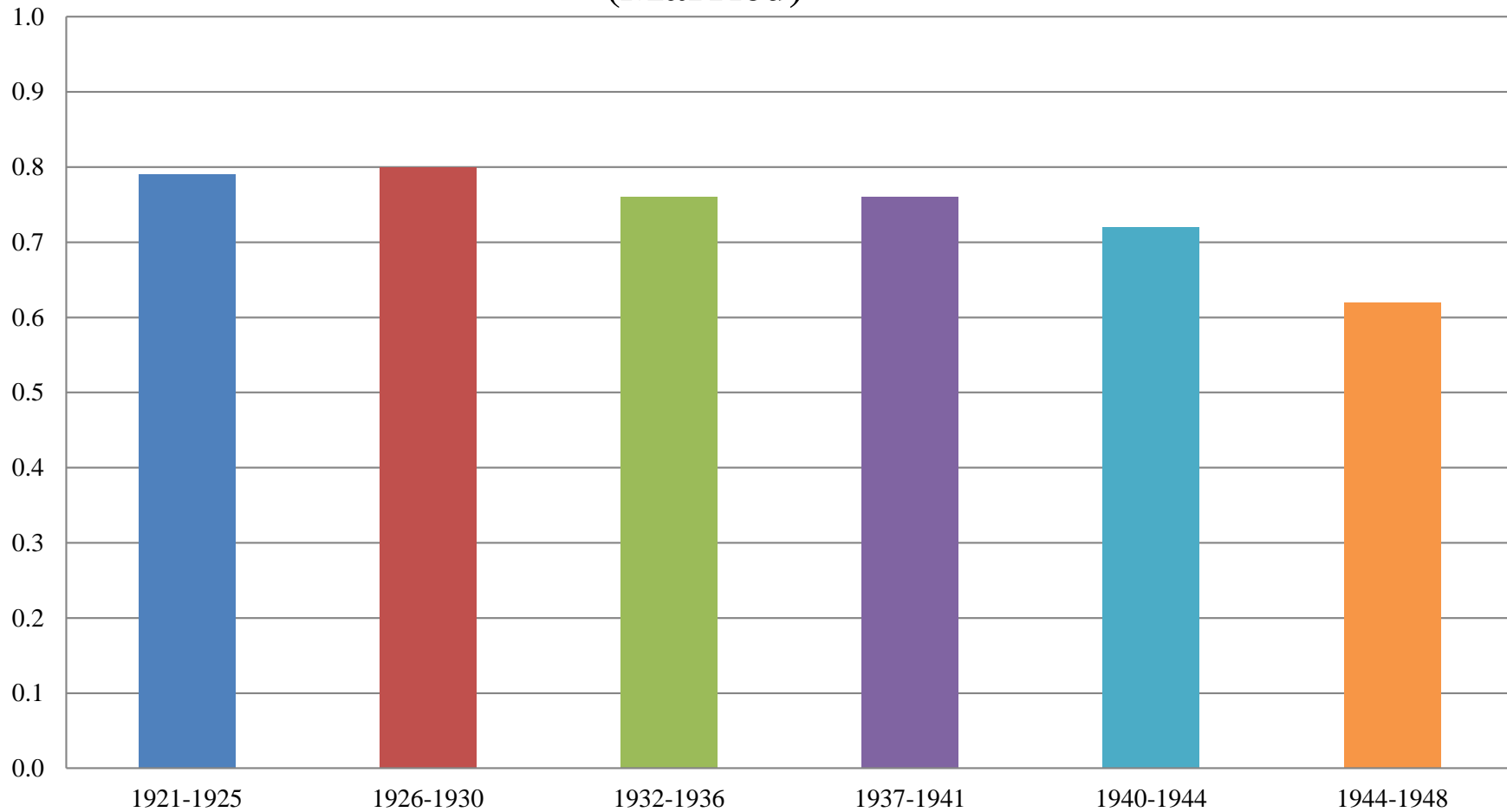
Source: SIPP-ADREC matched data

Social Security Receipt At Age 64 (Less Than College Graduate)



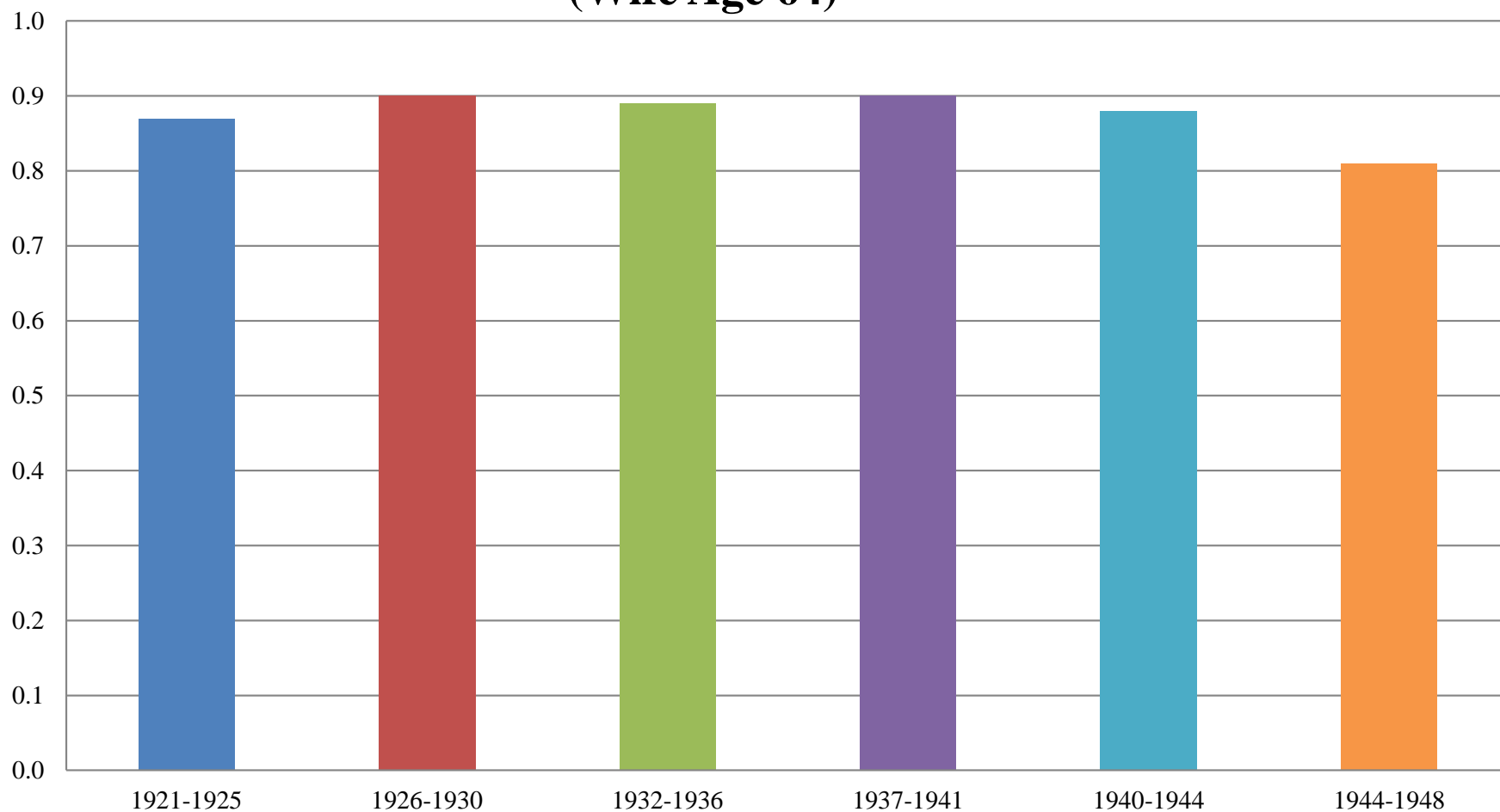
Source: SIPP-ADREC matched data

Social Security Receipt At Age 64 (Married)



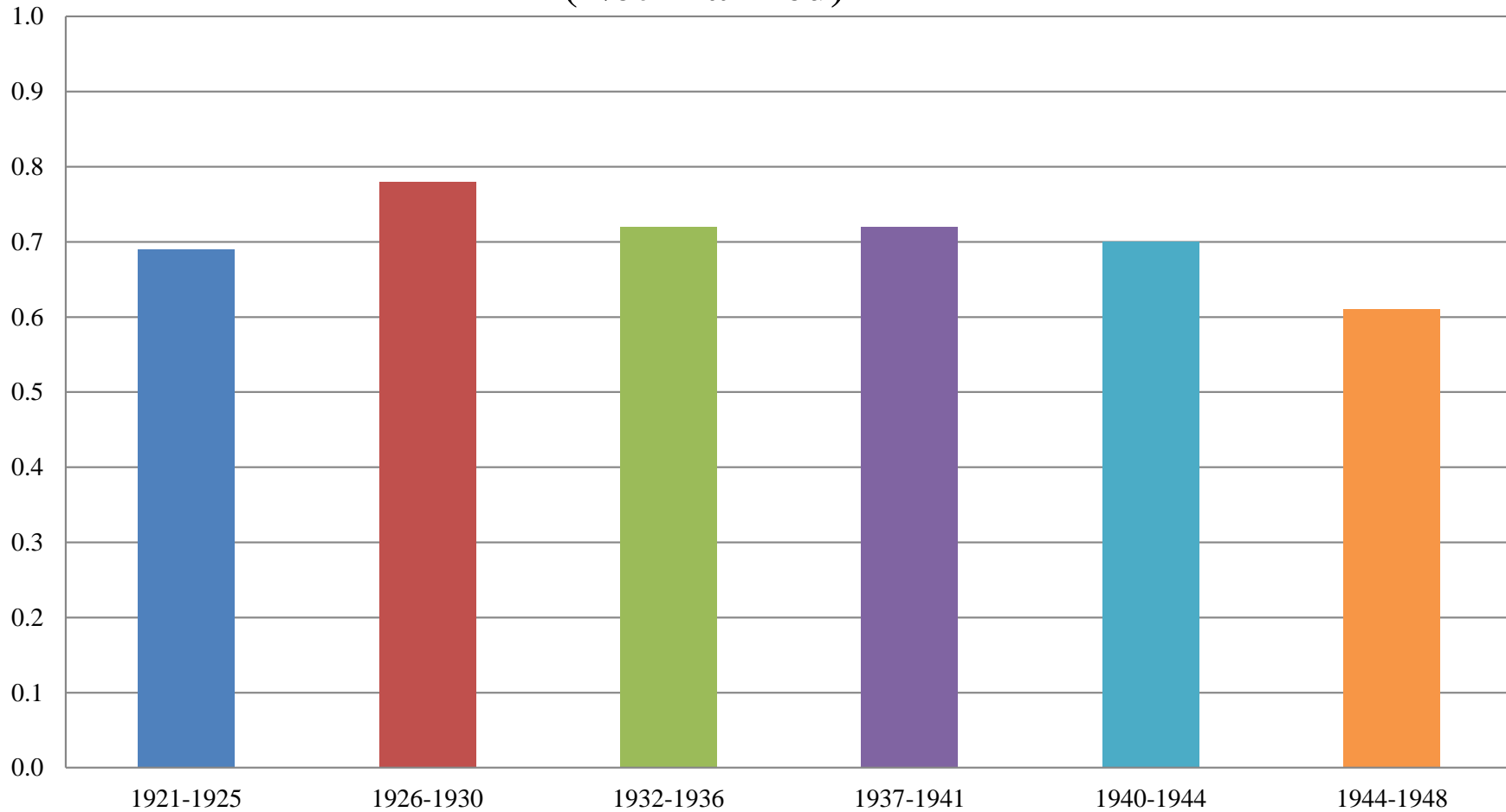
Source: SIPP-ADREC matched data

Either Spouse Receive Social Security (Wife Age 64)



Source: SIPP-ADREC matched data

Social Security Receipt At Age 64 (Not Married)

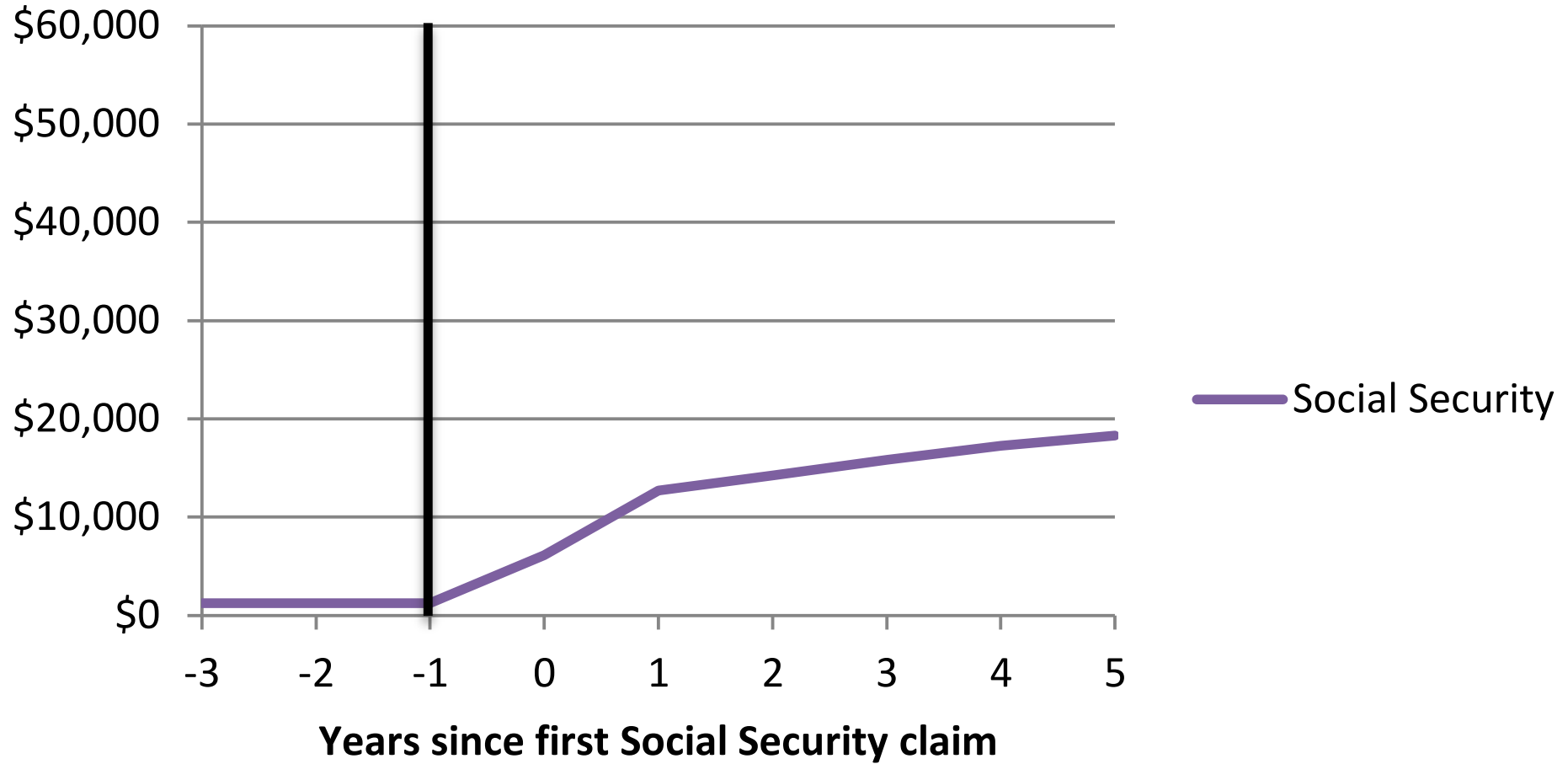


Source: SIPP-ADREC matched data

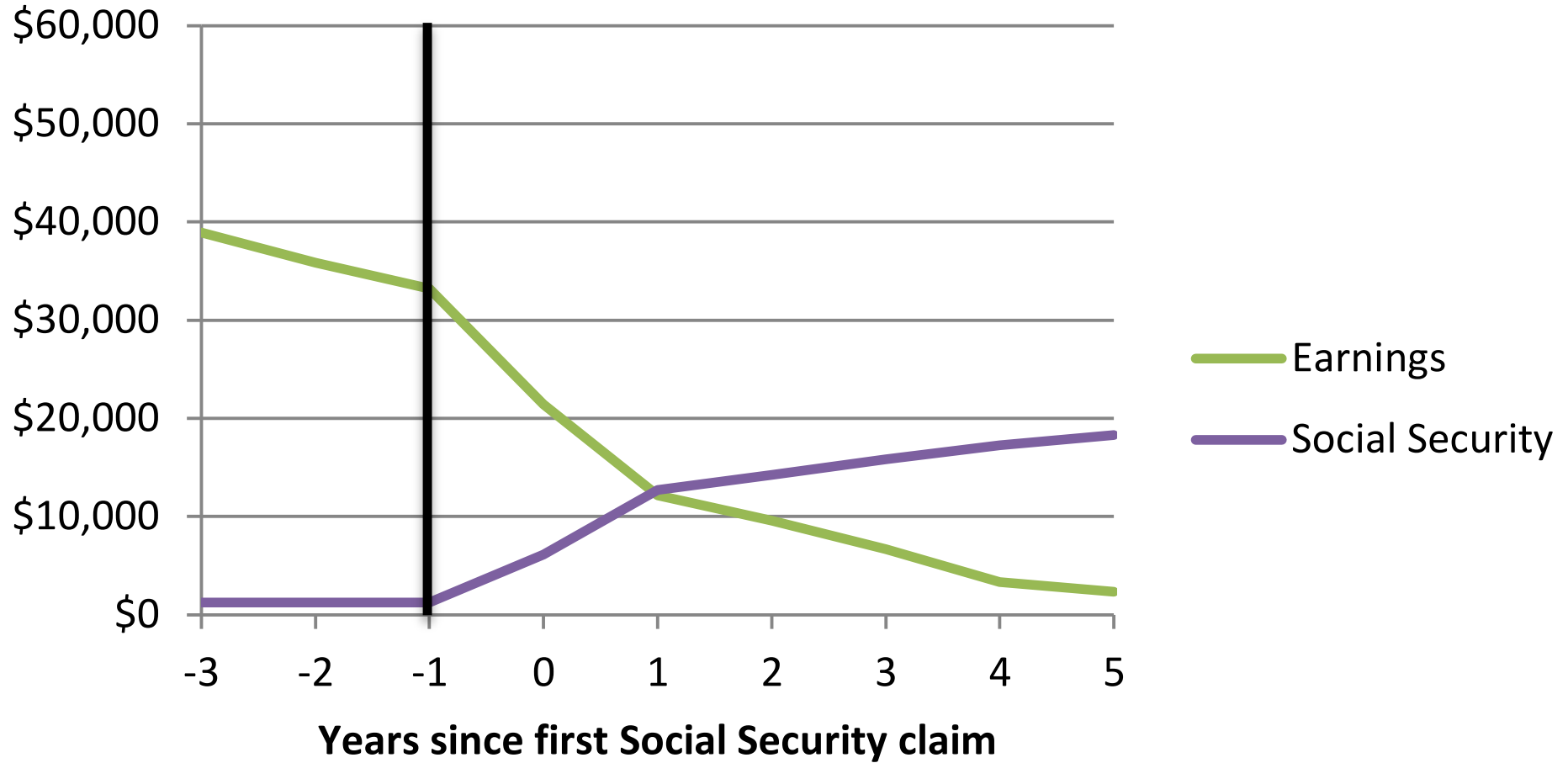
Event Study: How Does Women's Total Income change at retirement?

- Examine sample of women from 2008 panel who are either householder or spouse of householder
 - N=1500
- Define retirement event: year woman/couple first received social security benefits (select years 2003-2007)
- First received when age 60-70 and not claiming SSDI
- Measure real income of not-married women and married couples equivalence-adjusted

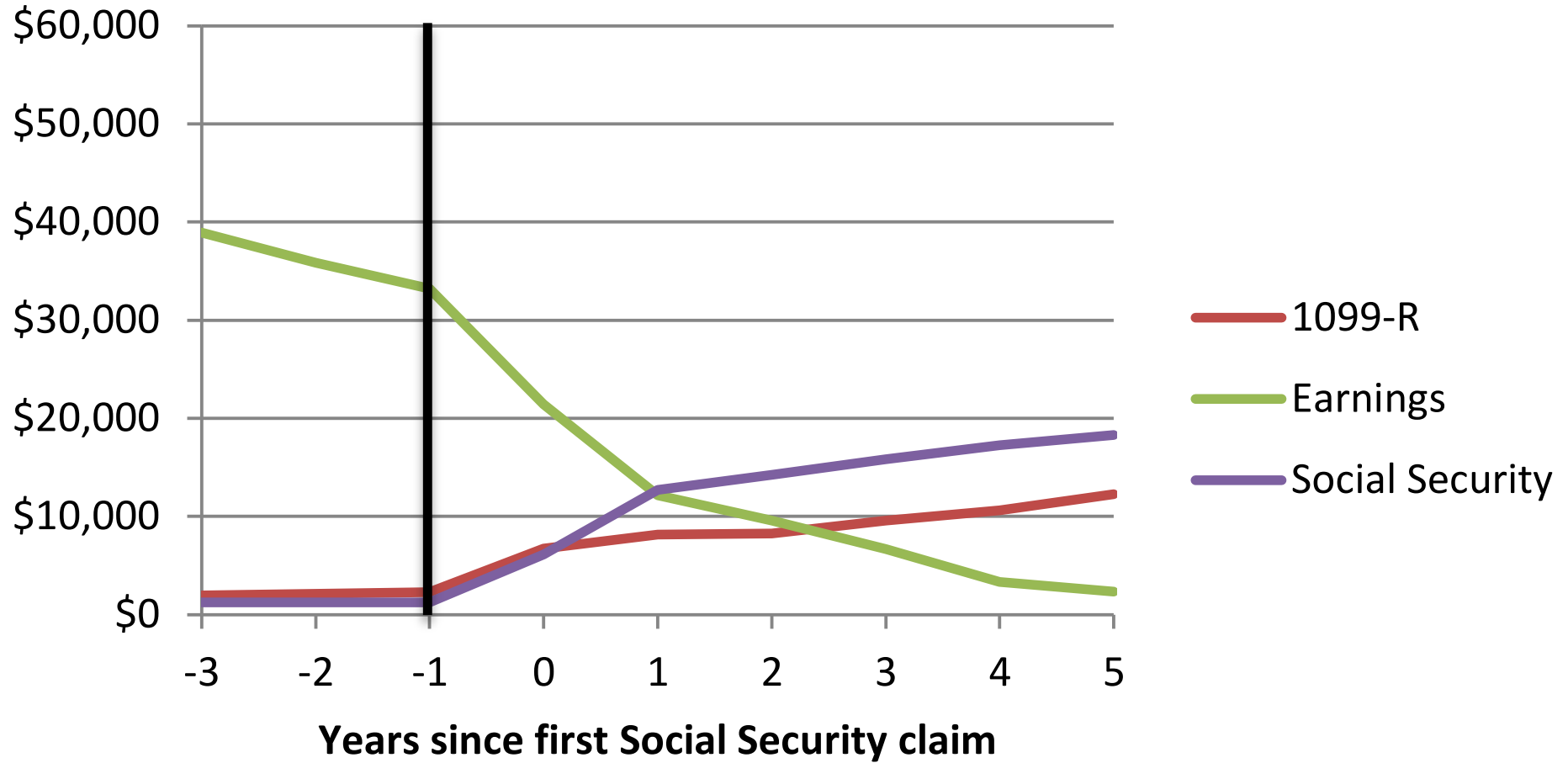
Real Median Income by Source



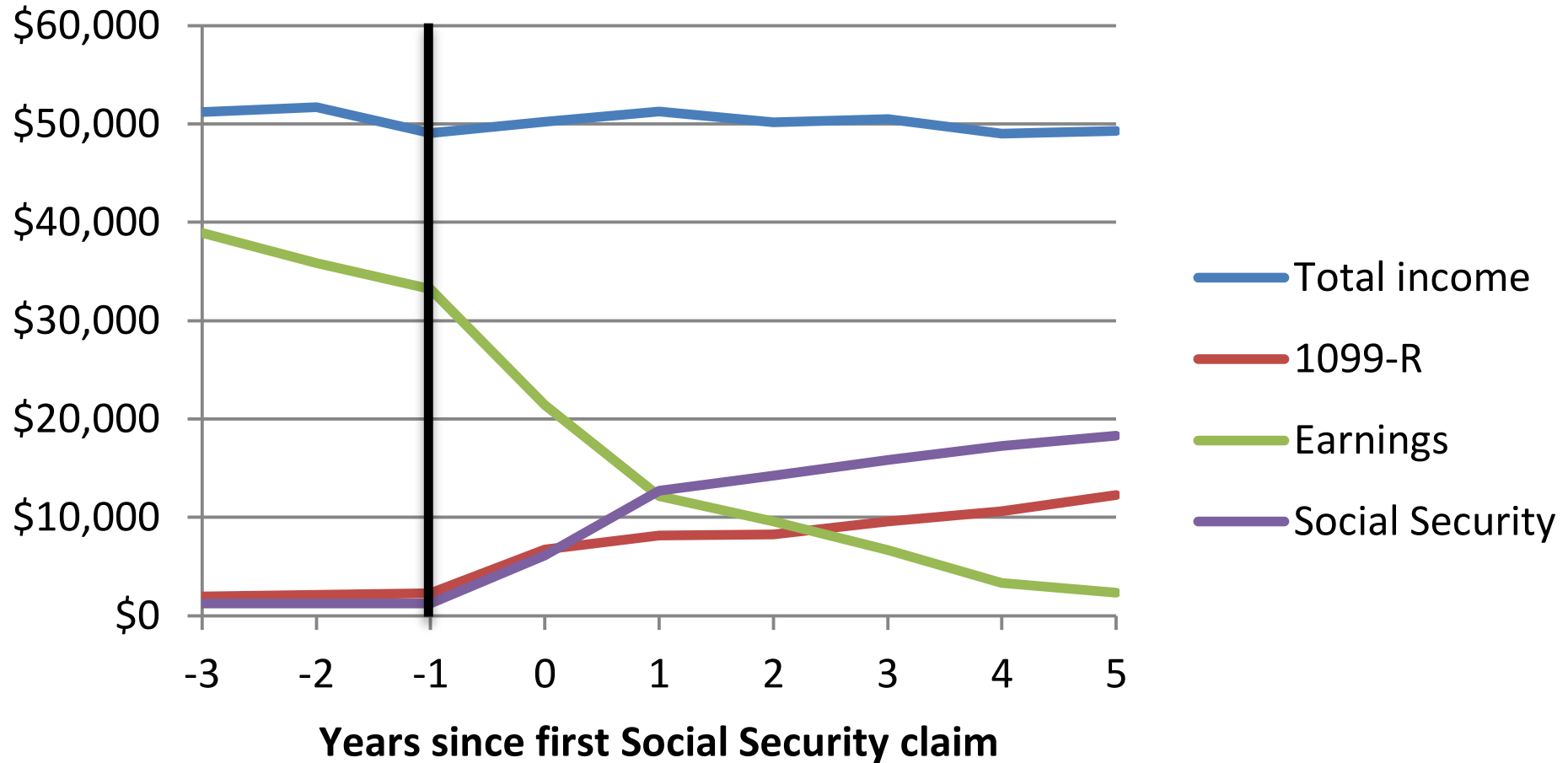
Real Median Income by Source



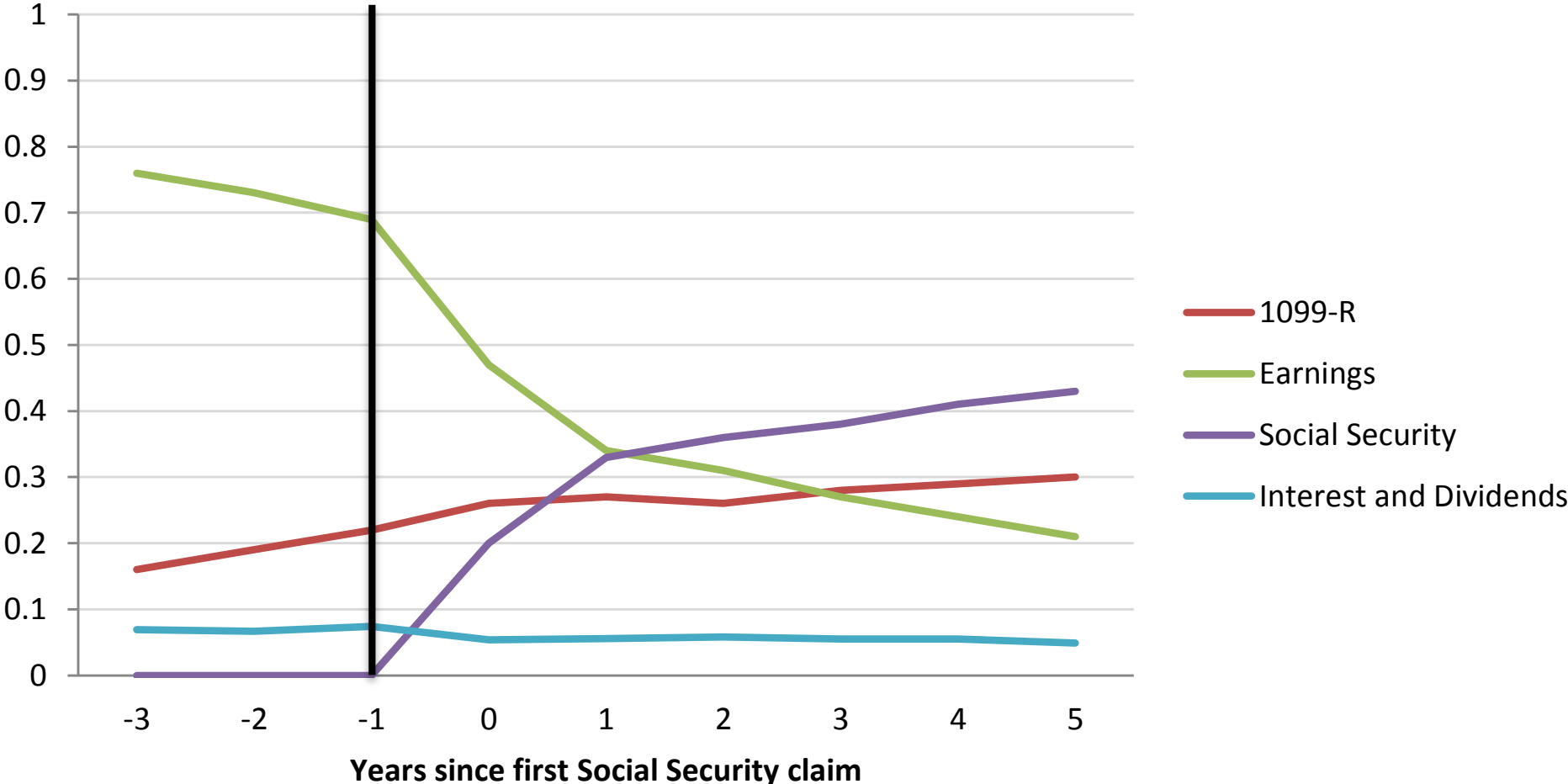
Real Median Income by Source



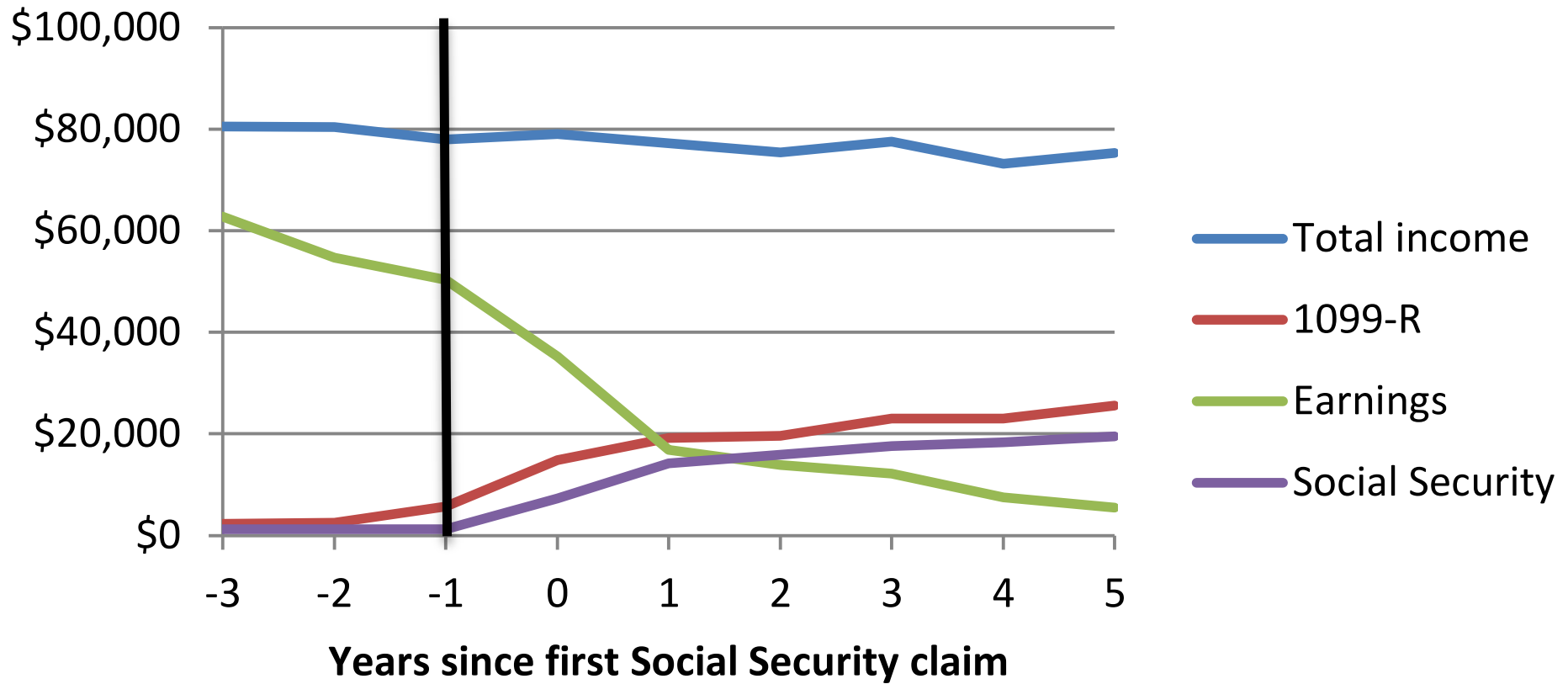
Real Median Income by Source



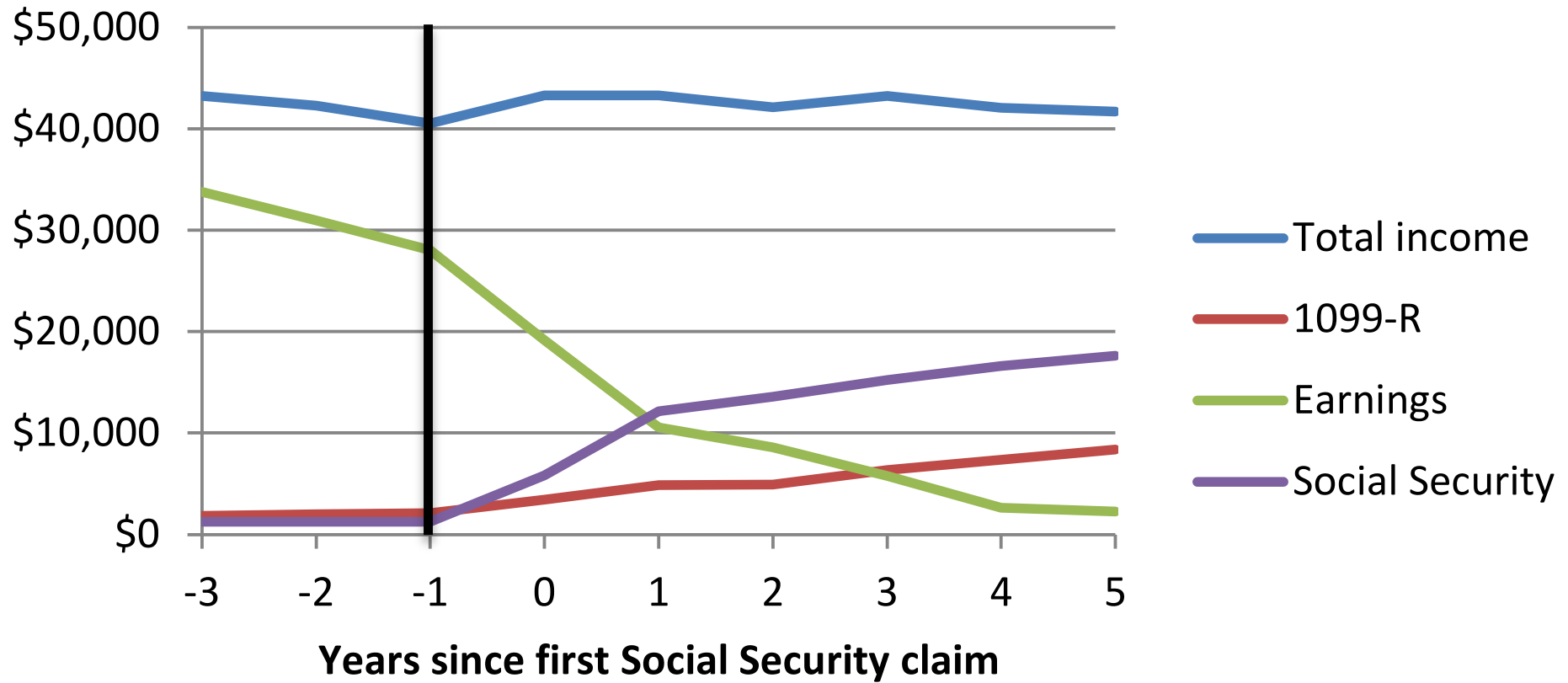
Shares of Total Income



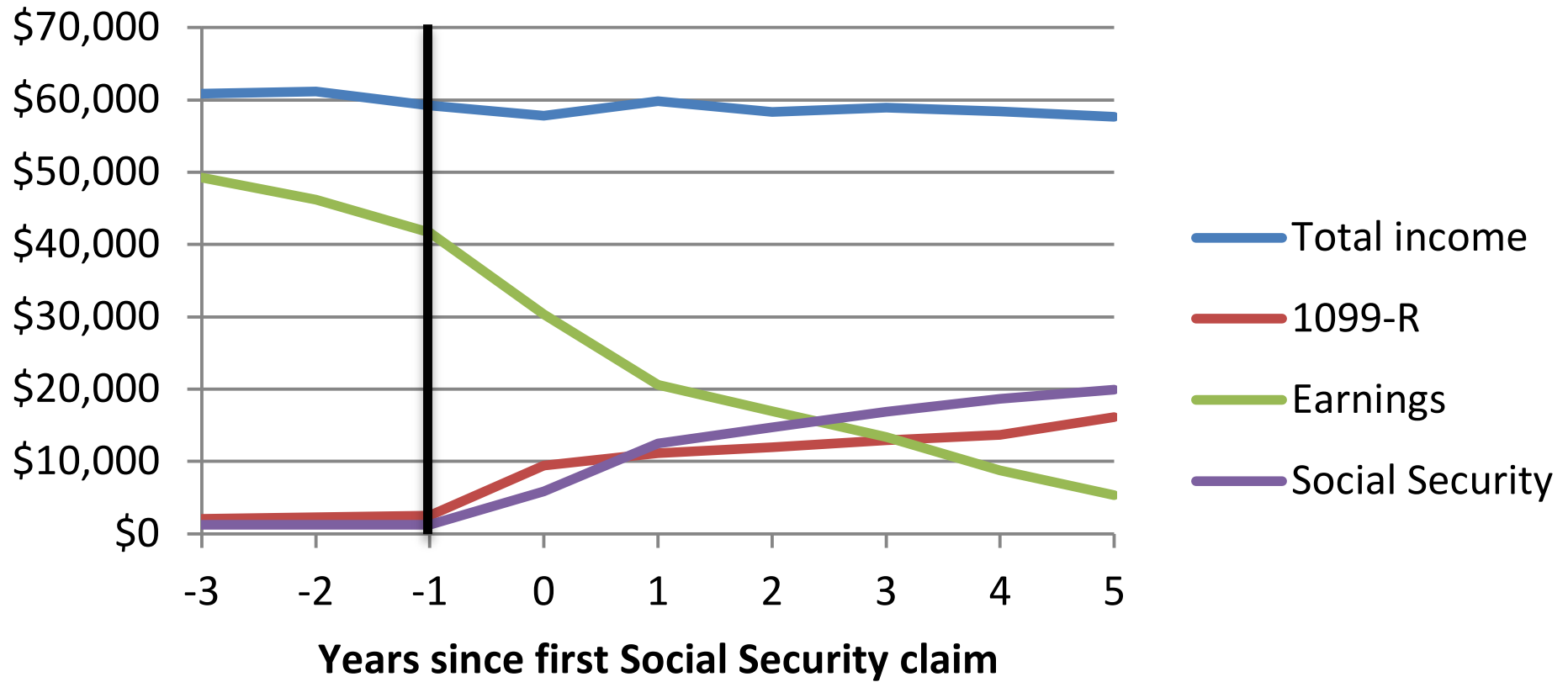
Real Median Income by Source (College Graduate)



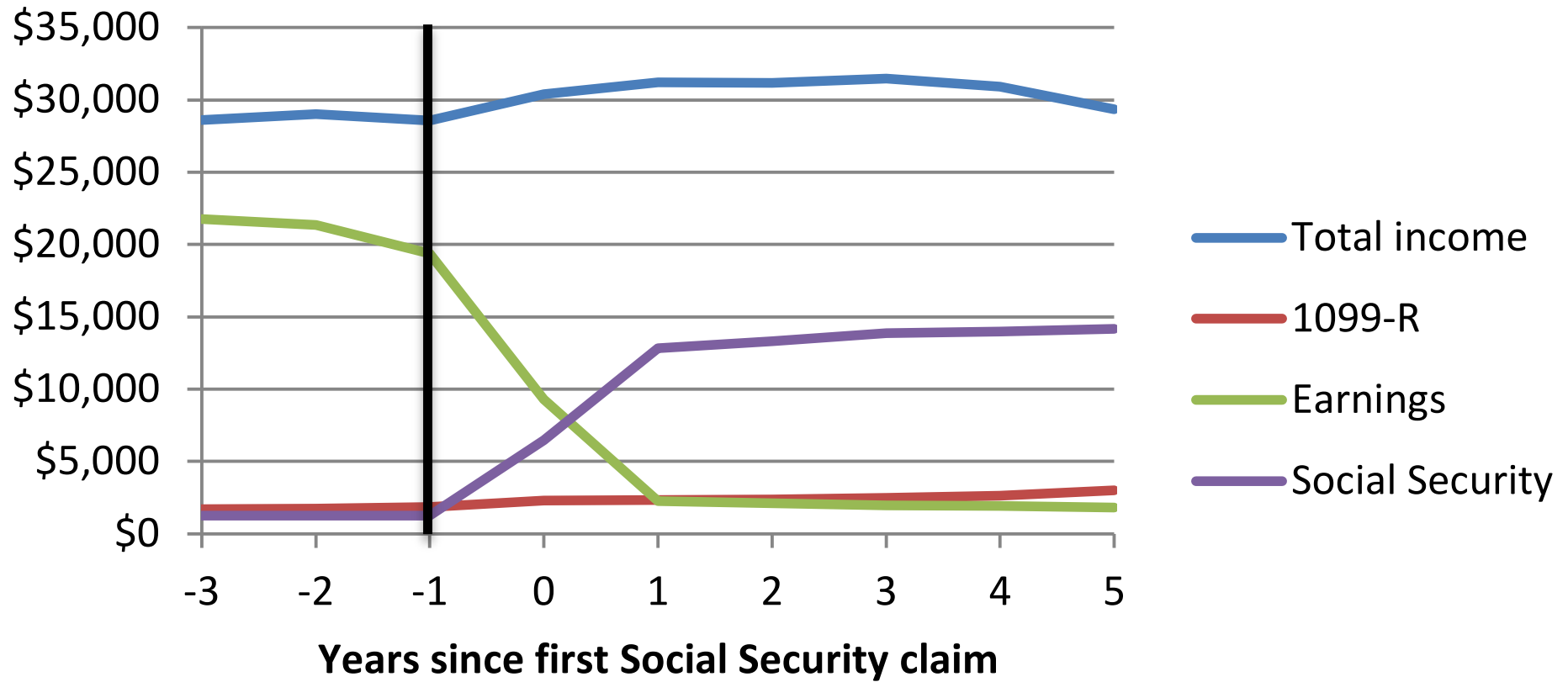
Real Median Income by Source (Not College Graduate)



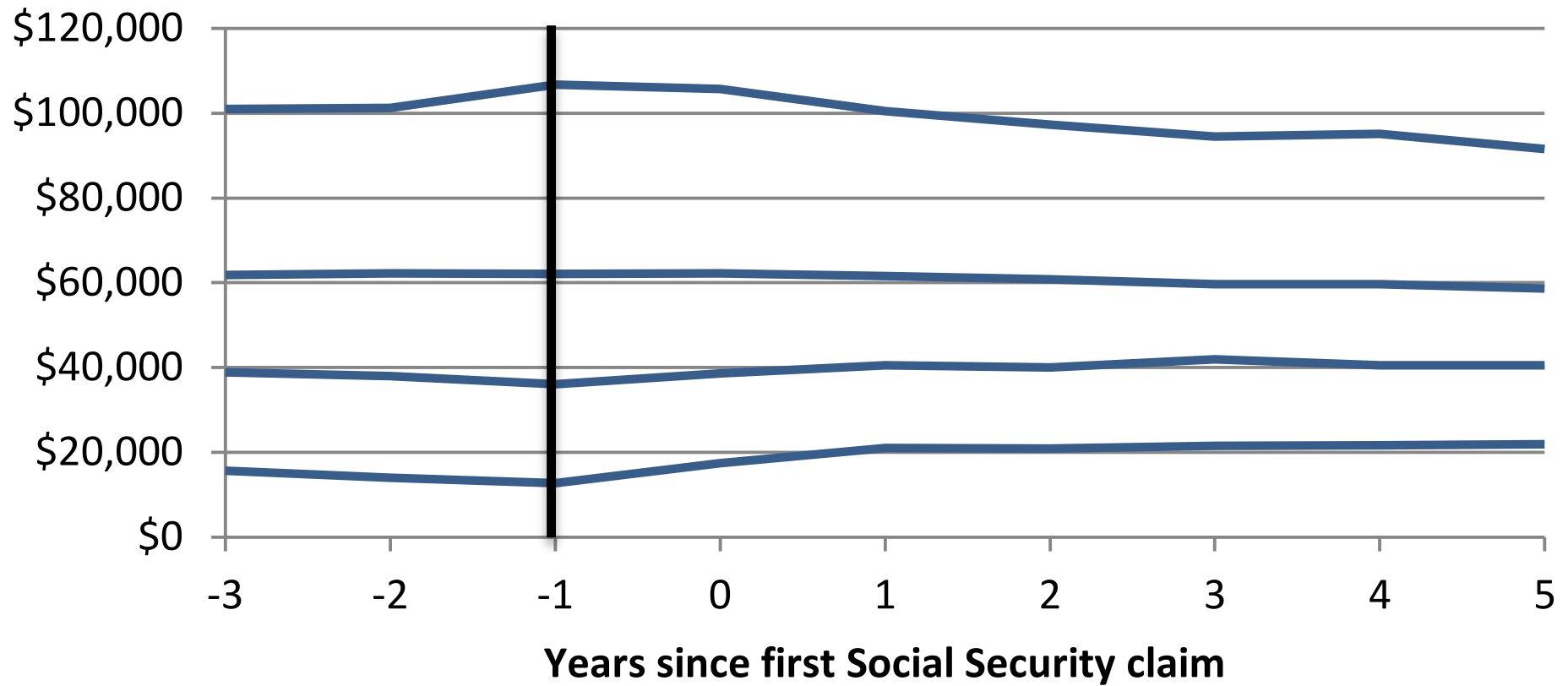
Real Median Income by Source (Married)



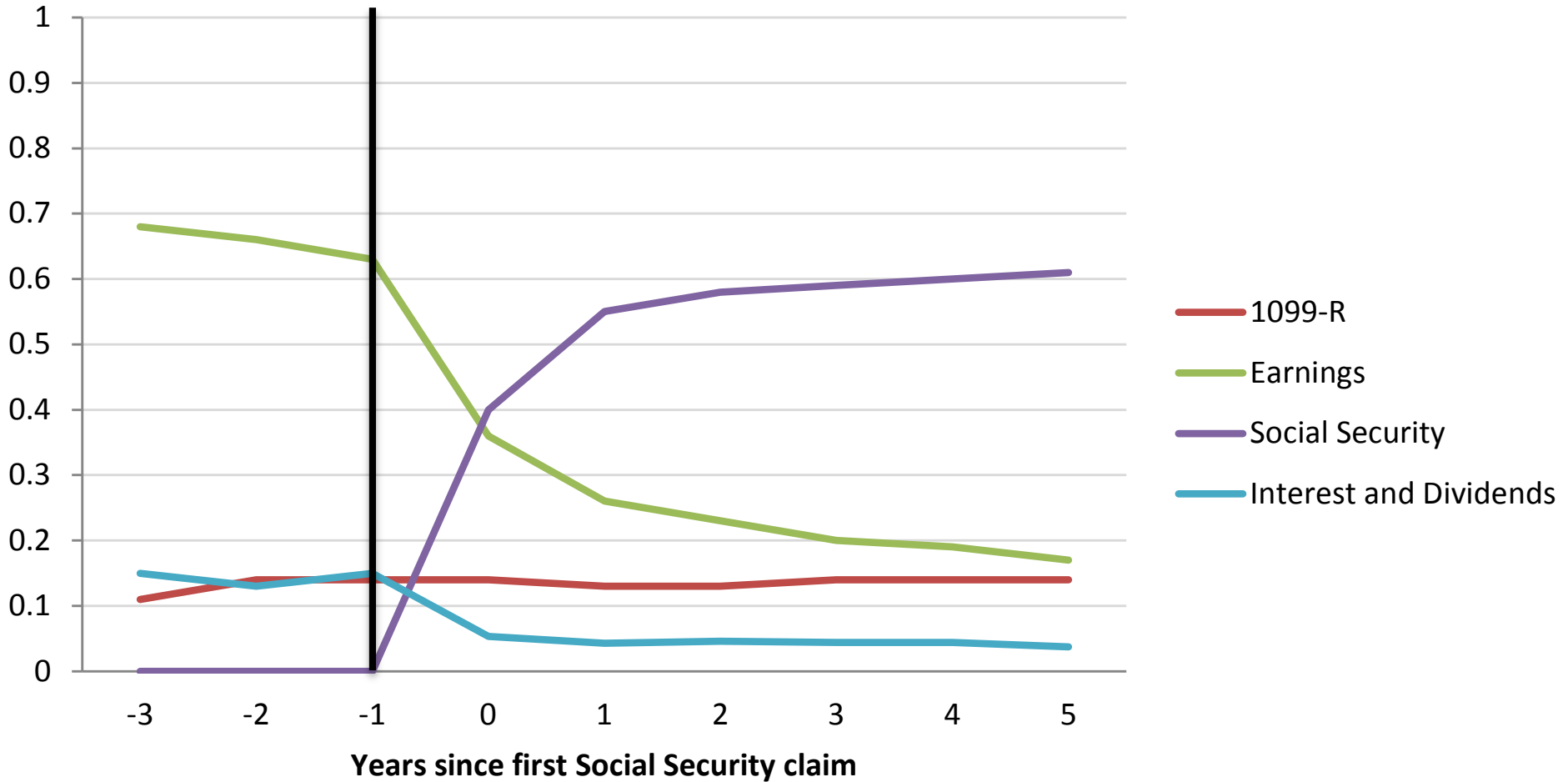
Real Median Income by Source (Not Married)



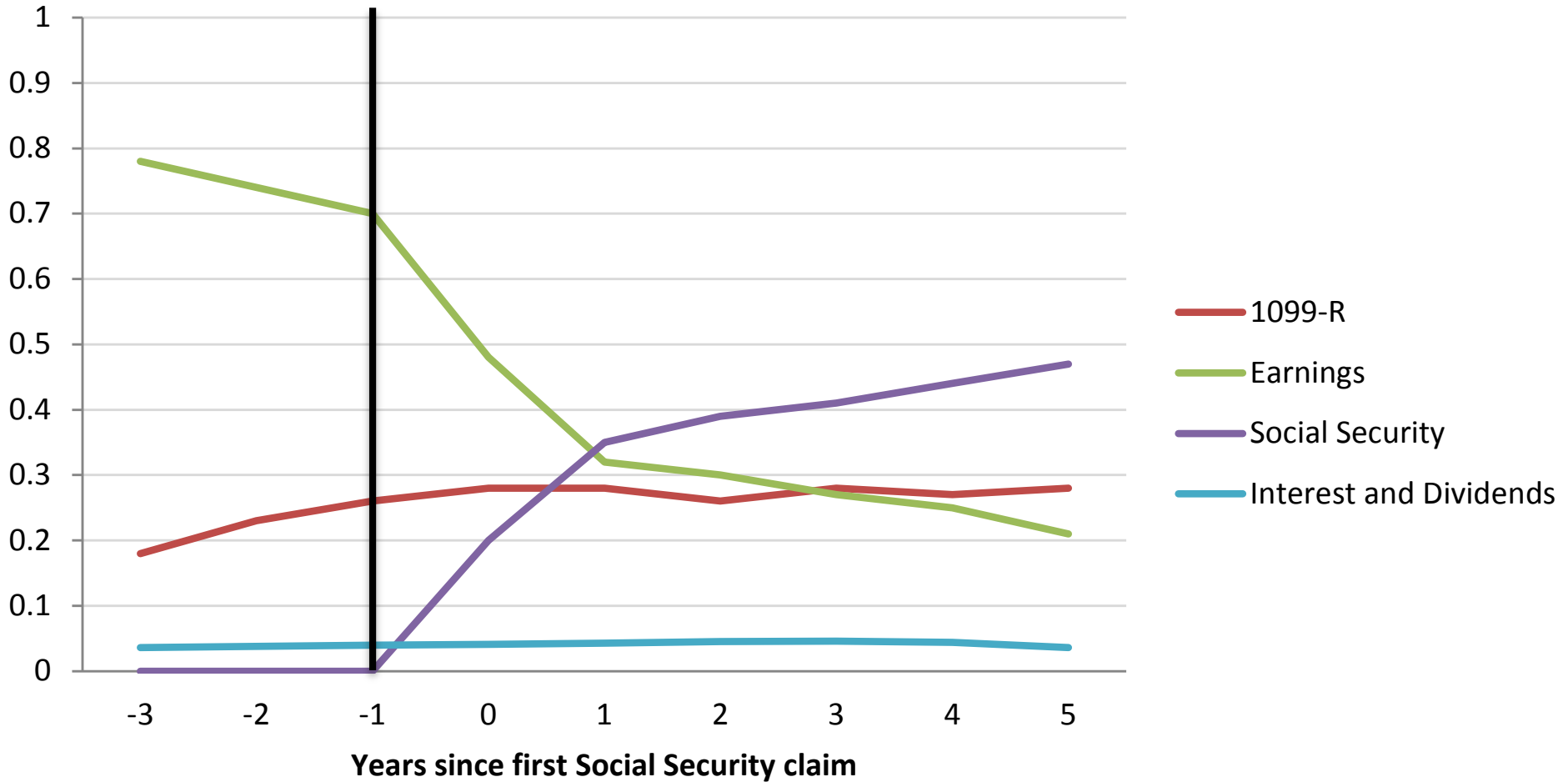
Real Median Income (By t-1 Income Quartile)



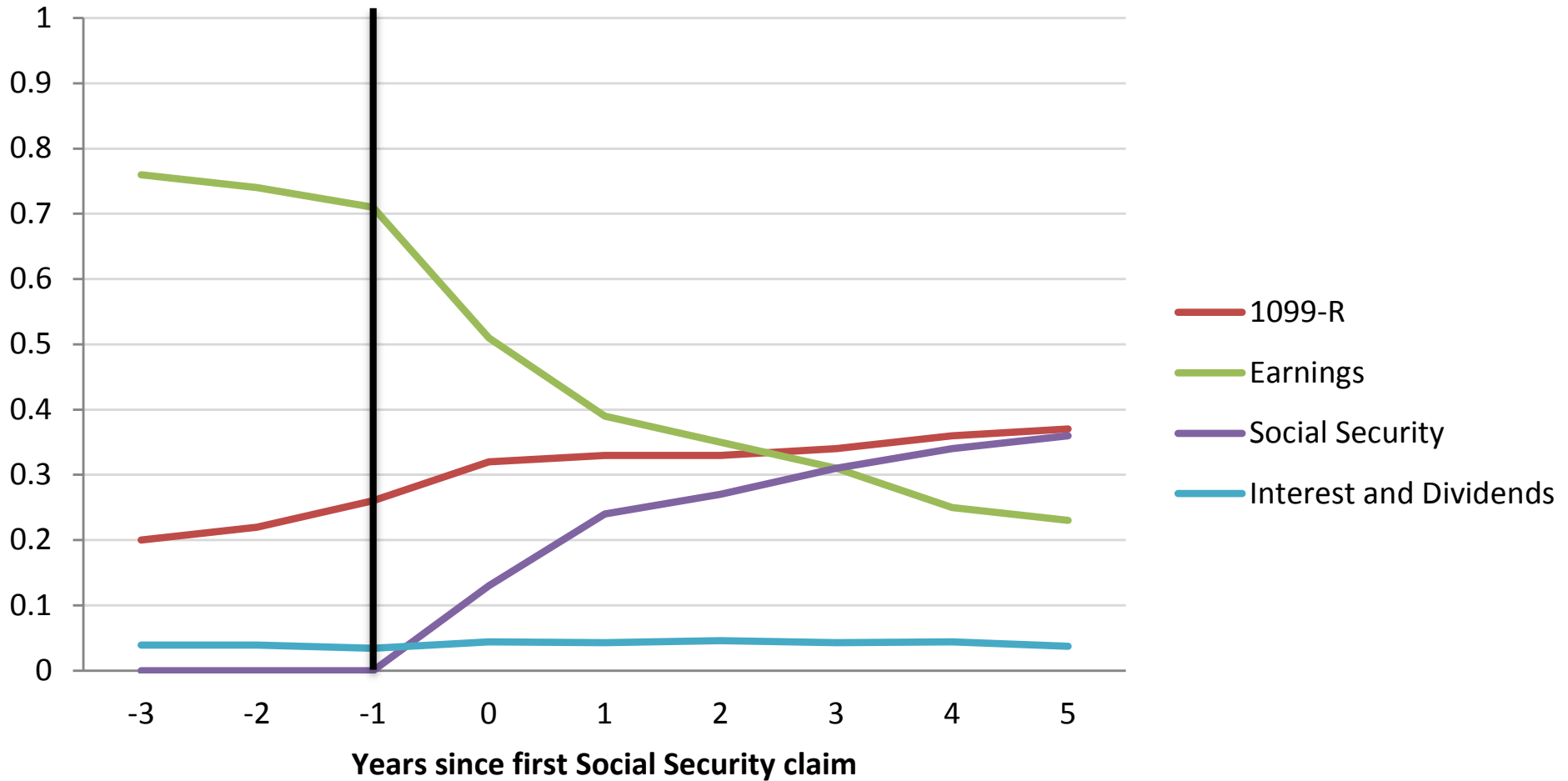
Shares of Total Income, Quartile 1



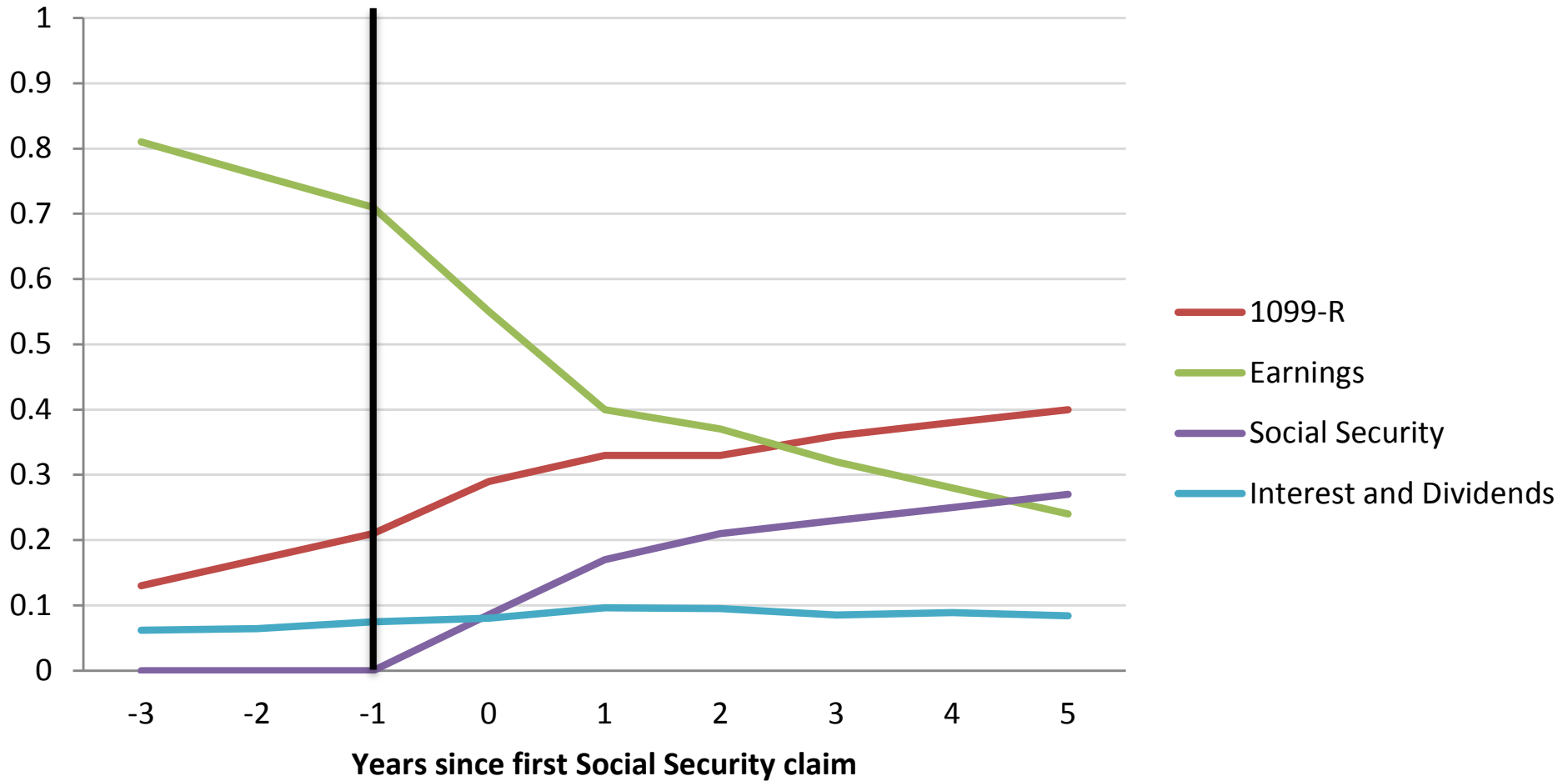
Shares of Total Income, Quartile 2



Shares of Total Income, Quartile 3



Shares of Total Income, Quartile 4



Conclusion

- Document growing divergence between survey and ADREC income among the population 65+
- Women are working longer, claiming OASI later and more likely to receive pension income and receive higher amounts of pension and OASI
- Recently retired women do not show evidence of large drops in income
 - Challenge to premise of “Retirement Consumption Puzzle”