



# Using Panel Tax Data to Examine the Transition into Retirement

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\* Views presented are those of the authors and do not necessarily represent the views of the Internal Revenue Service, or the views of the Investment Company Institute or its members.

# Motivation For the Paper

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- What happens to income near retirement?
  - Savings Crisis
  - Consumption Puzzle
- Administrative data offer another way to examine the issue
  - Income concept: consumable income
  - Enough consumable income to maintain standard of living?
- SOI Panel Data Users Group

# Outline

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- Data Description
- Defining the Event
- Sources & Measures of Income
- Analyzing All Retirees Using Information Returns
- Analyzing Filing Retirees Using Form 1040 and Information Returns

# DATA DESCRIPTION

# Data: SOI 1999 to 2008 Edited Panel

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- 1999 to 2008 panel of tax returns
  - Follows primary and secondary taxpayers who are in the 1999 SOI cross-section
- Make into individual based sample
  - Each individual on a joint return is an observation
  - Follows individuals even if filing status changes
  - Income measures presented will be per capita (splits joint income)
- Data from 1040 and related schedules & forms
  - Most items on front of the 1040
  - SOI total tax
  - Self-employment splits
- Uses 1999 sample weight

# Add Information Returns: More detail for filers, sole information for nonfilers

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- Forms W2, 1099-SSA, 1099-R, 5498
  - From W2
    - Compensation splits; FICA taxes; pension checkbox; Box 12 (but only some codes)
  - From 1099-SSA
    - Amounts and type: retirement or disability
  - From 1099-R
    - Amounts and type: early or normal; Roth or traditional; other
  - From 5498
    - IRA balance, contributions, Roth conversions
- Extensive cleaning
  - Multiple forms per taxpayer – requires “bucketing”
  - Amended forms
  - Not part of SOI editing

# Description of the Primary Sample

- Nondependent returns
- In 1999:
  - Age 55 to 61
  - Own Work Income: W2 wages, tips, or self-employment earnings
  - No own 1099-SSA

	<b>Weighted Sample (thousands)</b>
Age 55 to 61, alive, and filing	15,775
Wage & salary, business, or farm, reported on 1040	14,666
Self or spouse have a W2, tips, or self employment	14,426
Own W2, tips, or self employment	12,319
No own Social Security benefits	12,012

# Summary of Preliminary Investigation of the Data

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- Tax return data not representative of over age 65 population due to nonfiling
- Tax data appears to be more representative of sample of interest: age 55 to 61, still working, no Social Security (most file a return)
- Tax data has more pension, annuity, and IRA income than the CPS
- Need Form 1099-R data for Social Security: underreporting and distinguishing between disability and retirement benefits

# DEFINING THE EVENT

# Transitions into Retirement

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- Examine transitions relative to first year taxpayer receives their own Social Security retirement benefits
- Of the 12.0 million in taxpayers in 1999, by 2008:
  - 9.4 million (78%) are observed with own SS benefits
  - 0.5 million (4%) die before they receive benefits
  - 2.1 million (18%) alive but have not claimed
- Questions for analysis:
  - What is the basis for comparison?
  - What is the period of transition?

# Compare Income to Year Before Retire

- Call year of first Social Security retirement receipt year  $t$
- Year before is year  $t-1$
- Compare year  $t+x$  to year  $t-1$

## Two Samples For Analysis

### Sample 1 (using information return data)

- Retire in 2000 to 2005 (65% of observed retirements from 2000 to 2008)
- Alive for 3 years after first receipt of Social Security (97% of those who retired in 2000 to 2005)

### Sample 2 (using 1040 data)

- File in all years from  $t-1$  to  $t+3$  (85% of those who retire in 2000 to 2005)

# Affect on Sample of Selecting Period of Analysis

	1999 Income Category						
	1 <sup>st</sup> quintile	2nd quintile	3rd quintile	4th quintile	75th to 95 <sup>th</sup>	95th to 99th	Top one percent
<b>Percent claiming Social Security by 2008</b>	80%	83%	80%	76%	76%	66%	67%
<b>Percent of those claiming by 2008 who claim by 2005</b>	70%	66%	66%	65%	59%	56%	56%
<b>Percent claiming by 2005 who are alive 3 years after first claim</b>	96%	98%	97%	99%	97%	97%	100%
<b>Percent claiming by 2005 who file a return from t-1 to t+3</b>	67%	81%	90%	94%	95%	96%	99%

# **SOURCES & MEASURES OF INCOME**

# Sources of Income

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- Work related income
  - W2 earnings
  - Self-employment earnings
  - Pension distributions
  - IRA distributions
  - Social Security Benefits
- Everything else

# Measures of Income

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- Net Income
  - Capital and labor income less savings and taxes
- Information return only (for tabs with nonfilers)
  - Form W2, 1099-SSA, and 1099-R
- 1040 data plus information return (for filers)

# Work Related Income

## Form 1040 Work Related Income (for filers)

- Earnings = wage and salary + self-employment + total Social Security benefits + taxable IRA distributions + taxable pension and annuity distributions + Roth distributions – deductible IRA contribution – nondeductible IRA contributions – Keogh, SEP & SIMPLE contributions – Roth contributions – self employed health deduction
- Net: net of federal income and payroll taxes and self-employment taxes

## Information Return Work Related Income Measure (for both filers and nonfilers)

- Earnings = W2 wages + W2 tips + 1099-R traditional pension and IRA distributions + 1099-R Roth pension and IRA distributions + some other 1099-R income (excess contributions, recharacterized IRA contributions, deemed distributions, due to death and disability) + 1099-SSA Social Security benefits – 5498 traditional and Roth IRA contributions – W2 Roth deferrals
- Net: net of federal income taxes (if filing) and payroll taxes

# **ANALYZING ALL RETIREES USING INFORMATION RETURNS**

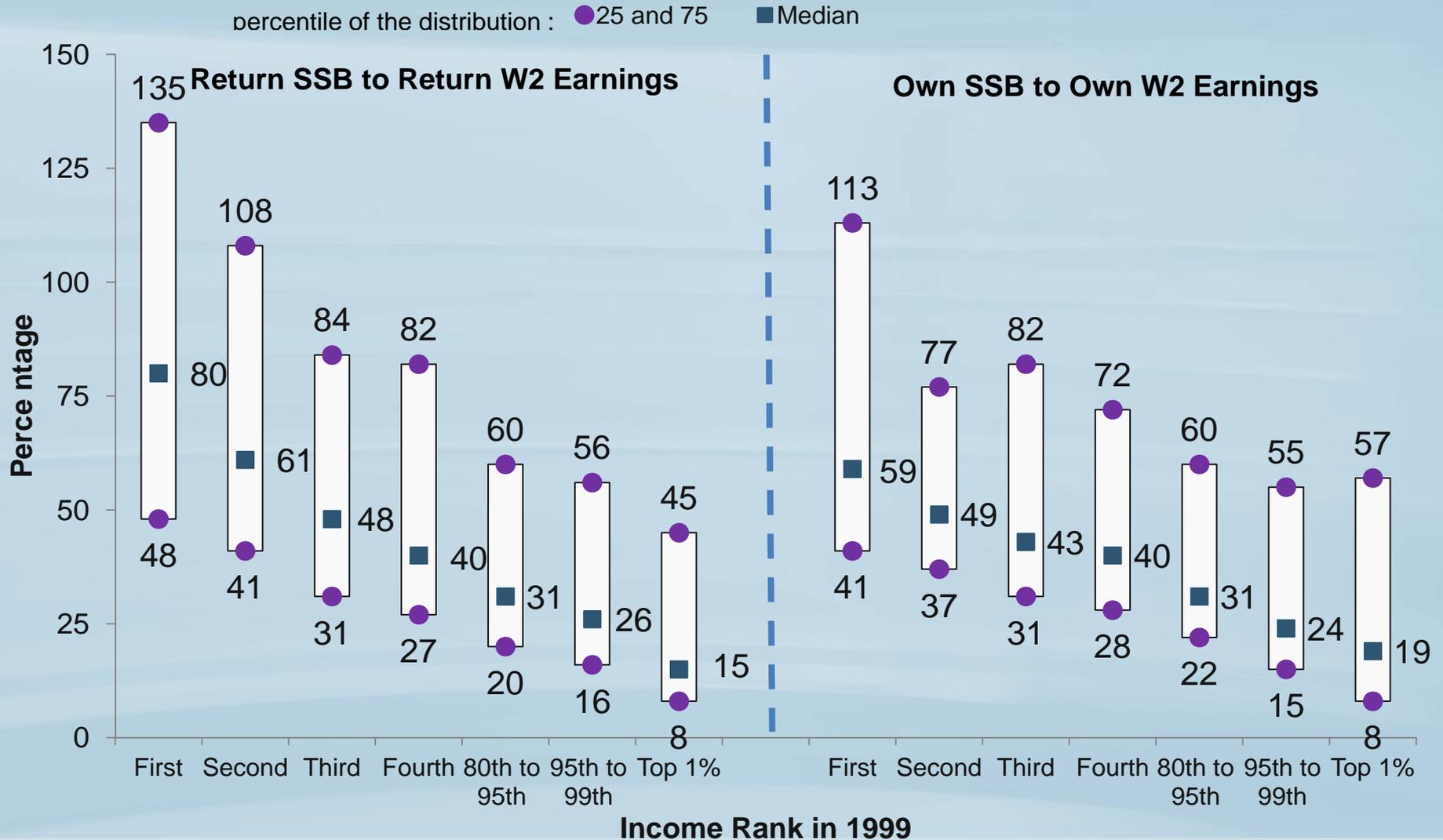
# Ratio of Real Social Security Benefits to Real W2 Earnings In Year t-1

Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, alive in t+3

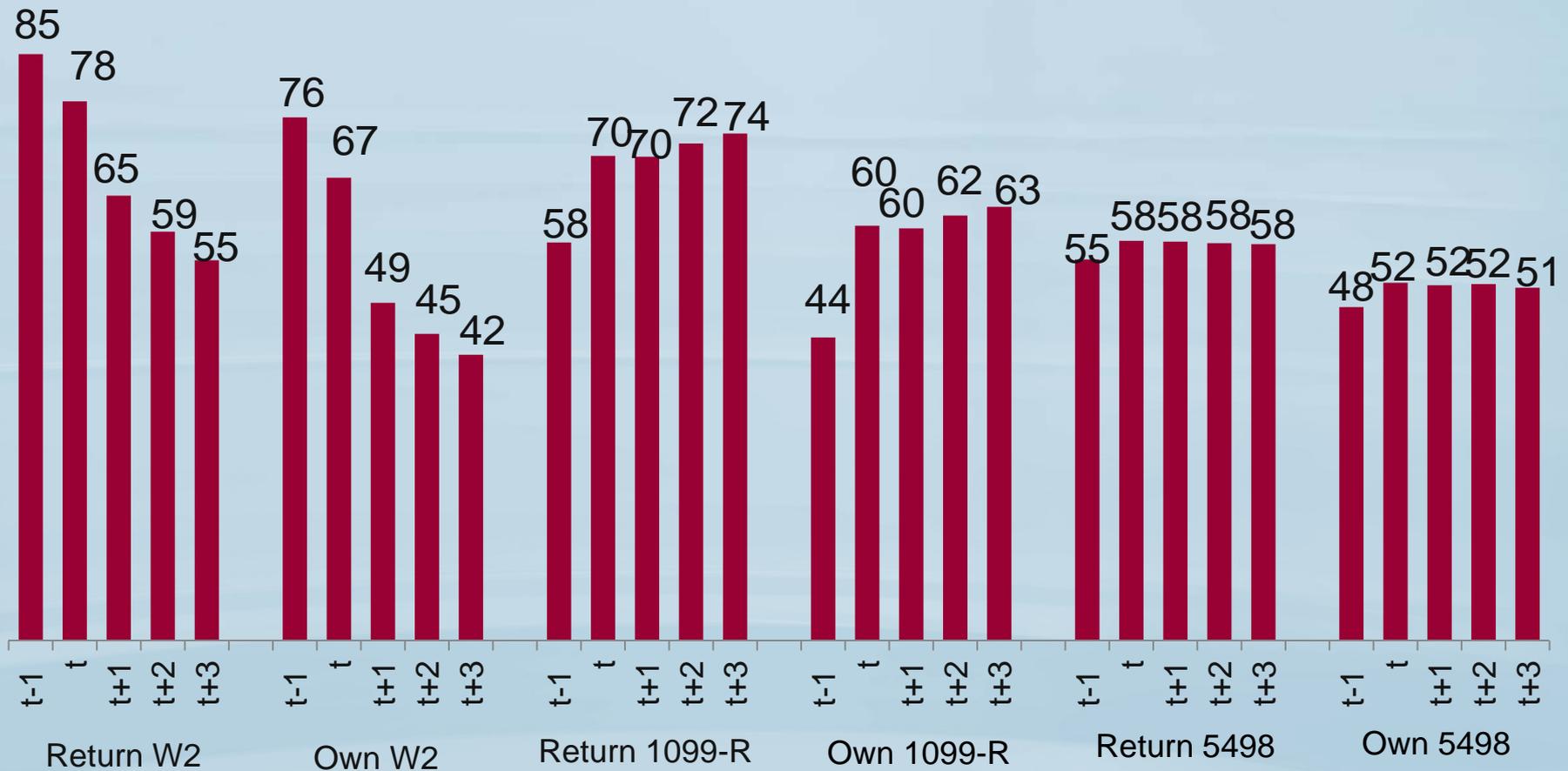


# Ratio of Real Social Security Benefits in Year t+3 to Real W2 Earnings In Year t-1

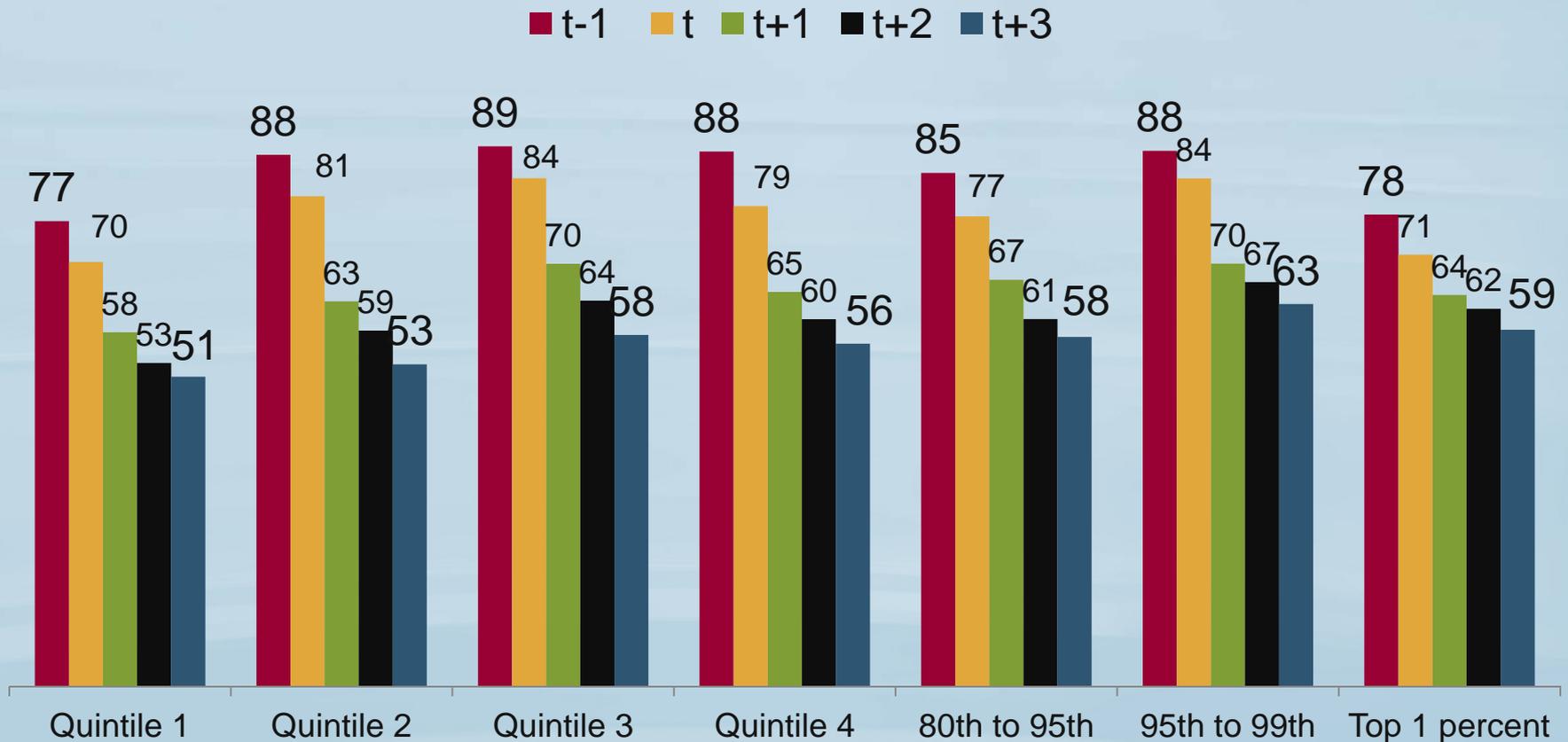
Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, alive in t+3



# Sample 1 (retire 2000-2005, alive in t+3) Incidence of Selected Information Returns

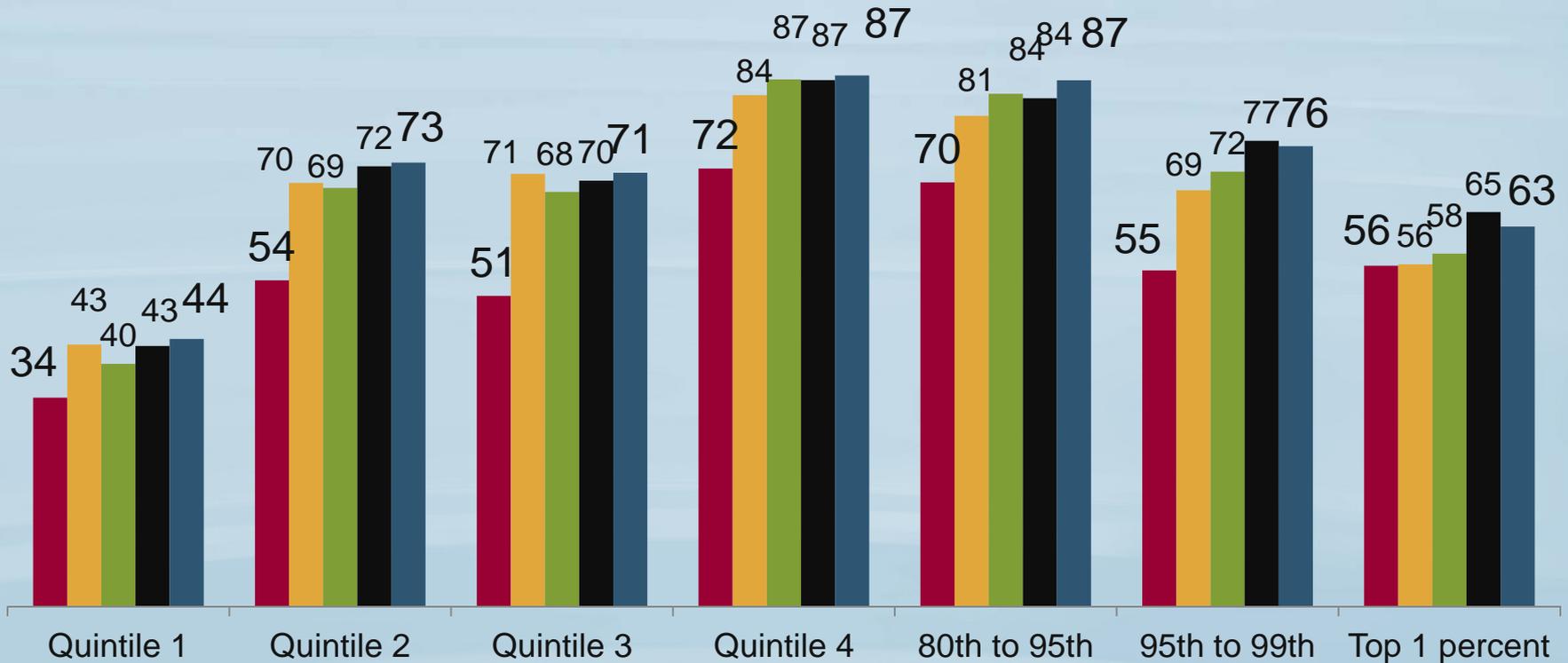


# Sample 1 (retire 2000-2005, alive in t+3) Incidence of Return W2 by 1999 Income

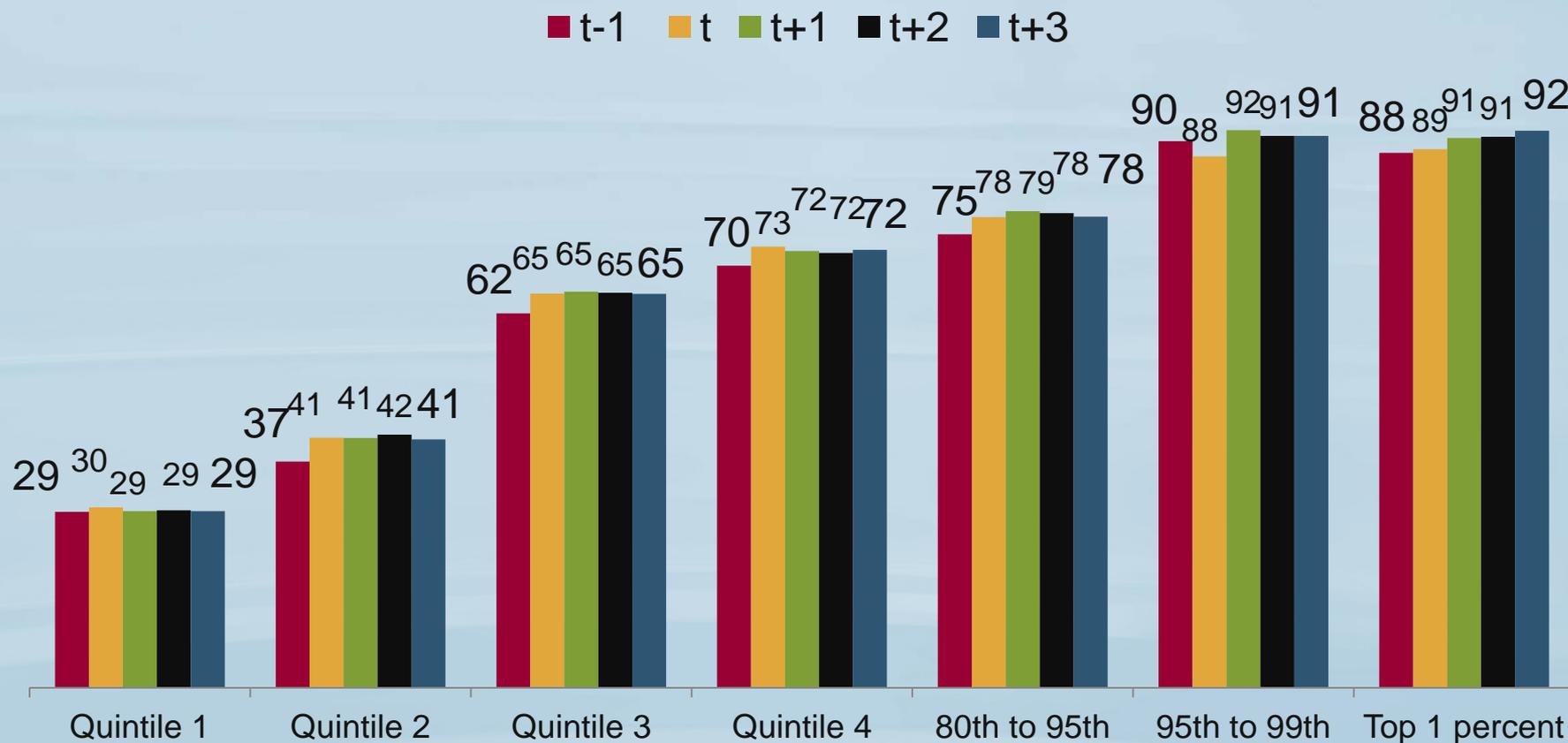


# Sample 1 (retire 2000-2005, alive in t+3) Incidence of Return 1099-R by 1999 Income

■ t-1 ■ t ■ t+1 ■ t+2 ■ t+3

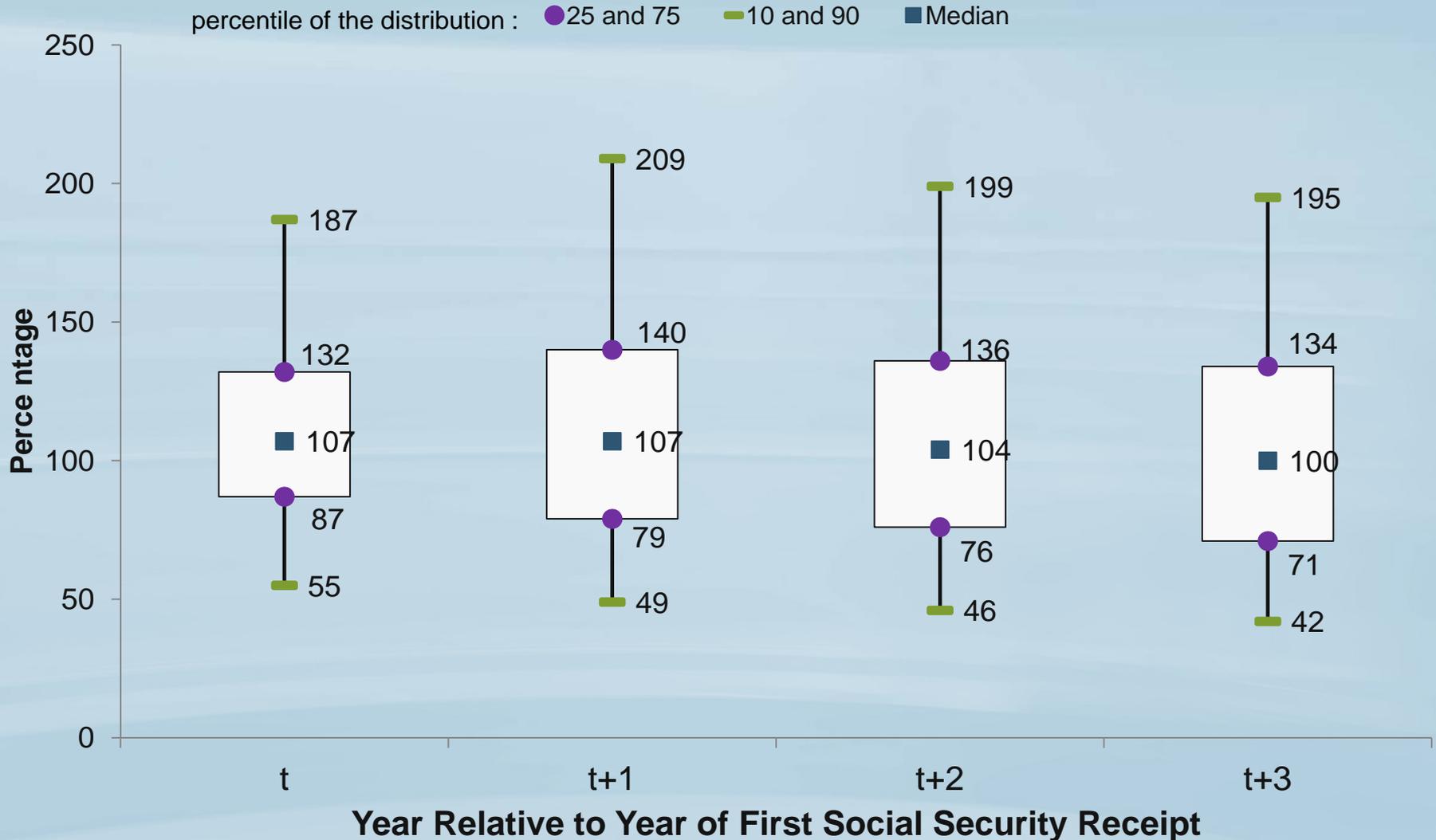


# Sample 1 (retire 2000-2005, alive in t+3) Incidence of Return 5498 by 1999 Income



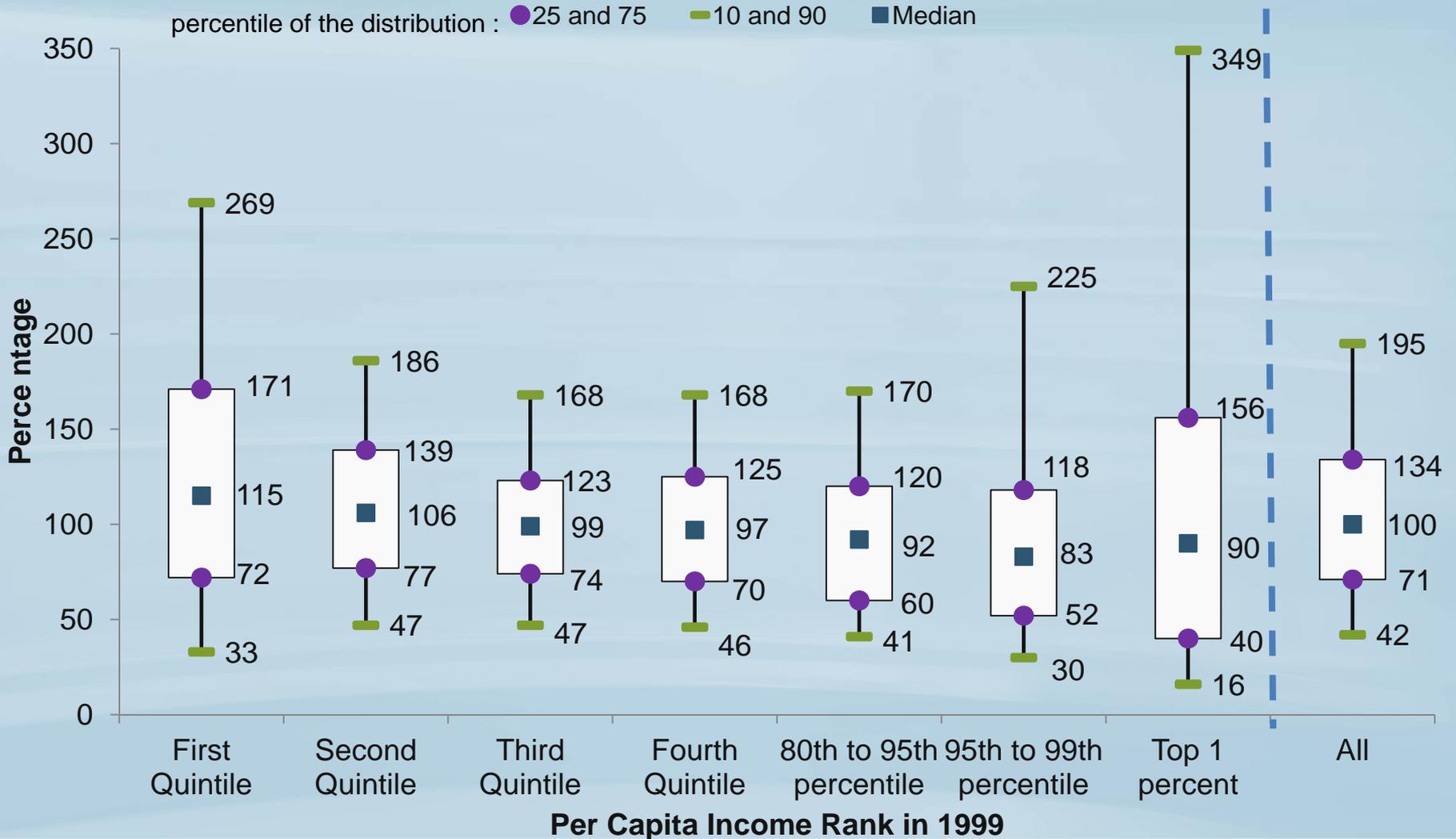
# Ratio of Real Work Related Income in Year t to Year t+3 Relative to Year t-1

Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, alive in t+3



# Ratio of Real Work Related Income in Year t+3 to Real Net Earnings in Year t-1

Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, alive in year t+3, by 1999 income category



# Mean & Median Real Net Per Capita Income by 1999 Income Rank

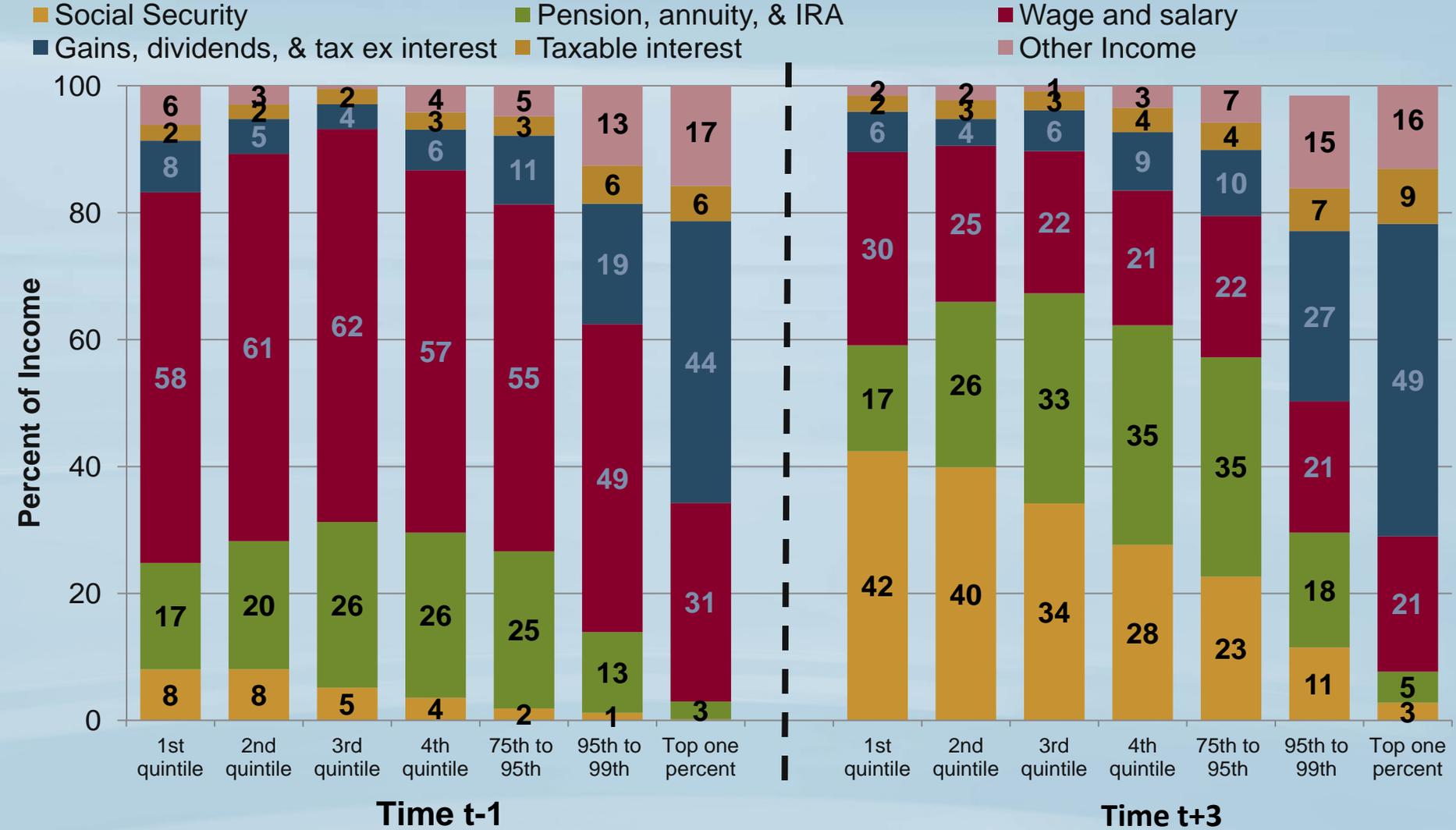
Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, alive year t+3

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	80th to 95th	95th to 99th	Top 1 percent	ALL
	Mean real per capita wages plus Social Security							
Time t-1	11,378	18,597	24,562	29,723	41,975	63,815	185,800	26,101
Time t	13,779	18,250	22,622	26,410	35,545	49,956	166,943	24,111
Time t+1	14,938	17,933	21,494	24,489	35,026	51,929	135,500	23,444
Time t+2	14,814	17,251	20,803	23,388	30,066	45,569	120,837	21,960
Time t+3	14,698	17,070	19,570	22,350	27,697	41,977	123,313	21,043

# **ANALYZING FILING RETIREES USING 1040 & INFORMATION RETURNS**

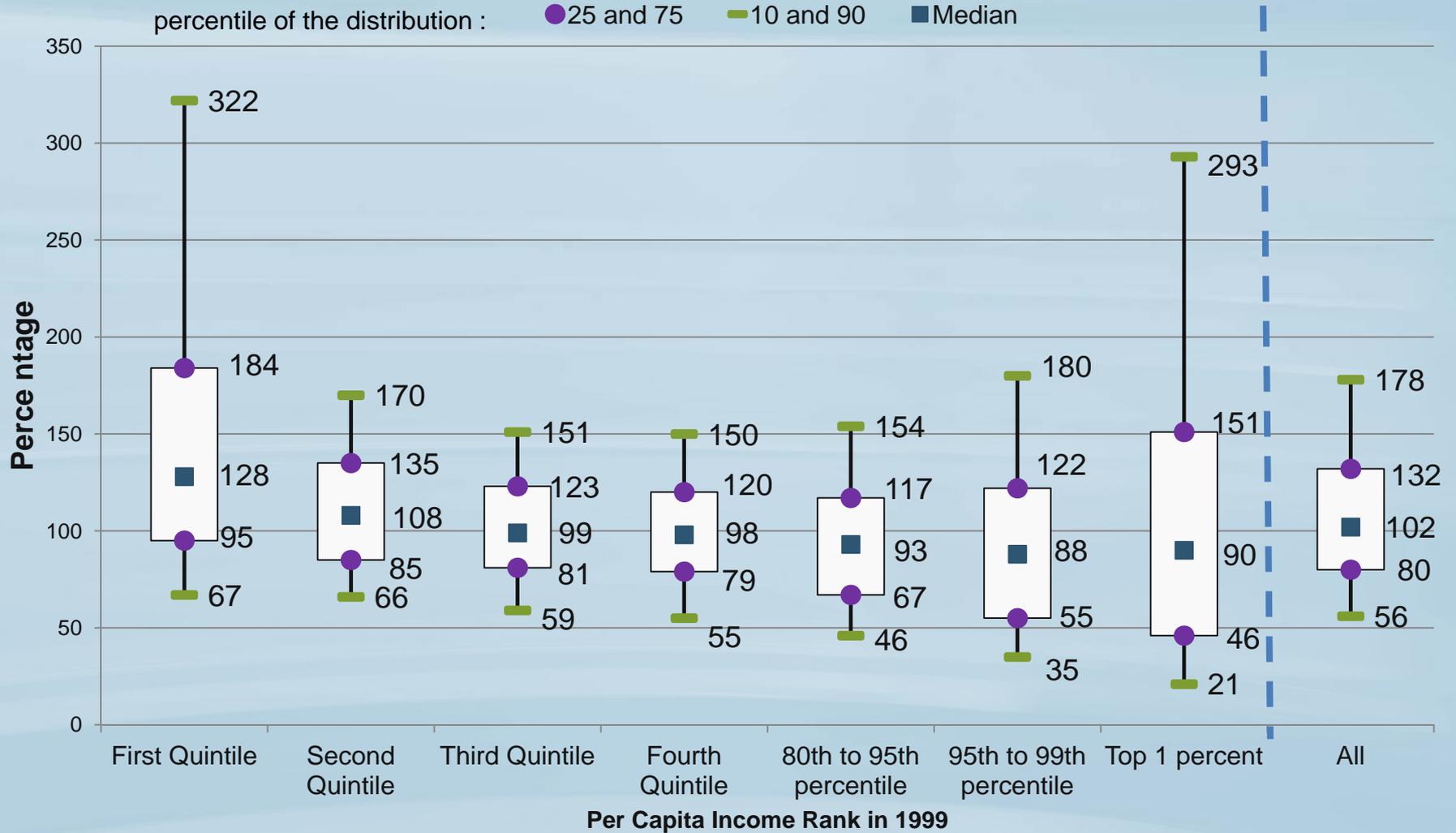
**Figure 1**  
**Aggregate Income Composition One Year Before and Three Years after Social Security Receipt**

Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, file in all years t-1 to t+3, by 1999 income category



# Ratio of Real Work Related income in Year t+3 to Real Net Earnings in Year t-1

Individuals 55 to 61 in 1999, first receipt of Social Security in 2000 to 2005, file in all years t-1 to t+3, by 1999 income category



# Things We Learned

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- On average (and median), do not see a drop in income near first receipt of Social Security.
  - Lowest income quartile has highest replacement rate of earnings
- Much more pension, annuity, & IRA income relative to survey data.
- Retirement income persistent.

# Future Work

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- More work on persistence of pension and IRA income
- Use Form 5498 to examine drawdown rate
- Regression analysis to examine replacement rates