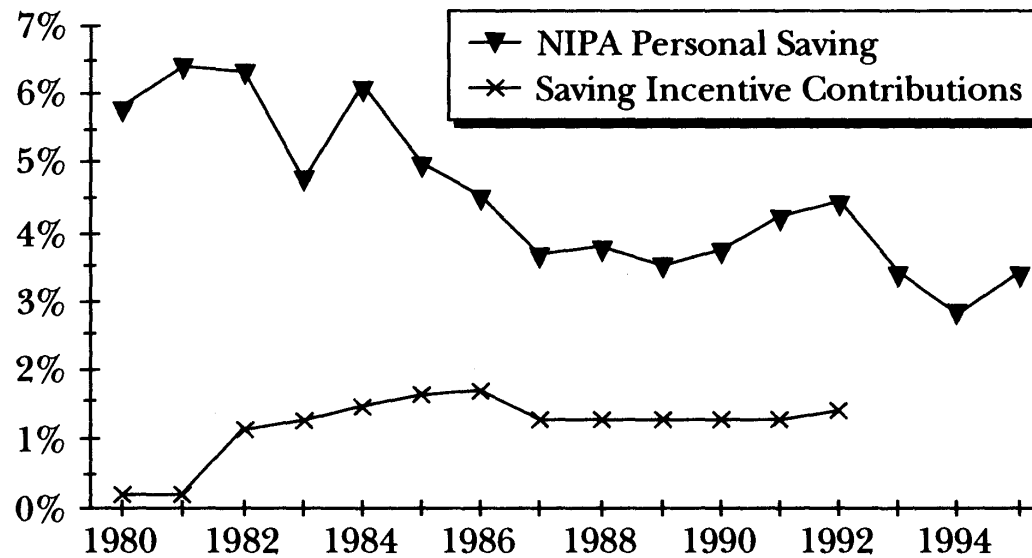
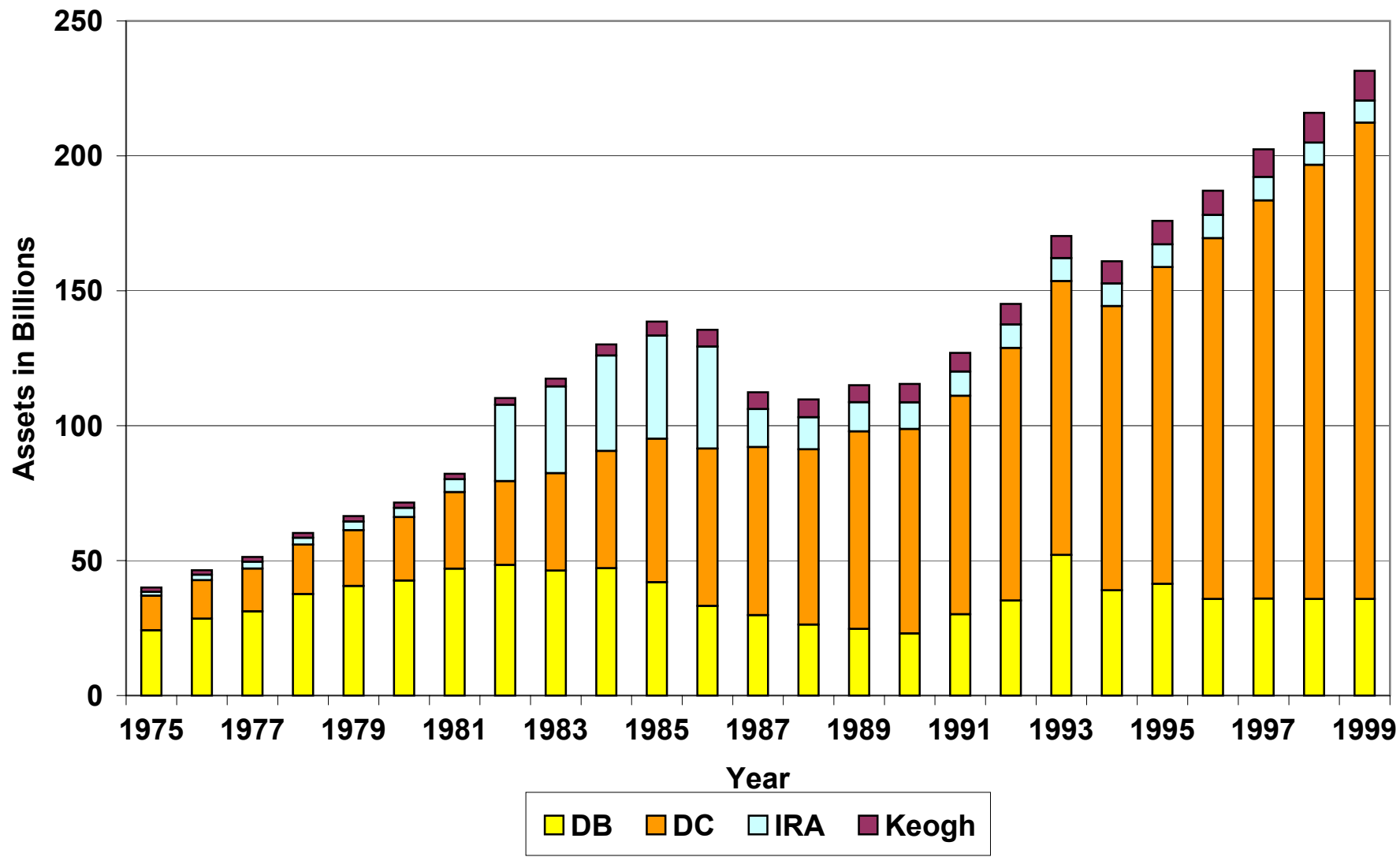


*Figure 1*  
**Personal Saving and Saving Incentive Contributions as a Percentage of GDP, 1980–1995**



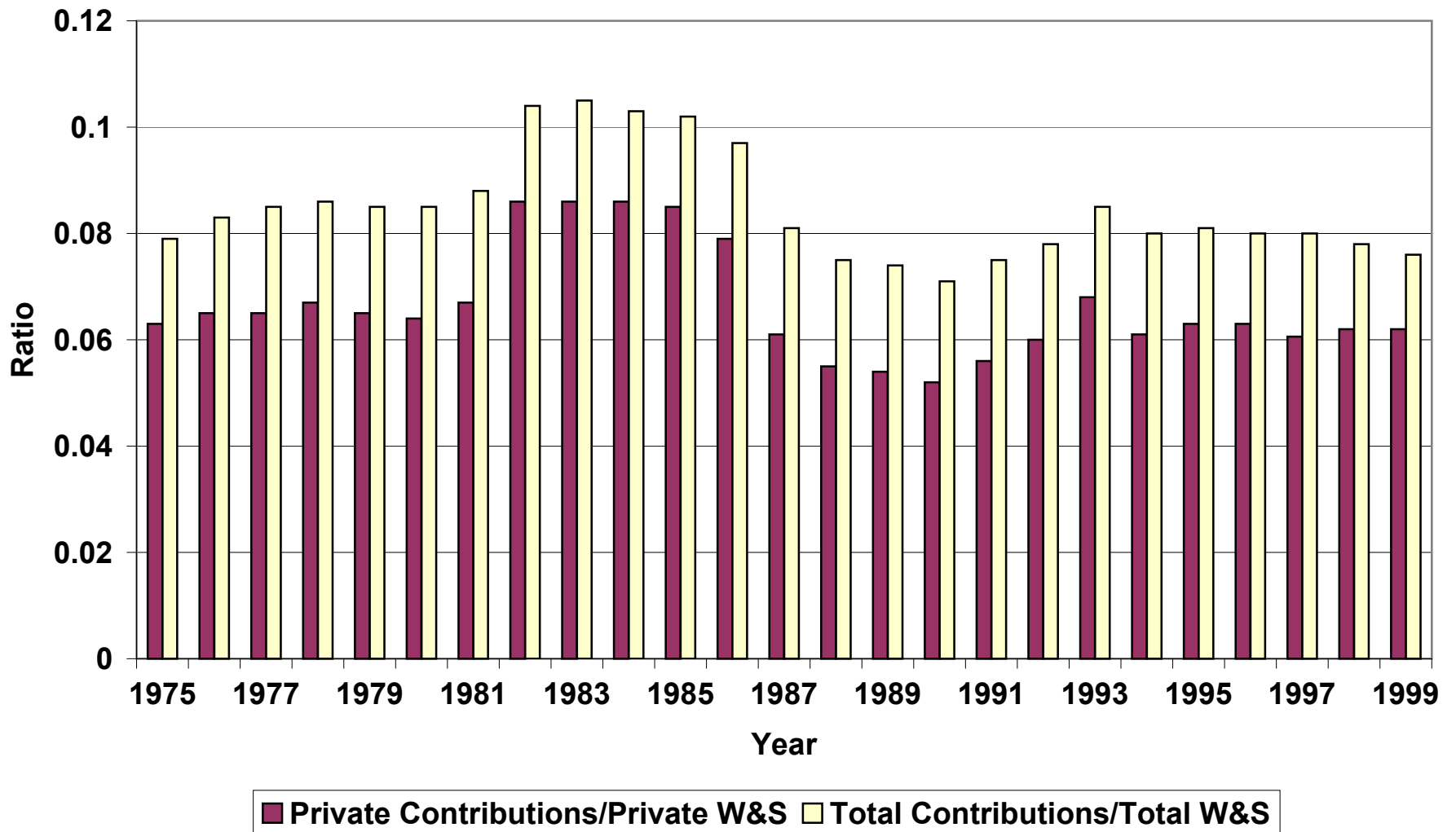
Sources: National Income and Product Accounts and the references in footnote 1.

**Figure 5a. Private Pension Contributions**



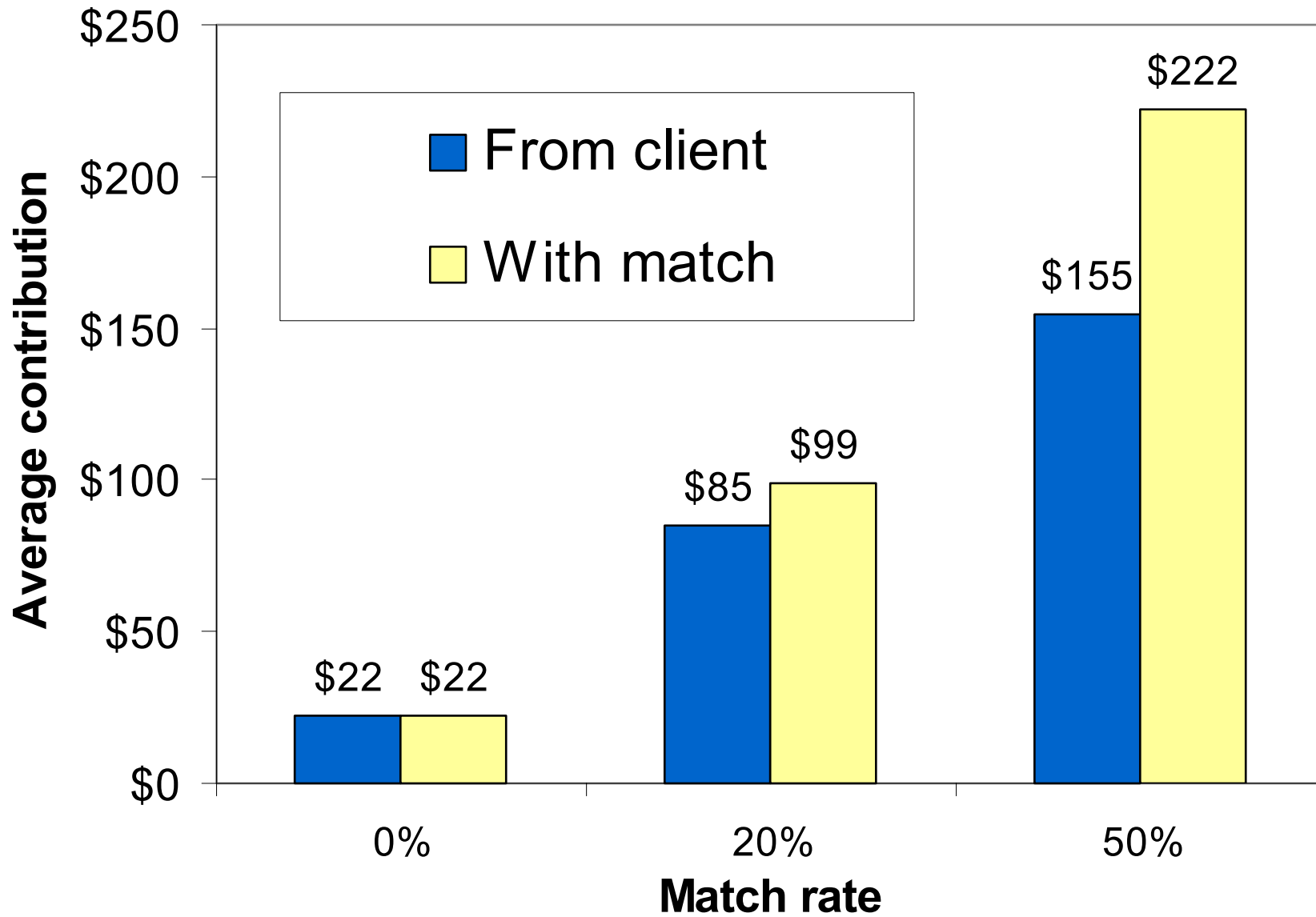
Source: statistics computed by the author(s)

**Figure 6b. Ratio of Private and Total Pension Contributions to Wage and Salary Earnings**



Source: statistics computed by the author(s)

## Effects on contributions (unconditional)



**Table 8: Saver's Credit Parameters**

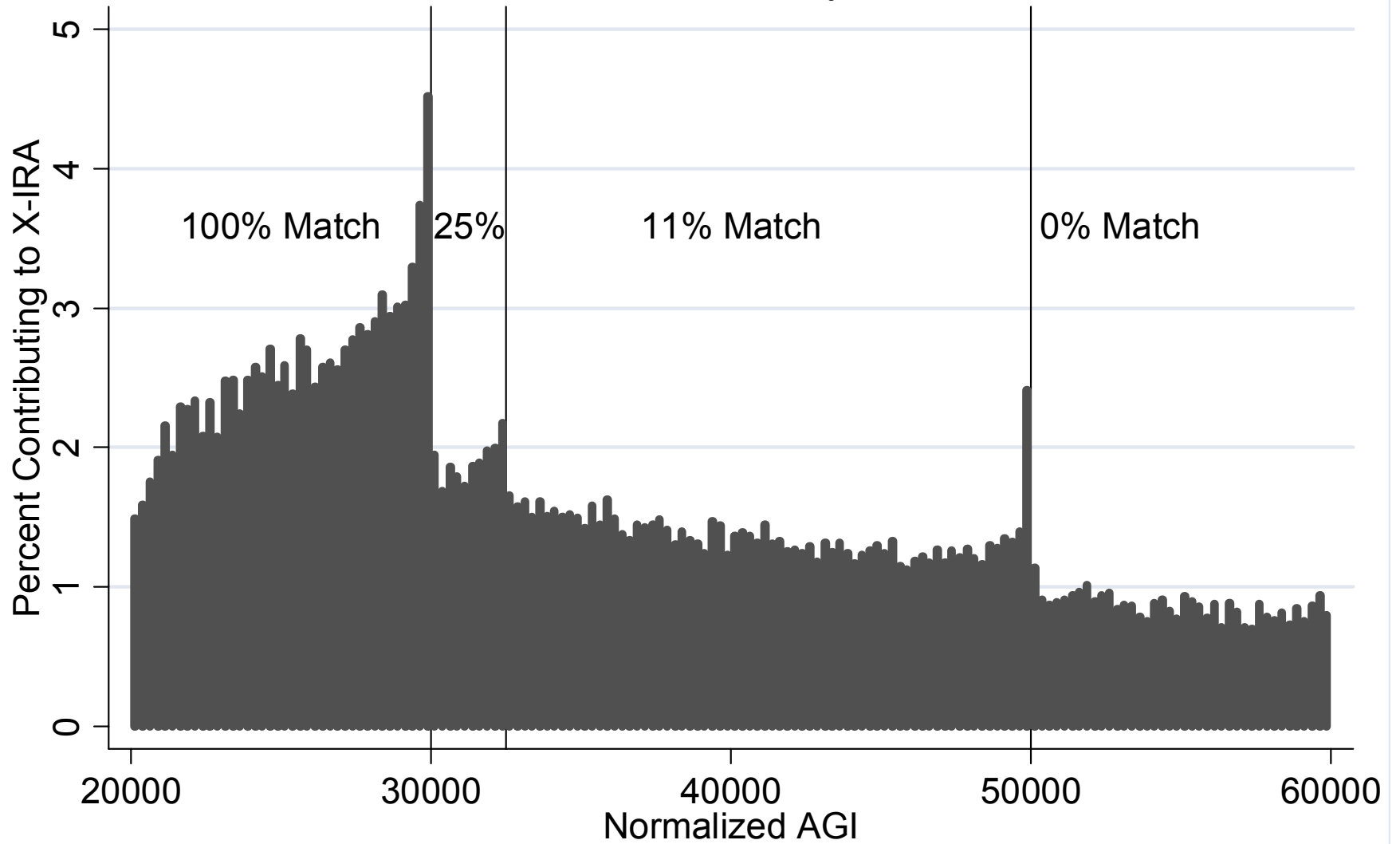
Credit Rate $t$	Equivalent Match Rate $t/(1-t)$	Married Filing Jointly	Head of Household	Single and others
		AGI range	AGI range	AGI range
50%	100%	\$0-\$30,000	\$0-\$22,500	\$0-\$15,000
20%	25%	\$30,001-\$32,500	\$22,501-\$24,375	\$15,001-\$16,250
10%	11.1%	\$32,501-\$50,000	\$24,376-\$37,500	\$16,251-\$25,000
0%	0%	\$50,001+	\$37,501+	\$25,001+

Saver's credit is a non-refundable federal income tax credit proportional to the sum of IRAs and 401(k)s contributions up to \$2,000 of contributions (per spouse for married)

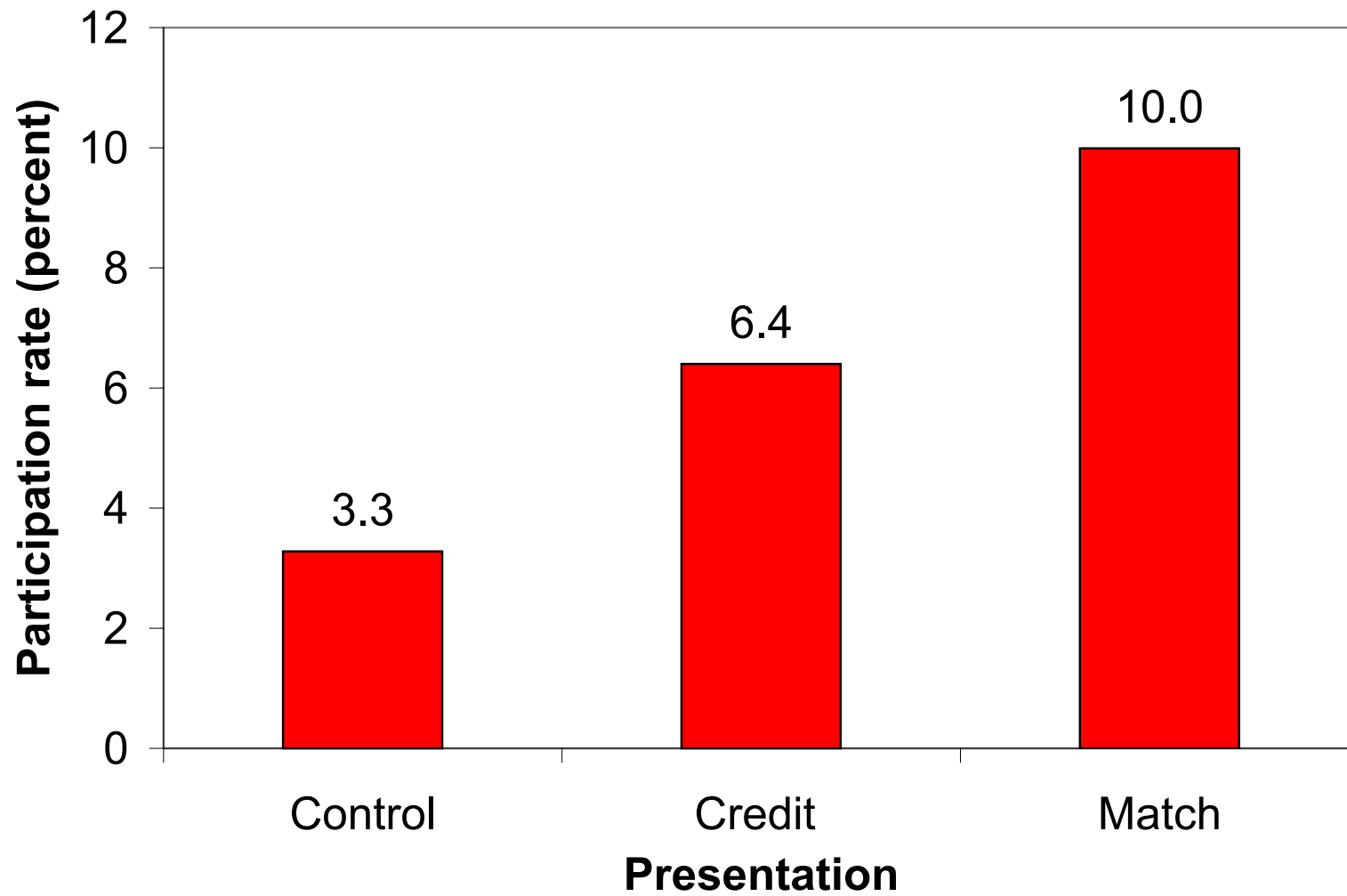
AGI = gross income - 401k - Traditional IRA

Figure 4

Percent X-IRA Contributors by \$250 AGI Bands



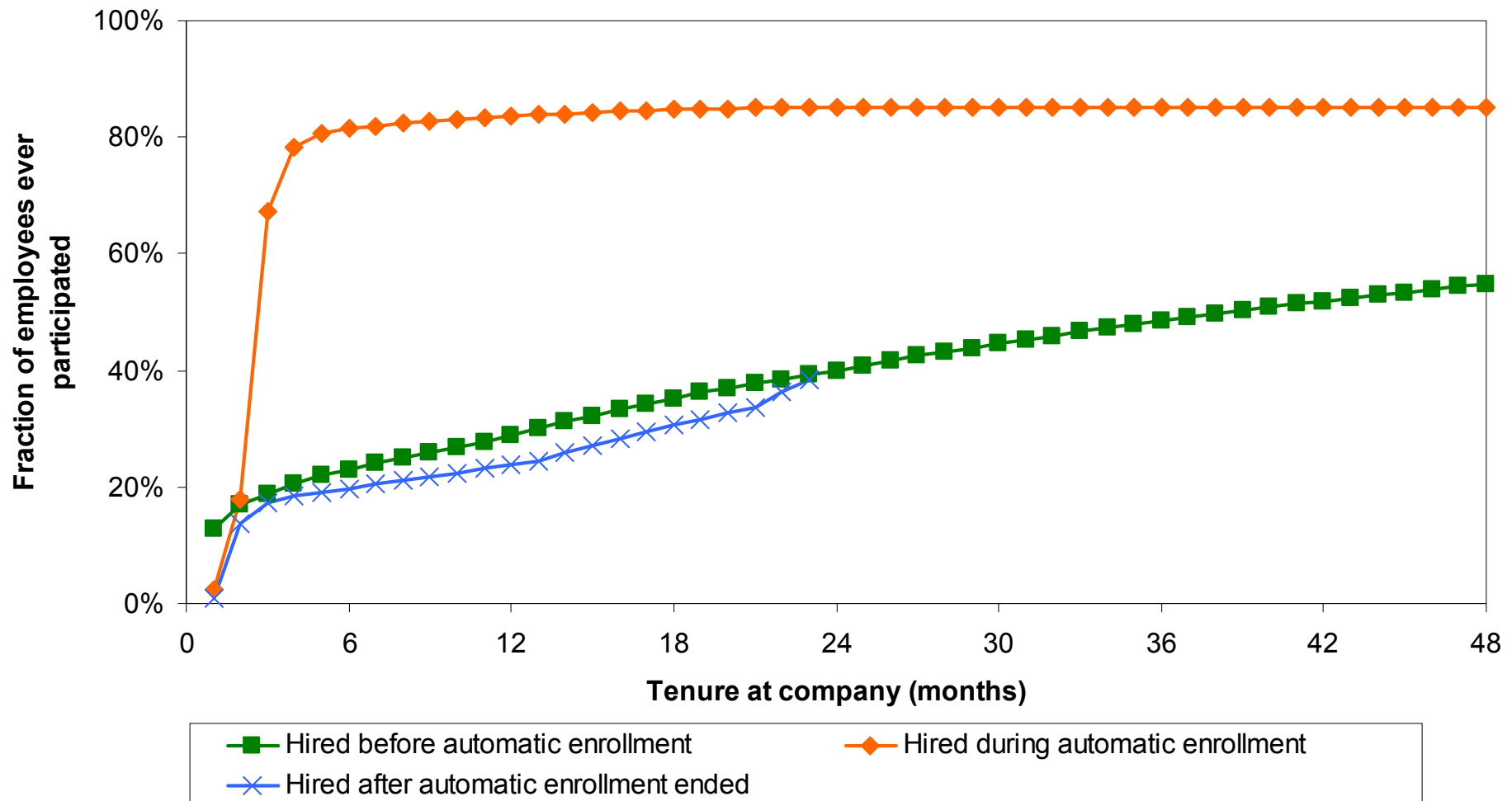
## Effects of Credit vs Match on X-IRA Take-up



# Automatic enrollment effect

**Automatic enrollment dramatically increases participation.**

**401(k) participation by tenure at firm: Company B**

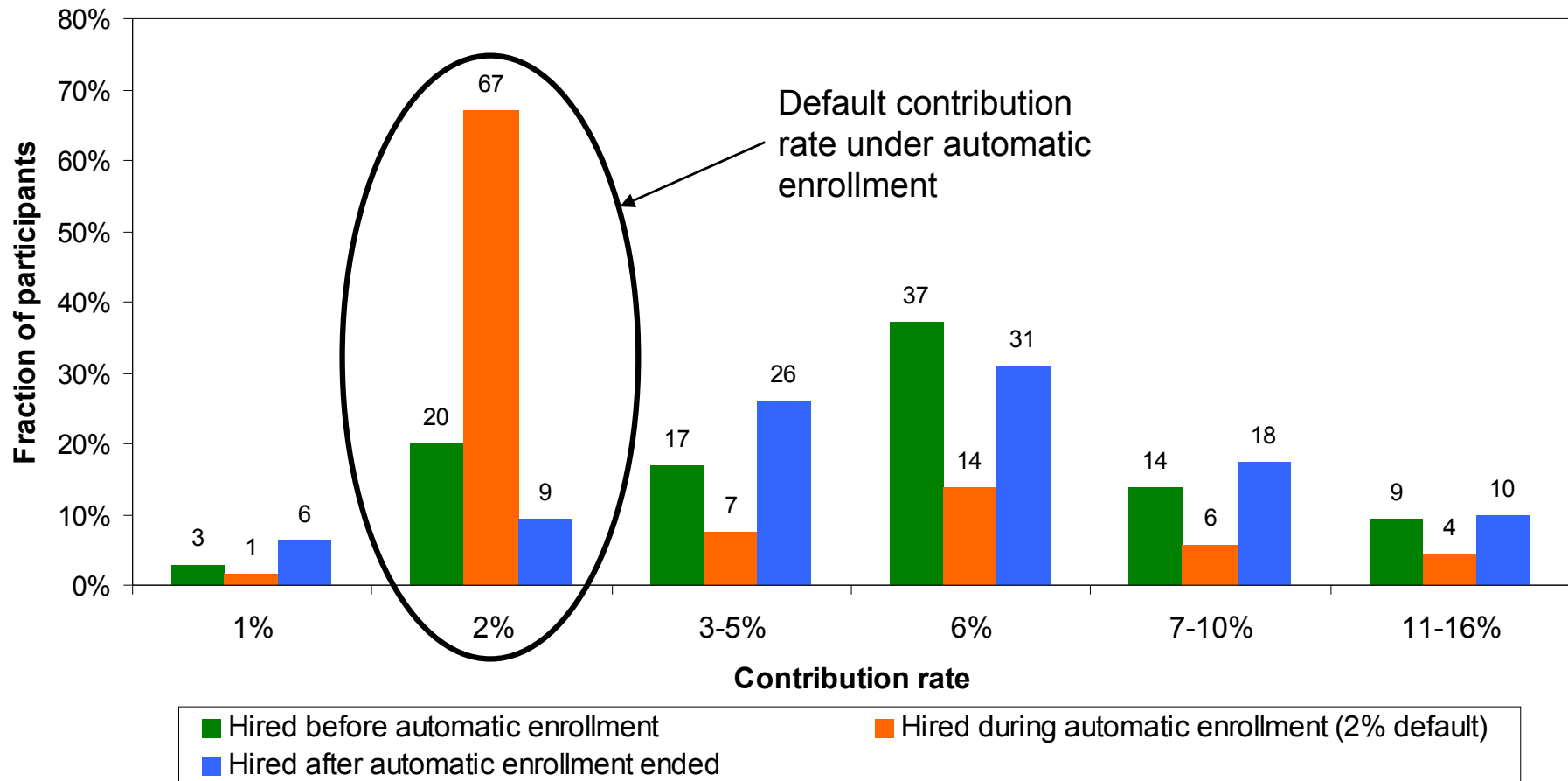




# Automatic enrollment effect

## Employees enrolled under automatic enrollment cluster at the default contribution rate.

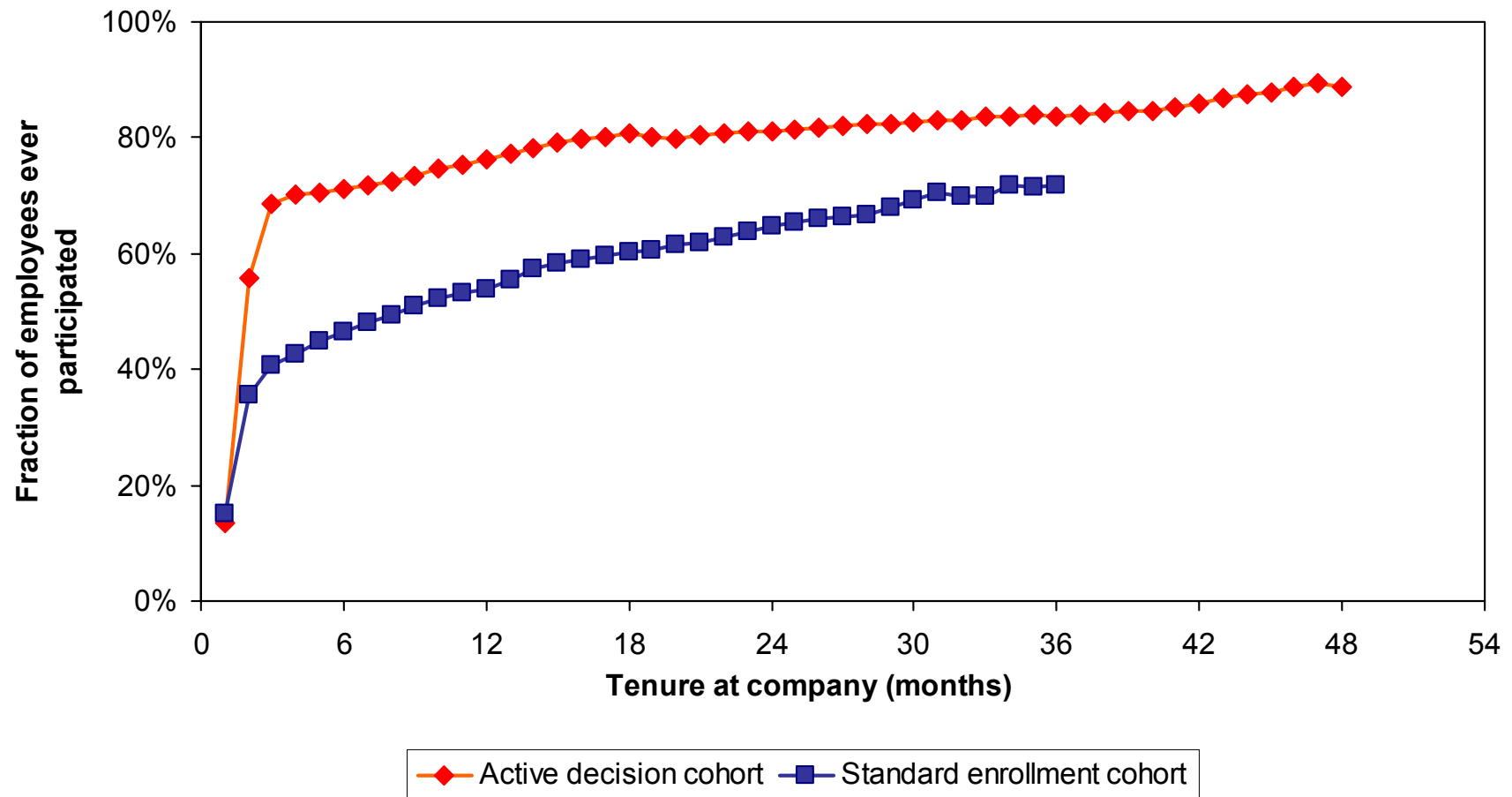
Distribution of contribution rates: Company B



# Active decision effect on participation

**401(k) participation increases substantially when employees are not allowed to be passive about savings.**

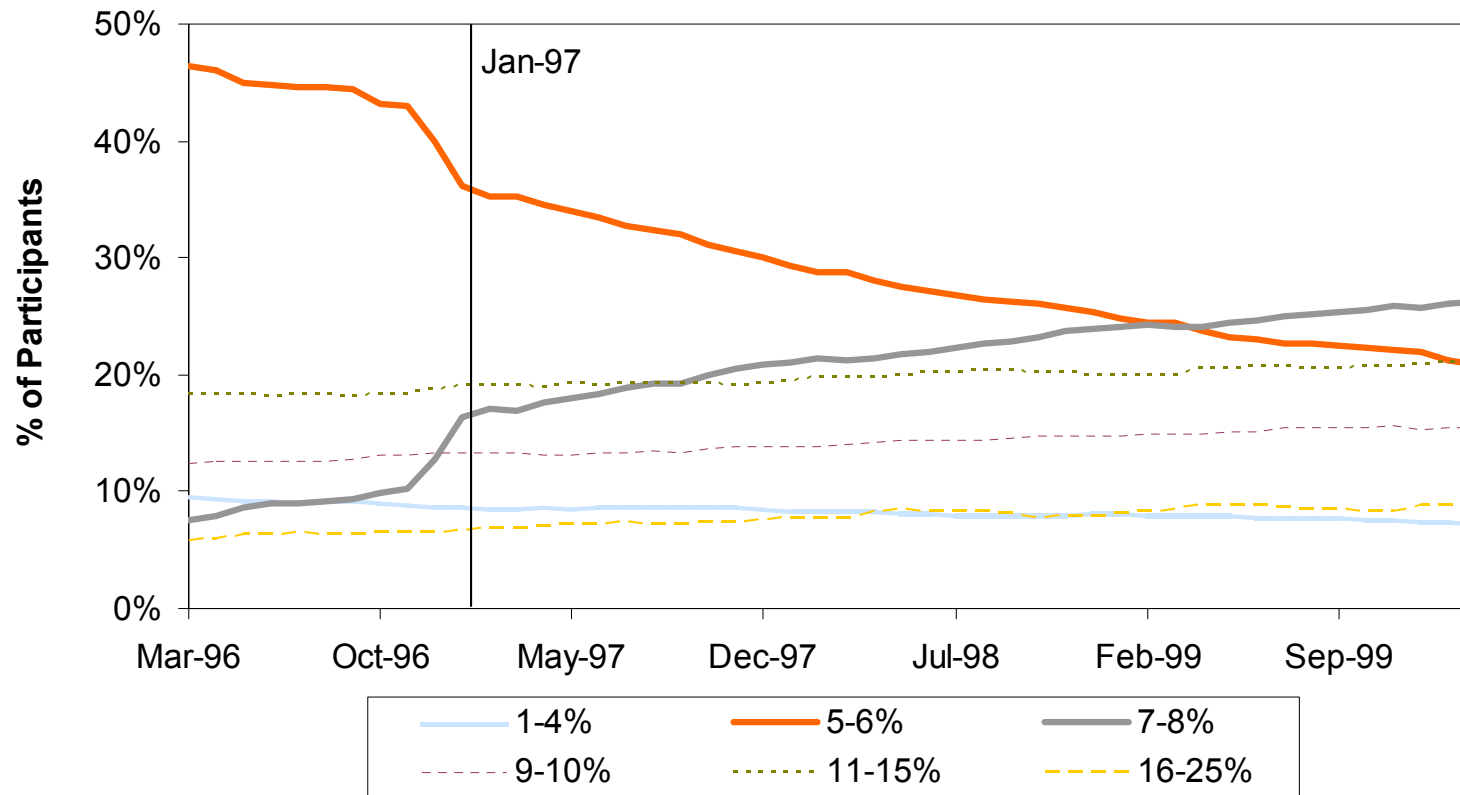
401(k) participation by tenure: Company E



# Employer match threshold and contribution rates

**Changing the match threshold caused employees to slowly move from the old threshold to the new threshold.**

**401(k) contribution rate response to match threshold change: Company G**



# The Flypaper Effect in Individual Investor Asset Allocation (Choi, Laibson, Madrian 2007)

Studied a firm that used several different match systems in their 401(k) plan.

I'll discuss two of those regimes today:

Match allocated to employer stock and workers can reallocate

- Call this “default” case (default is employer stock)

Match allocated to an asset actively chosen by workers; workers *required* to make an active designation.

- Call this “no default” case (workers must choose)

Economically, these two systems are identical.

They both allow workers to do whatever the worker wants.

# Consequences of the two regimes

	<u>Balances in employer stock</u>	
	<b>Default ES</b>	<b>No Default</b>
Own Balance in Employer Stock	<b>24%</b>	<b>20%</b>
Matching Balance in Employer Stock	<b>94%</b>	<b>27%</b>
Total Balance in Employer Stock	<b>56%</b>	<b>22%</b>

# Cash Distributions

What happens to savings plan balances when employees leave their jobs?

- Employees can request a cash distribution or roll balances over into another account
  - Balances  $> \$5000$ : default leaves balances with former employer
  - Balances  $< \$5000$ : default distributes balances as cash transfer
- Vast majority of employees accept default (Choi et al. 2002, 2004a and 2004b)
- When employees receive small cash distributions, balances typically consumed (Poterba, Venti and Wise 1998)

# Post-Retirement Distributions

- Social Security
  - Joint and survivor annuity (reduced benefits)
- Defined benefit pension
  - Annuity
  - Lump sum payout if offered
- Defined contribution savings plan
  - Lump sum payout
  - Annuity if offered

# Defined Benefit Pension Annuitization

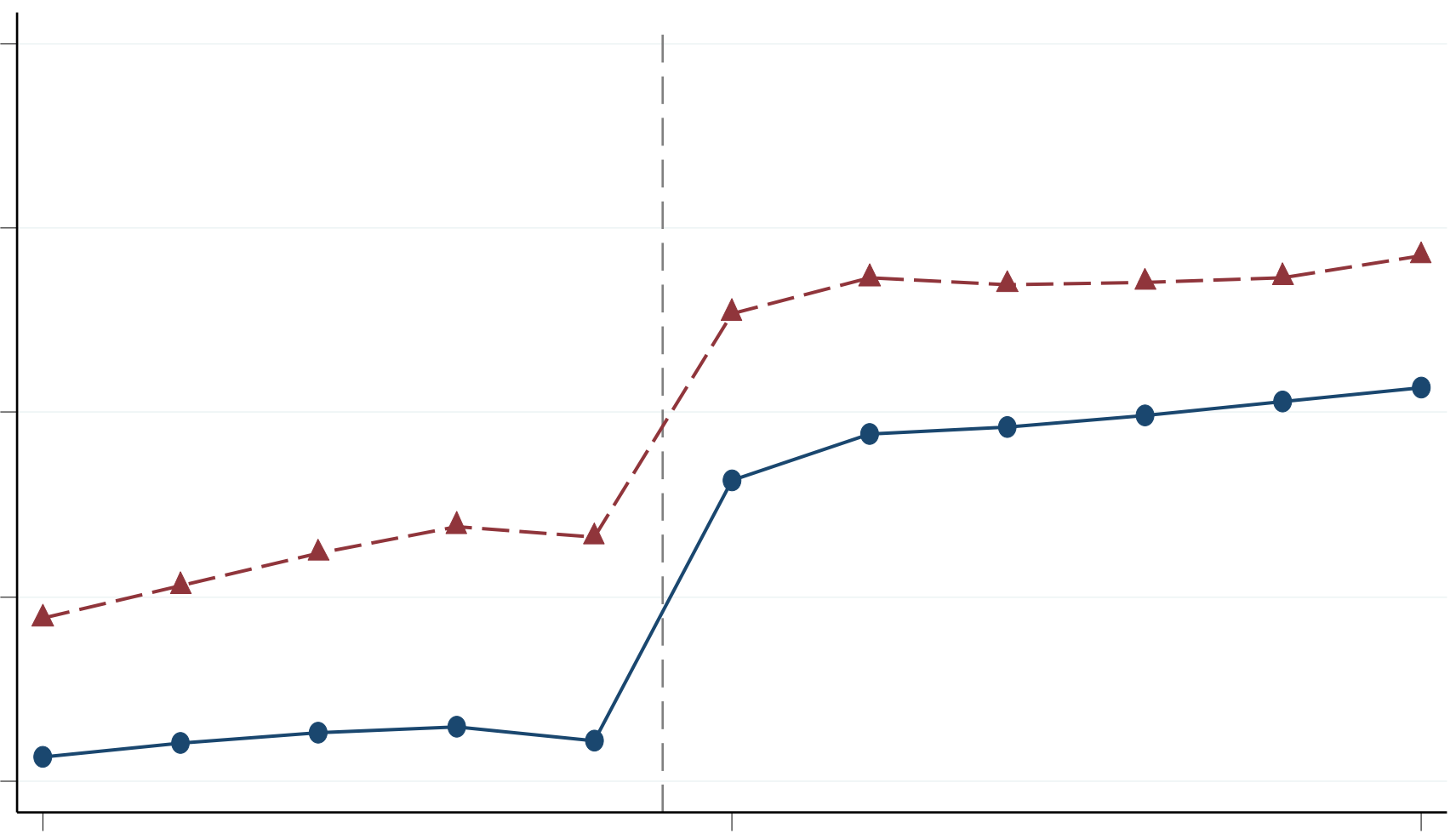
- Annuity income and economic welfare of the elderly
  - Social Security replacement rate relatively low on average
  - 17% of women fall into poverty after the death of their spouse (Holden and Zick 2000)
- For married individuals, three distinct annuitization regimes
  - Pre-1974: no regulation
  - ERISA I (1974): default joint-and-survivor annuity with option to opt-out
  - ERISA II (1984 amendment): default joint-and-survivor annuity, opting out required notarized permission of spouse



## Impacts of Government Policies on Savings for Active vs. Passive Savers

	Automatic Contribution		Price Subsidy	
	Raises Pension Contribs. M+P?	Raises Total Savings M+P+S?	Raises Pension Contribs. M+P?	Raises Total Savings M+P+S?
Active Savers	No	No	Yes	Uncertain
Passive Savers	Yes	Uncertain	No	No
<b>Data</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

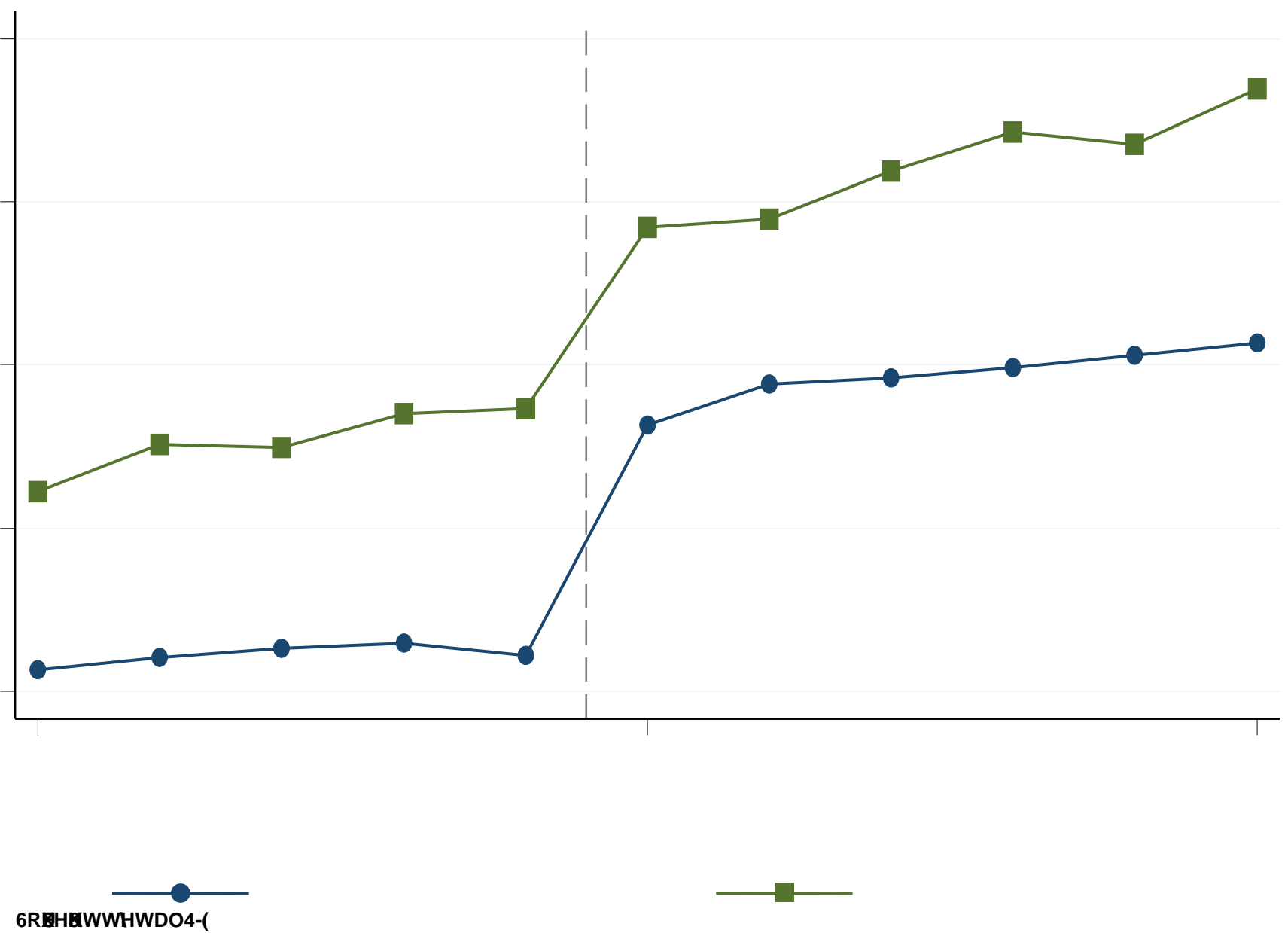
# Event Study around Switches to Firm with >3% Increase in Employer Pension Rate



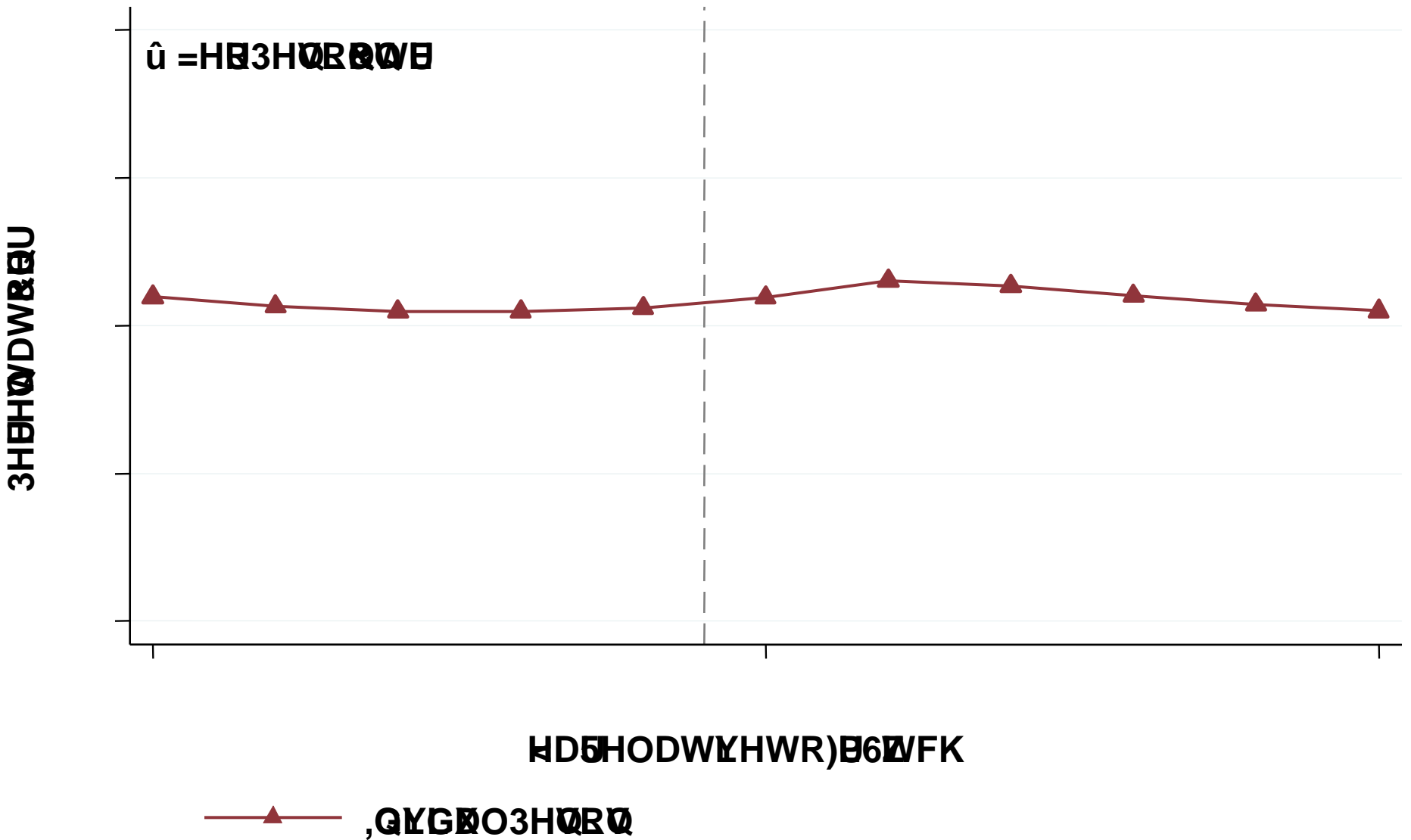
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# Event Study around Switches to Firm with >3% Increase in Employer Pension Rate



# Fraction at Corner around Switches to Firm with >3% Increase in Employer Pension Rate



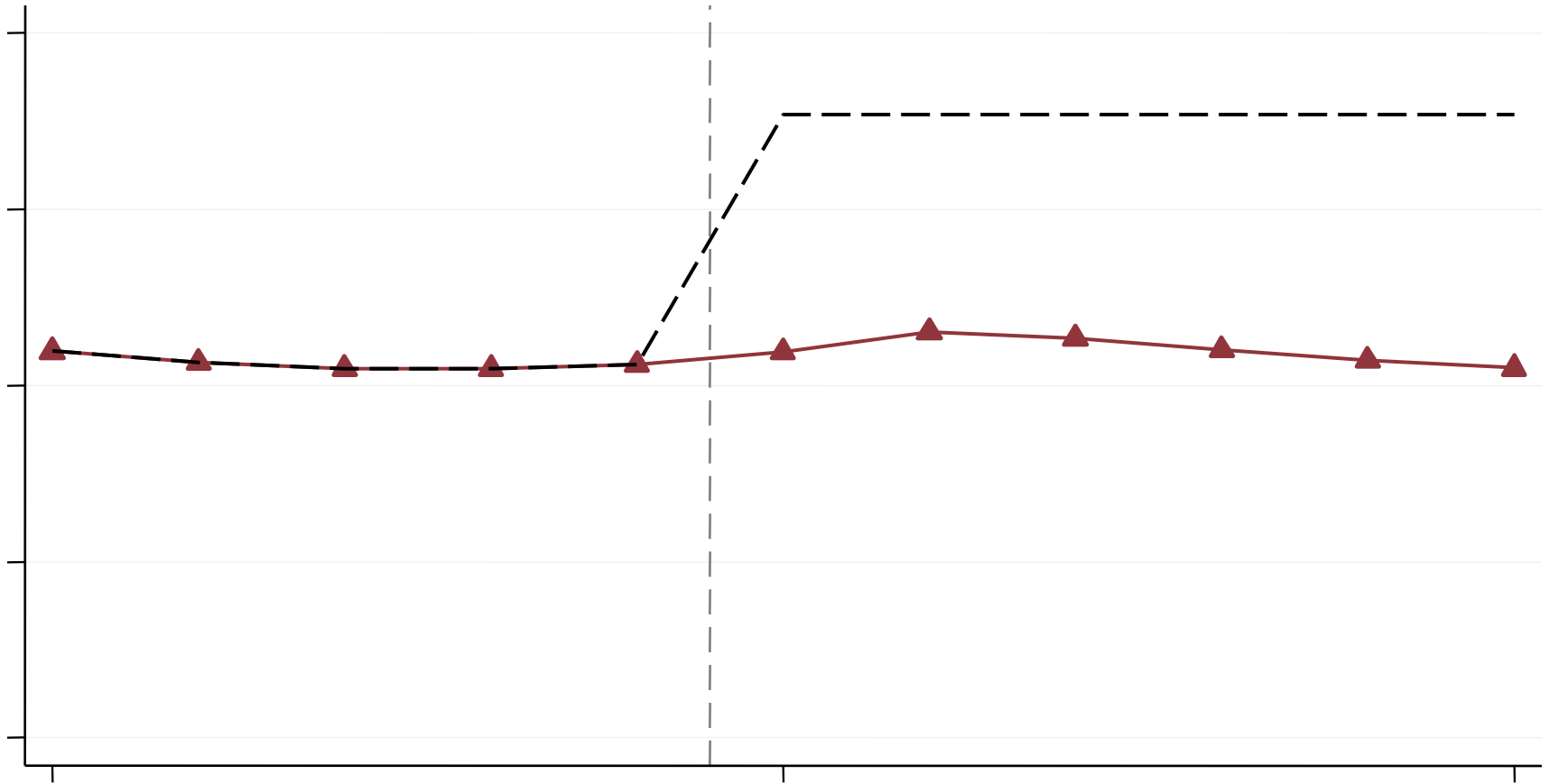
$\hat{u} = 0.5$

Time

Firm with >3% Increase in Employer Pension Rate

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# Fraction at Corner around Switches to Firm with >3% Increase in Employer Pension Rate

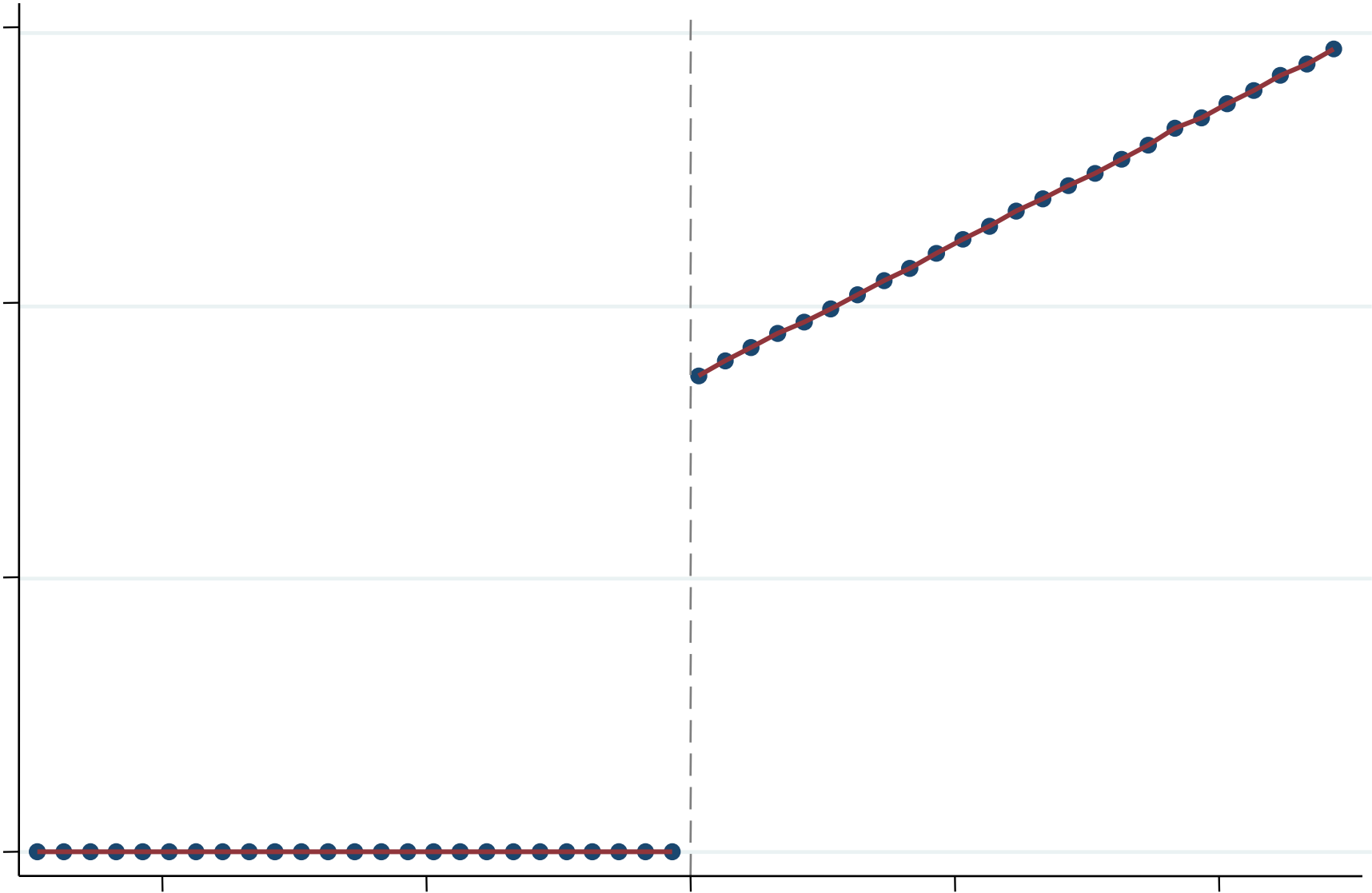


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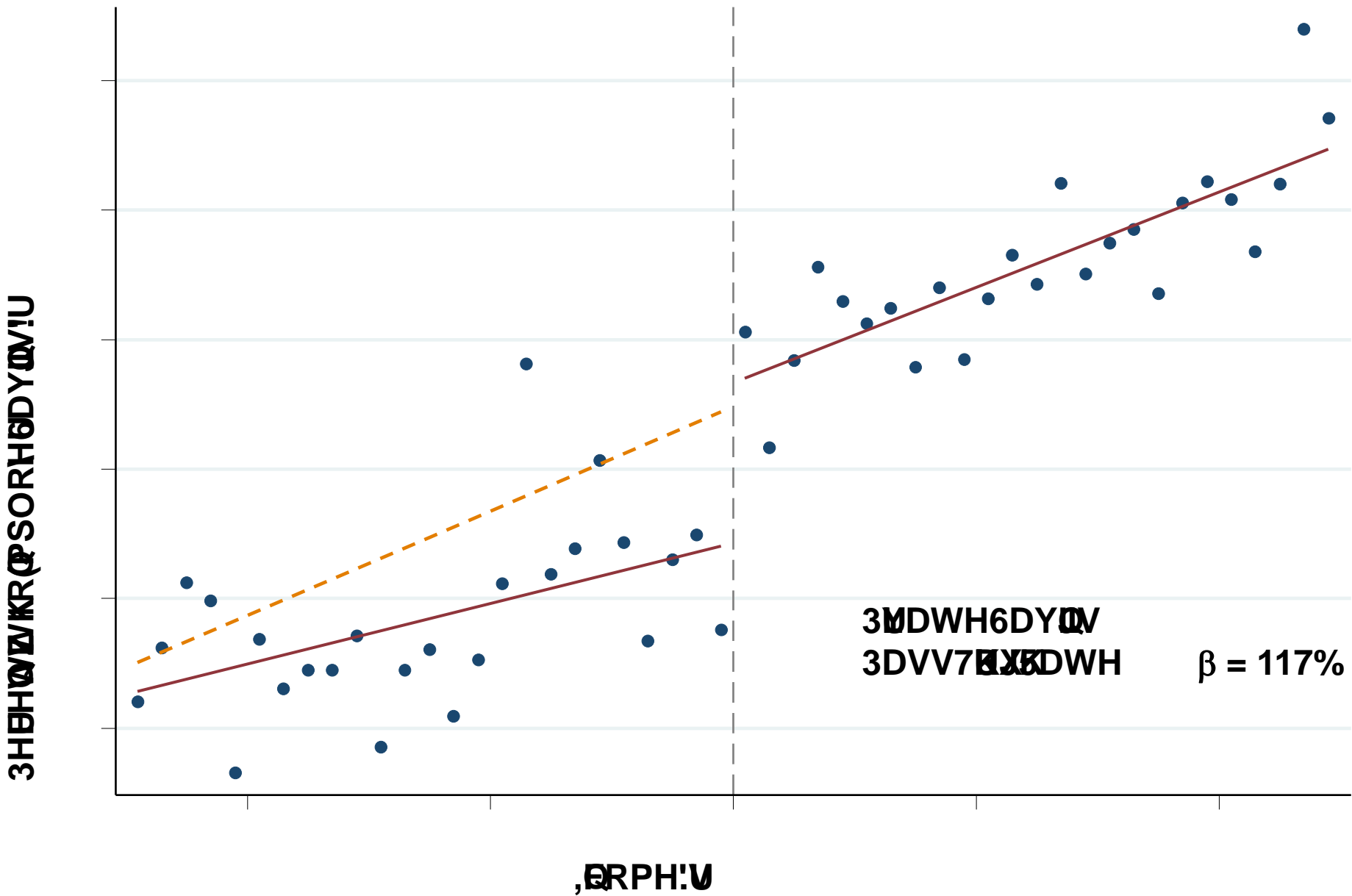
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Mandated Savings (M) Around Eligibility Threshold in 1998

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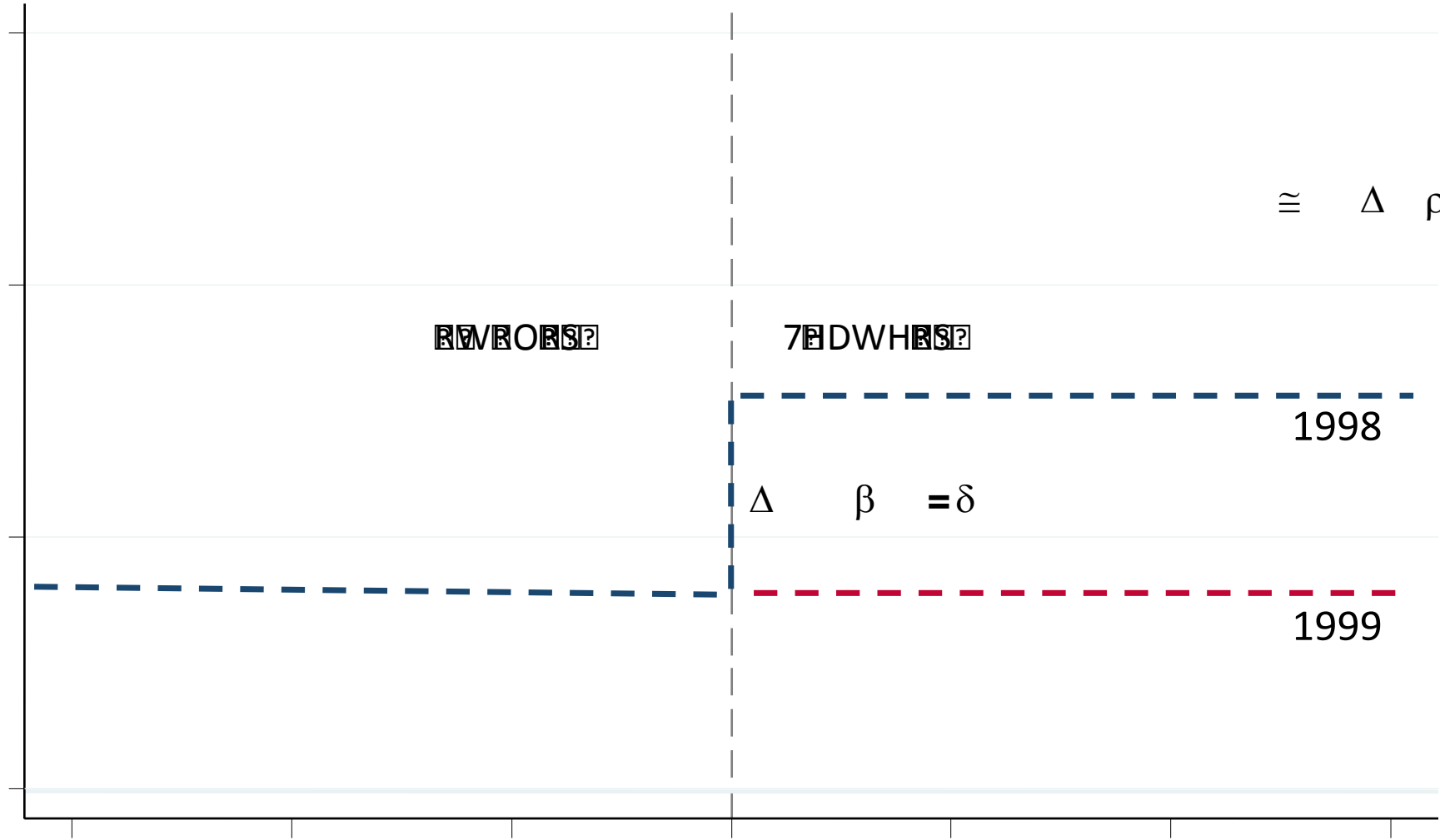


# Effect on Mandate on Private Savings: Threshold Approach



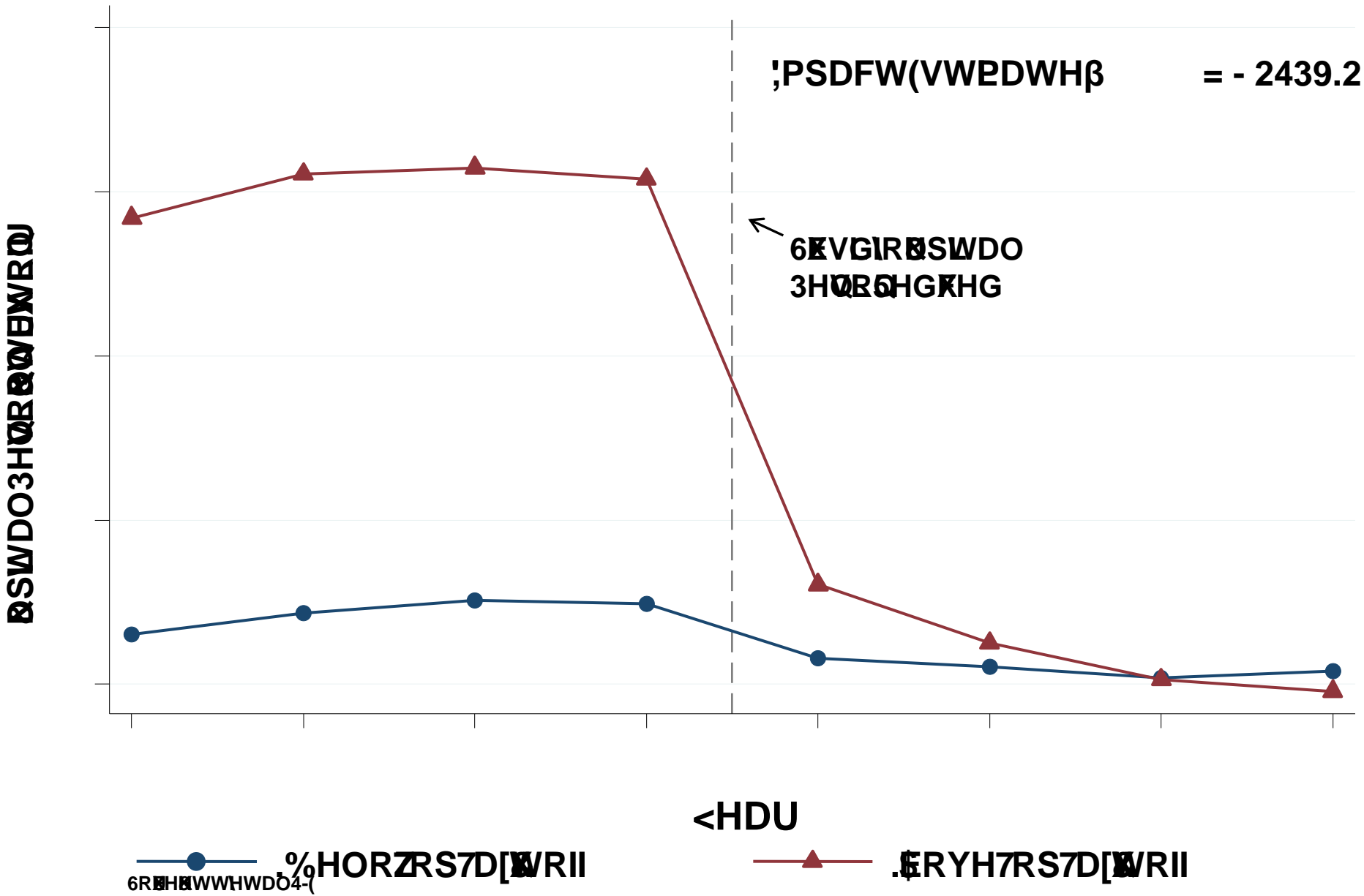
# Subsidy for Capital Pensions in 1999

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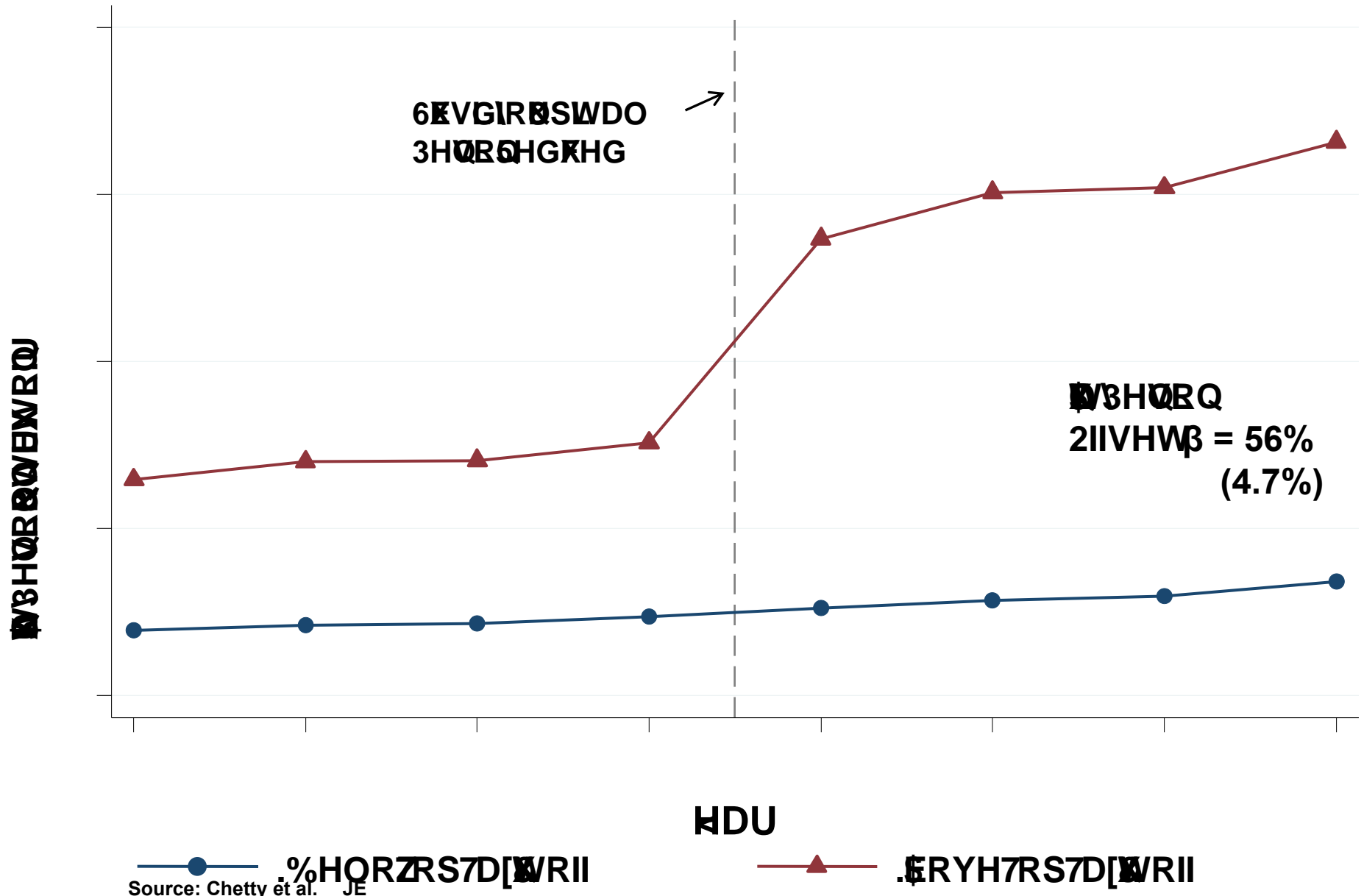




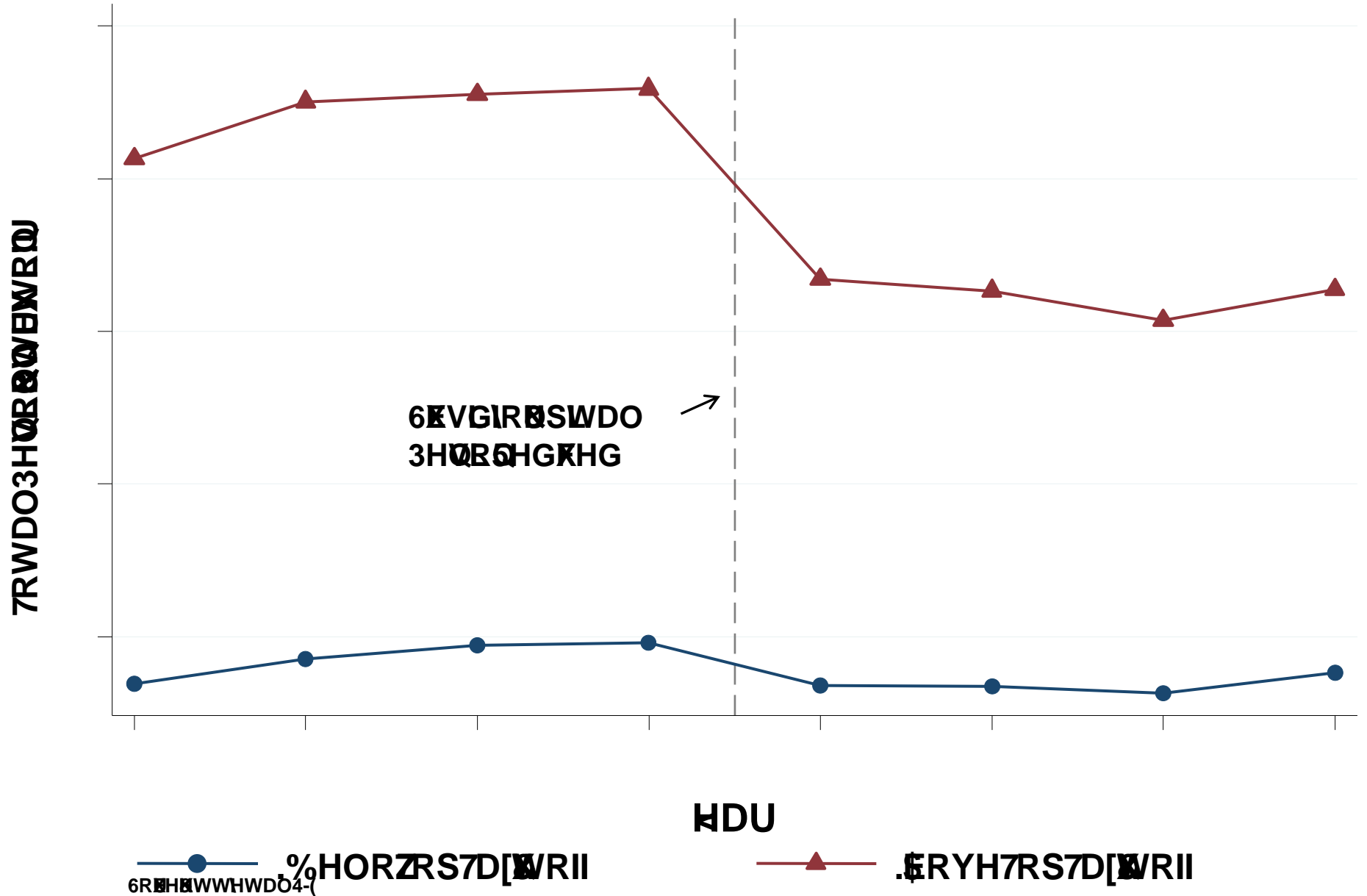
# Impact of Subsidy Reduction On Individual Capital Pension Contribs.



# Impact of Capital Pension Subsidy Reduction On Annuity Pension Contributions

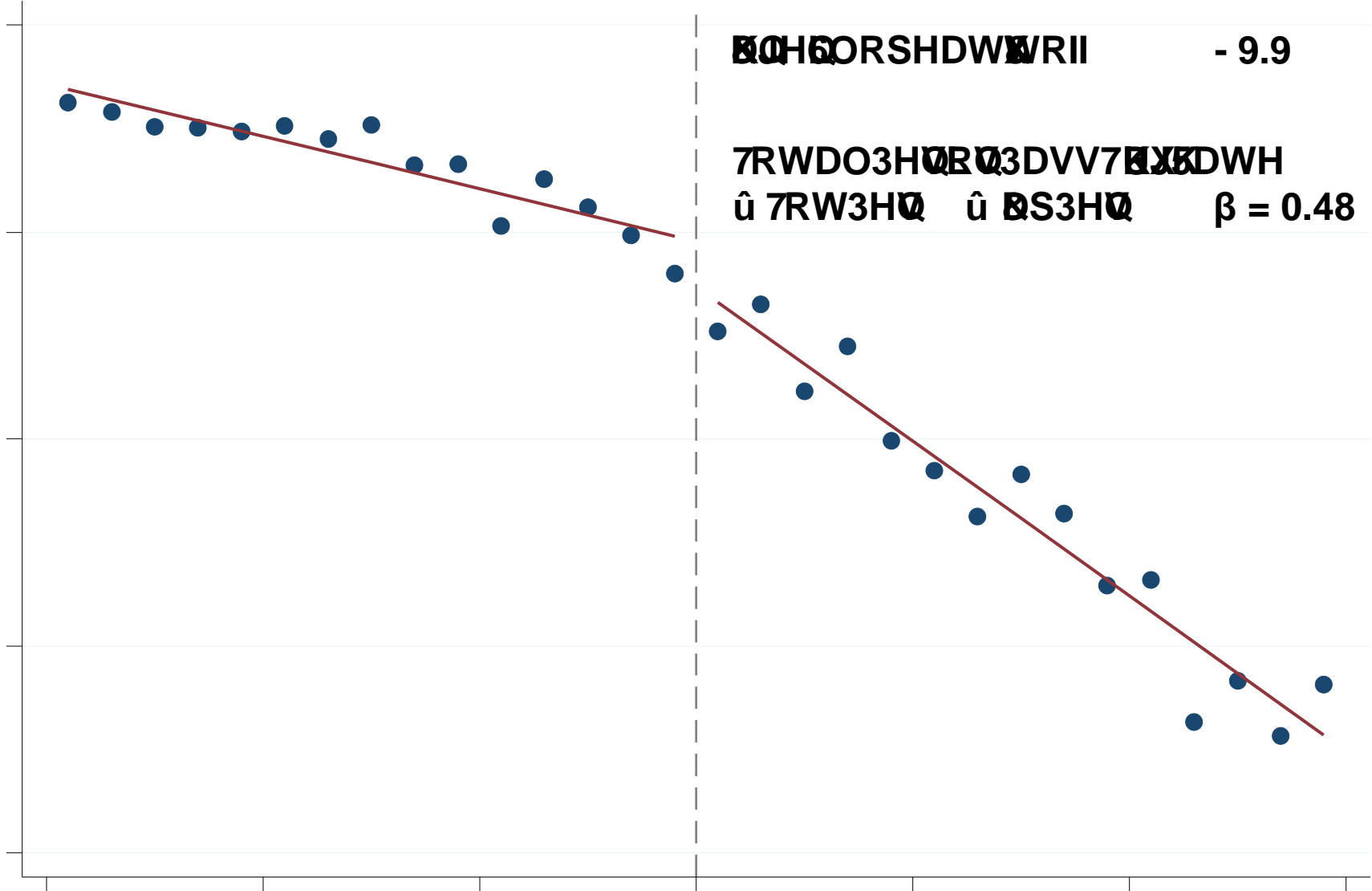


# Impact of Capital Pension Subsidy Reduction On Total Pension Contributions



# Change in Total Pension Contributions Post-Reform (1999-2001) minus Pre-Reform (1996-1998)

Y-axis label:  $\Delta \text{Total Pension Contributions}$



# Change in Taxable Savings

## Post-Reform (1999-2001) minus Pre-Reform (1996-1998)

