

? Comment \_\_\_\_\_ for Their Retirement Benefits?

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March, 2021



- This paper reexamines the IL teacher pension upgrade experience using pension system (TRS) data tracking the 1998-99 (22-28 experience) cohort to 2019. Actual retirement annuity and timing.
- Findings
  - More teachers purchased upgrade (87% versus 74%)
  - Importantly, nearly all teachers who did not purchase upgrade were better off not making the purchase
  - IL pension upgrade experience not well suited to answer the question



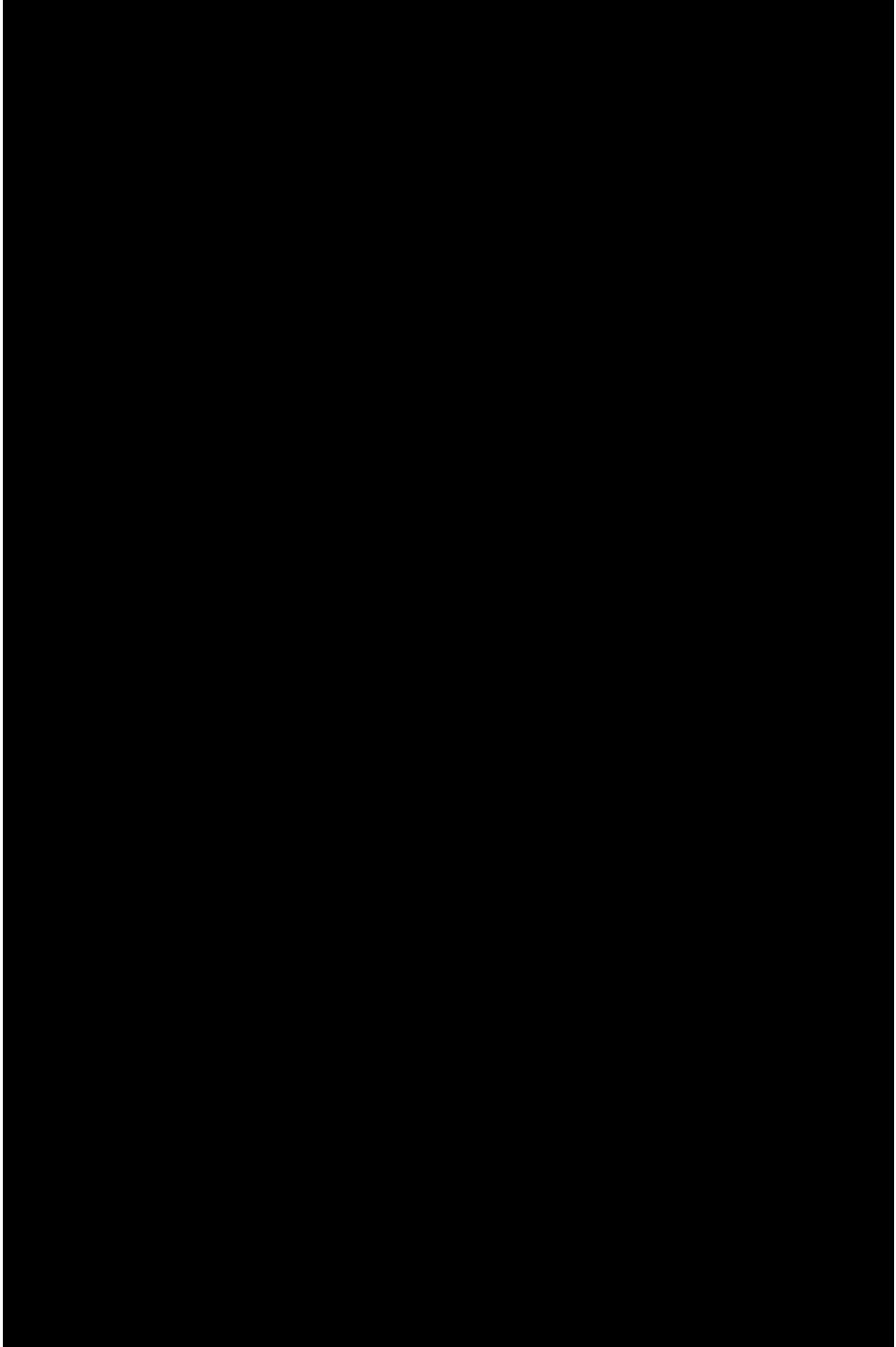
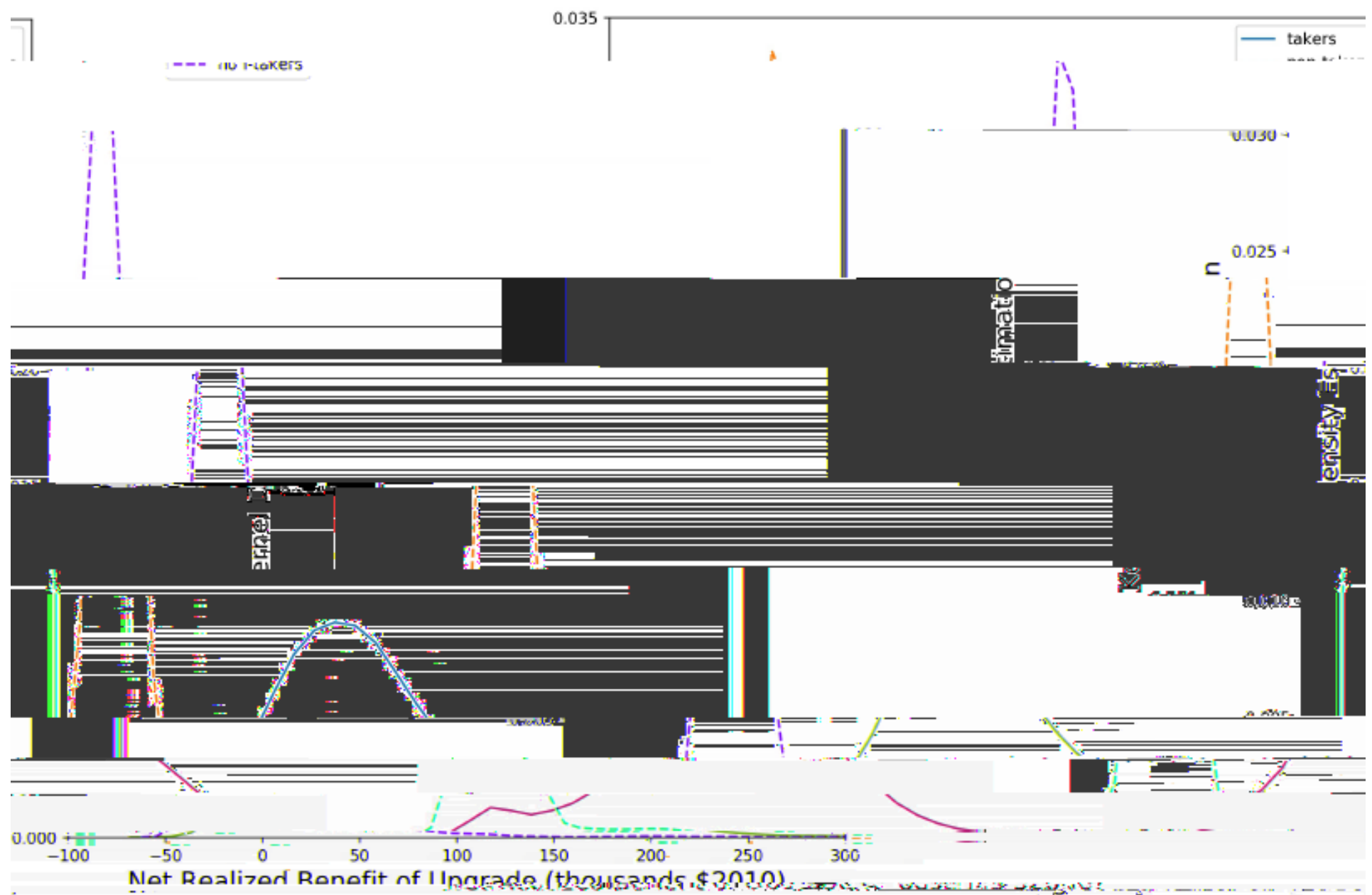




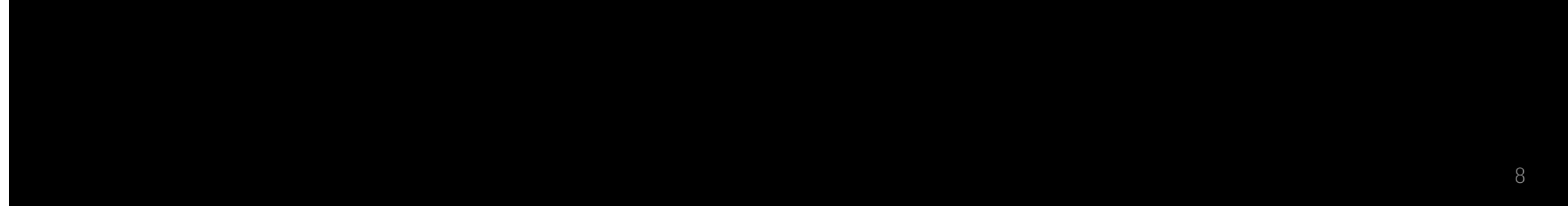
Figure 2: - Distribution of Net Realized Benefit from Upgrade for "takers"



based on realized retirement based on realized retirement based on projected retirement

	(4)	(5)	(6)	(1)	(2)	(3)
106,312	106,312	106,312	106,312	106,312	106,312	106,312
121,552	106,297	101,800	taker	16,654	87.1%	15,255
1,400	9,500	99,000	3,473	19.0%	14,999	
100.0%	100.0%	100.0%	101,111	99,999	99,999	female
14,257	100,920	102,000	100,000	100,000	100,000	100.0%
82,949	104,382	104,382	104,382	104,382	104,382	100.0%
230	104,382	Male	6,620	100.0%	16,902	110,133
827	105,313	taker	5,860	88.5%	17,057	123,884
4,193	111,603	111,603	111,603	111,603	111,603	100.0%
4,193	111,603	111,603	111,603	111,603	111,603	100.0%

based on realized retirement based on realized retirement based on projected retirement





Investment Decision: Upgrade of Taxers and Non-Taxers

	positive	negative	Total
taxers	16,061	509	16,570
non-taxers	190	2,289	2,479
<b>Total</b>	<b>16,251</b>	<b>2,798</b>	<b>19,049</b>

22.07%    12.10%    107.00%

non-taxer    190    2,289    2,479    decision

- Econometric paradox
- Even with updated (ex post) data on retirement timing and actual

~~the demand for pension upgrades is a function of the pension upgrade~~

de: linear probability model of individual demand for the pension upgrade

$$P_i = \beta_0 + \beta_1 P_i + \beta_2 B_i + \beta_3 R_i + \beta_4 e_i \quad (1)$$

Ratio  $\beta_2 / \beta_1 = 1$



- Problem with instruments (benefit and price are both functions of salary) (Goldhaber and Holden, 2020)
- Problem with LPM (and non-linear)
  - 7
  - 0



- Vast majority of Illinois teachers made upgrade decisions consistent with PW maximization at conventional discount rates (2%)
- Illinois upgrade experience not well suited to estimate WTP of teachers for pension upgrades
- Illustrates (yet again) that pension plan incentives affect timing of retirement
  - Very important to understand behavioral effects of pension rules in estimating the costs or benefits of pension rule changes