A Bad Nudge? Inertia vs. Crowd-Out in the Life Insurance Market

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Introduction

- Life Insurance Market Overview
  - Replace the lost earnings of a principal breadwinner, cover outstanding debt (such as mortgage), medical expenses, and funeral expenses.
  - Net premiums totaled $560 billion in 2013. About 70% of households own a plan, but 50 year low.
  - Two Major Sub-markets
    - *Group* (Employer sponsored) market (community rated) 39% of households
    - *Non-group* (Individual) market (experience rated) 28% of households
- Policy Motivations
  - Many households with large uninsured financial vulnerabilities (Bernheim et al., AER, 2003)
  - Most elderly widows who are poor are in the midst of a long spell of poverty (McGarry, 1995)

Literature

- Extensive Margin – Opt-in/Opt-out
  - 401k participation (Madrian & Shea 2001)
  - Organ donation (Abadie & Gay 2006)
- Intensive Margin – Stay or Switch
  - Medicare Part D choice (Ericson 2014)
  - Medicaid plan choice (Marton & Yelowitz 2015)
  - Retirement contribution levels (Chetty et al. 2014)
  - Private health insurance choice (Handel 2013)
    - Much like Handel (2013), examine whether employees respond to a change in the external environment
    - Nudge to increase coverage through mandatory component
    - Easily undone for those at the interior

Research Questions

- How does a change in mandatory life insurance coverage influence supplemental coverage, *when the change can (and should) be completely undone?*
- How do different employees respond to this nudge?
- Was the nudge desirable?

Life Insurance Policy Change

	Pre (2006-2007)	Post (2008-present)
Mandatory	$10,000	1x salary
	($\approx$ 0.2x salary)	($\approx$ $50k)
Supplemental	1-3x salary	1-5x salary
Maximum	$375k	$1m
Max. w/out medical underwriting	$375k	$375k
Rating	5-year Age Bins	5-year Age Bins
Increase Coverage	Open Enrollment	Open Enrollment
Decrease Coverage	Anytime	Anytime
Monthly price/$1,000		
Age 35	$0.06	$0.09
Age 40	$0.10	$0.10
Age 45	$0.17	$0.15
Age 50	$0.28	$0.25

Nudge

- For whom is this policy change a nudge?
  - **Interior Solution:** able to undo the employer life insurance increase. In 2007 there are 3 scenarios of supplemental coverage
    - 46%: 0x salary (mechanical increase)
    - 22%: **1-2x salary (those that could and *should* change)**
    - 32%: 3x salary (ambiguous)
  - **Information:** Aware of the employer life insurance increase and understand that it can be undone
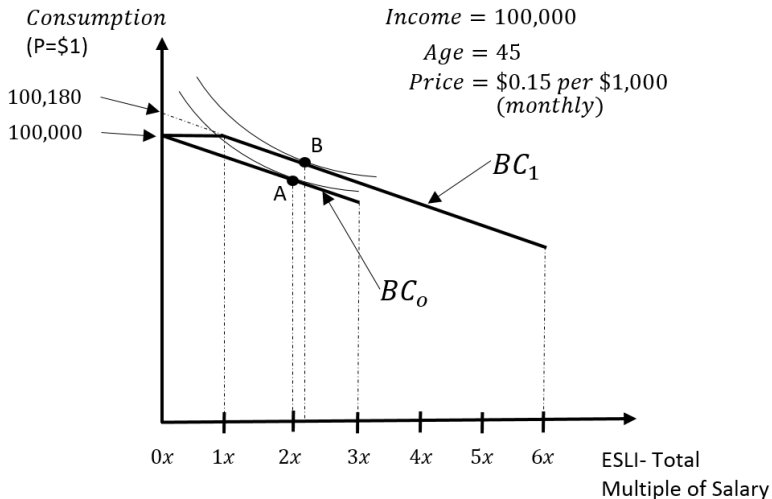
Data: Payroll data from University

- Payroll data from a large public university in the Southeast
  - Panel from 2006-2015
  - Demographics: age, race, gender, income
  - Employee type: faculty/staff, main campus/medical campus
  - Complete elections for life insurance
  - Other fringe benefit elections: health insurance, 403b/457b retirement, dental, vision, AD&D, FSA
- Representativeness
  - Benefit books from over 100 universities
  - National Compensation Survey
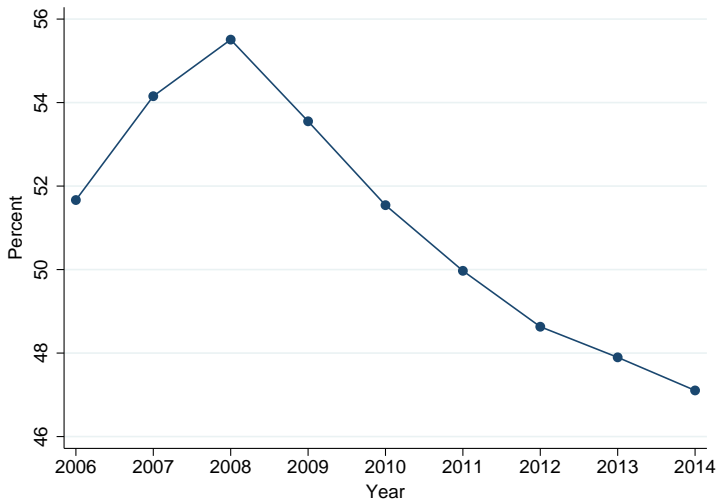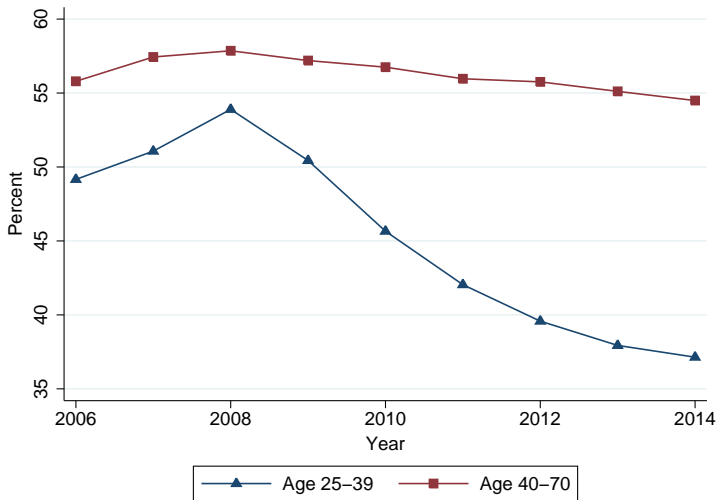
Summary Stats: Full-time Employees

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Demographics									
Male	38.9	38.9	38.1	38.0	37.6	37.4	37.1	37.3	36.9
Age (years)	43.0	44.1	44.4	44.4	44.5	44.7	44.6	44.8	44.8
White (non-Hispanic)	86.0	86.1	85.8	85.8	85.7	85.8	86.0	86.1	86.1
Married	47.6	48.5	49.2	49.8	49.5	49.5	48.9	48.6	47.9
Child	43.8	44.5	45.9	46.7	47.2	47.9	47.8	48.2	47.9
Employment									
Nominal Salary ($1,000)	38.0	39.0	41.0	42.0	43.0	43.0	44.0	45.0	46.0
Faculty	16.9	17.2	16.4	16.3	16.3	16.3	16.1	16.2	15.9
Staff	83.1	82.8	83.6	83.7	83.7	83.7	83.9	83.8	84.1
Main Campus	75.9	74.4	71.9	63.4	61.9	61.6	59.6	59.3	58.1
Healthcare	24.1	23.7	26.5	35.2	36.7	37.0	38.7	38.8	40.3
Elections									
Supplemental Life Insurance	51.7	54.1	55.4	53.5	51.5	50.0	48.6	47.9	47.1
Multiple	1.2	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3
Multiple (if >0)	2.4	2.4	2.6	2.6	2.6	2.6	2.7	2.7	2.7
Health Ins.	89.7	91.5	91.4	91.6	92.0	92.7	92.5	93.2	93.3
Health FSA	15.8	17.7	17.5	17.1	19.2	18.5	18.9	19.0	19.2
Voluntary 403(b)	12.5	14.6	15.2	14.3	13.2	13.7	13.6	13.5	13.6
Voluntary 457(b)	4.6	5.0	4.9	4.7	4.5	4.7	4.8	4.8	5.0
ADD Ins.	49.9	53.2	52.9	51.1	48.7	47.6	46.1	45.7	45.0
Vision Ins.	38.6	41.9	45.6	47.4	49.5	51.0	53.2	54.8	56.8
Dental Ins.	65.8	68.8	68.0	70.2	71.0	72.8	73.7	74.8	76.1
Observations	12,175	11,833	12,122	12,629	13,312	13,479	13,947	14,073	14,240

Note: Median Salary (rather than mean) is reported due to topcoding at $375,000.

Supplemental Life Insurance Participation

Fiscal Year:	2006	2007	2008	2009	2010	2011	2012	2013	2014
Age Bins									
Age<35	40.0	43.4	45.8	41.3	36.4	33.3	30.7	29.5	28.7
Age 35-39	58.4	60.1	63.6	60.6	57.4	54.3	51.2	49.4	48.5
Age 40-44	61.7	65.2	66.6	65.0	63.6	60.9	60.2	60.1	58.0
Age 45-49	60.5	63.1	63.9	63.5	64.2	63.5	62.8	60.8	59.8
Age 50-54	54.6	57.6	59.6	60.1	59.5	60.3	59.9	60.1	58.9
Age 55-59	53.1	52.4	51.7	51.8	51.6	51.1	52.5	52.9	53.2
Age 60-64	44.4	44.8	44.2	44.5	44.3	44.3	44.2	43.8	44.7
Age 65-69	32.3	34.1	30.9	28.3	30.0	32.6	32.5	32.9	36.6
Age 70+	21.7	23.6	23.2	19.3	18.8	18.8	21.6	21.2	23.8
Income Bins									
<$20,000	31.1	35.0	35.2	32.6	30.5	29.0	22.0	25.2	20.7
$20,000-$49,999	49.3	52.3	53.7	51.8	49.0	47.1	45.7	44.9	43.3
$50,000-$99,999	61.1	61.7	62.5	60.4	59.7	58.6	57.2	55.5	55.0
$100,000-$149,999	54.3	55.0	53.9	52.8	53.1	53.6	53.5	53.3	53.6
$150,000+	51.4	52.1	49.0	46.1	41.6	39.5	36.1	35.2	35.0
Race/Ethnicity									
White (non-Hispanic)	52.5	54.8	55.9	54.0	51.8	50.2	48.9	48.2	47.4
Black (non-Hispanic)	45.6	49.8	54.3	52.3	51.2	50.7	48.7	49.3	49.1
Other	48.0	50.0	49.3	48.5	47.9	44.4	43.0	41.3	39.7
Employer Group									
Faculty	51.6	51.8	52.1	49.2	47.6	46.2	44.2	42.1	42.2
Staff	51.7	54.6	56.1	54.4	52.3	50.7	49.4	49.0	48.0
Main Campus	51.6	53.3	54.8	52.5	50.6	49.1	48.2	47.1	46.6
Healthcare	51.9	57.2	57.8	55.8	53.3	51.8	49.5	49.4	48.0
Gender									
Female	50.9	54.2	55.4	53.7	51.5	49.8	48.4	48.1	47.2
Male	52.9	54.0	55.4	53.3	51.6	50.1	49.0	47.5	47.0

- Compare university to National Compensation Survey (March 2013) from BLS
- Payroll data comparable to Colleges and Universities
  - 1x salary is the modal benefit given
  - Take up is similar to higher education
- (Will do) Compare to publicly available benefits books collected by hand from 100+ universities from July 2014

Representativeness: National Compensation Survey

	All Workers			Full Time Workers			Part Time Workers		
	Access	Part.	Take Up	Access	Part.	Take Up	Access	Part.	Take Up
All Industries	60% (0.8)	59% (0.8)	97% (0.2)	75% (0.8)	73% (0.8)	98% (0.2)	15% (0.9)	13% (0.8)	88% (2.1)
Education Services	76 (1.1)	74 (1.1)	98 (0.4)	—	—	—	—	—	—
Junior Colleges, colleges and universities	83 (1.6)	80 (1.6)	96 (1.2)	—	—	—	—	—	—
Large Public University in Southeast	89	89	100	100	100	100%	0%	0%	—
	No contrib.	Mult of earnings	Flat dollar	No contrib.	Mult of earnings	Flat dollar	No contrib.	Mult of earnings	Flat dollar
All Industries	94% (0.4)	56% (0.8)	39% (0.8)	94% (0.4)	56% (0.8)	39% (0.8)	95% (0.9)	55% (0.8)	38% (0.8)
Education Services	91 (1.6)	42 (2.1)	51 (2.1)	—	—	—	—	—	—
Junior Colleges, colleges and universities	—	60 (3.8)	33 (3.8)	—	—	—	—	—	—
Large Public University in Southeast	100	100	0	100	100	0	—	—	—

Notes: Summary statistics from Table 16, 17, 18, of March 2013 National Compensation Survey and authors' tabulation of administrative data. Statistics on full-time and part-time workers not available at industry level.

	All Workers			Full Time Workers			Part Time Workers		
	Mult. 1x Sal	Mult. 2x Sal	Mean Mult.	Mult. 1x Sal	Mult. 2x Sal	Mean Mult.	Mult. 1x Sal	Mult. 2x Sal	Mean Mult.
All Industries	61% (1.1)	22% (1.0)	1.3x	61% (1.1)	22% (1.0)	1.4x	74% (2.8)	9% (1.4)	1.3x
Education Services	48 (3.9)	26 (5.0)	1.4x	—	—	—	—	—	—
Junior Colleges, colleges and universities	51 (6.3)	28 (8.1)	1.4x	—	—	—	—	—	—
Large Public University in Southeast	100	0	1.0x	100	0	1.0x	—	—	—
	Flat $ 25th	Flat $ 50th	Flat $ 90th	Flat $ 25th	Flat $ 50th	Flat $ 90th	Flat $ 25th	Flat $ 50th	Flat $ 90th
All Industries	$10k	$20k	$50k	$10k	$20k	$50k	$5k	$10k	$50k
Education Services	$10k	$20k	$50k	—	—	—	—	—	—
Junior Colleges, colleges and universities	$10k	$20k	$50k	—	—	—	—	—	—
Large Public University in Southeast	—	—	—	—	—	—	—	—	—

Notes: Summary statistics from Table 19 and 21 of March 2013 National Compensation Survey and authors' tabulation of administriative data. Statistics on full-time and part-time workers not available at industry level.

Empirical Model: New Hires

- Default option for supplemental coverage is still no coverage.
- New hires should be less likely to opt into supplemental and choose lower levels after the policy change (new menu). Less inertia in the spirit of Handel (2013).
- The following regression compares responses of new hires pre and post 2008

$$LifeInsurance_i = \beta_0 + \beta_1 Post_i + \beta_2 X_i + \varepsilon_i \qquad (1)$$

- $LifeInsurance_i$ represents participation or multiple of salary in coverage in the first year they were hired
- $Post_i$ is an indicator for being hired after the change in 2008
- X_i is a vector of covariates including age, race, gender, employment position, salary, etc.

New Hire Mean Comparison

Hired:	Pre Change 2006-2007	Post Change 2008-2009
Demographics		
Age	35.54	37.88
Male	0.31	0.31
Indicator for Children	0.47	0.47
Ever Married	0.46	0.45
White	0.87	0.86
Employment		
Faculty	0.11	0.11
Staff	0.89	0.89
Annual Base Salary ($10k)	4.28	4.71
Main Campus	0.63	0.40
Healthcare	0.37	0.60
Life Insurance		
Basic Multiple of Salary	0.32	1.00
Has Supplemental	0.44	0.37
Multiple	1.00	0.90
Multiple (if >0)	2.27	2.42
Other Elections		
Health Insurance	0.86	0.89
Vision Insurance	0.53	0.55
Dental Insurance	0.68	0.72
Voluntary 403b	0.05	0.07
Voluntary 457b	0.02	0.02
AD&D	0.38	0.32
Observations	1,975	2,345

The sample is restricted to the first observation for individuals hired between
FY 2006 and 2009 and who are eligible to elect supplemental coverage.

	All	Faculty	Staff	Healthcare	Main	Staff (Main)
Hired Post Change	-0.090^{***}	-0.159^{***}	-0.082^{***}	-0.057^{***}	-0.117^{***}	-0.107^{***}
	(0.015)	(0.044)	(0.016)	(0.022)	(0.020)	(0.023)
Age	0.051^{***}	0.055^{**}	0.050^{***}	0.051^{***}	0.049^{***}	0.047^{***}
	(0.005)	(0.022)	(0.005)	(0.006)	(0.007)	(0.008)
Age Squared	-0.001^{***}	-0.001^{**}	-0.001^{***}	-0.001^{***}	-0.001^{***}	-0.001^{***}
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	-0.002	0.074	-0.016	-0.025	0.012	-0.008
	(0.016)	(0.048)	(0.017)	(0.025)	(0.021)	(0.024)
Black	0.037	0.049	0.041	0.042	0.047	0.048
	(0.026)	(0.108)	(0.027)	(0.037)	(0.038)	(0.040)
Other Race	0.020	0.048	-0.003	-0.015	0.037	0.012
	(0.032)	(0.054)	(0.041)	(0.058)	(0.039)	(0.059)
Annual Base Salary ($10k)	-0.001	-0.008^{**}	0.006^{*}	0.013^{***}	-0.005^{**}	0.001
	(0.002)	(0.003)	(0.003)	(0.005)	(0.003)	(0.004)
Healthcare	0.055^{***}		0.049^{***}			
	(0.016)		(0.016)			
Indicator for Children	0.138^{***}	0.176^{***}	0.133^{***}	0.142^{***}	0.134^{***}	0.122^{***}
	(0.017)	(0.057)	(0.017)	(0.023)	(0.024)	(0.026)
Ever Married	0.115^{***}	0.067	0.116^{***}	0.110^{***}	0.115^{***}	0.121^{***}
	(0.016)	(0.057)	(0.017)	(0.023)	(0.023)	(0.025)
Obs.	4,320	467	3,853	2,143	2,177	1,710
Participation Hired 2007	0.495	0.550	0.488	0.474	0.509	0.499

# New Hire Comparison: Supplemental Multiple, 2006-07 vs. 2008-09 (Tobit)

Marginal Effects Reported	All	Faculty	Staff	Healthcare	Main	Staff (Main)
Hired Post Change	−0.110***	−0.142**	−0.108***	−0.087***	−0.129***	−0.130***
	(0.022)	(0.064)	(0.023)	(0.033)	(0.030)	(0.034)
Age	0.086***	0.086**	0.084***	0.084***	0.087***	0.084***
	(0.008)	(0.036)	(0.008)	(0.010)	(0.011)	(0.012)
Age Squared	−0.001***	−0.001**	−0.001***	−0.001***	−0.001***	−0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	0.007	0.116*	−0.015	−0.022	0.026	−0.008
	(0.024)	(0.069)	(0.025)	(0.037)	(0.031)	(0.035)
Black	0.027	0.007	0.034	0.047	0.024	0.025
	(0.039)	(0.164)	(0.040)	(0.056)	(0.055)	(0.058)
Other Race	0.021	0.026	0.015	0.051	0.010	−0.016
	(0.047)	(0.079)	(0.060)	(0.087)	(0.056)	(0.082)
Annual Base Salary ($10k)	−0.005	−0.015***	0.006	0.013*	−0.009**	0.001
	(0.003)	(0.005)	(0.005)	(0.007)	(0.004)	(0.006)
Healthcare	0.084***		0.077***			
	(0.024)		(0.024)			
Indicator for Children	0.196***	0.258***	0.187***	0.213***	0.178***	0.155***
	(0.024)	(0.082)	(0.026)	(0.035)	(0.034)	(0.038)
Ever Married	0.177***	0.149*	0.172***	0.162***	0.186***	0.183***
	(0.024)	(0.083)	(0.025)	(0.033)	(0.034)	(0.037)
Obs.	4,320	467	3,853	2,143	2,177	1,710
Multiple Hired 2007	1.144	1.162	1.142	1.117	1.161	1.161

Continuously Employed with Supplemental Coverage in 2007
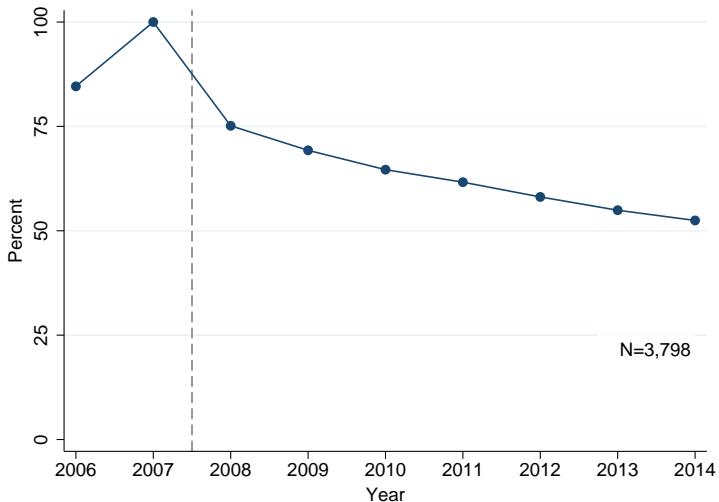
Life Insurance Multiples: Interior (1-2x) and Continuously Employed
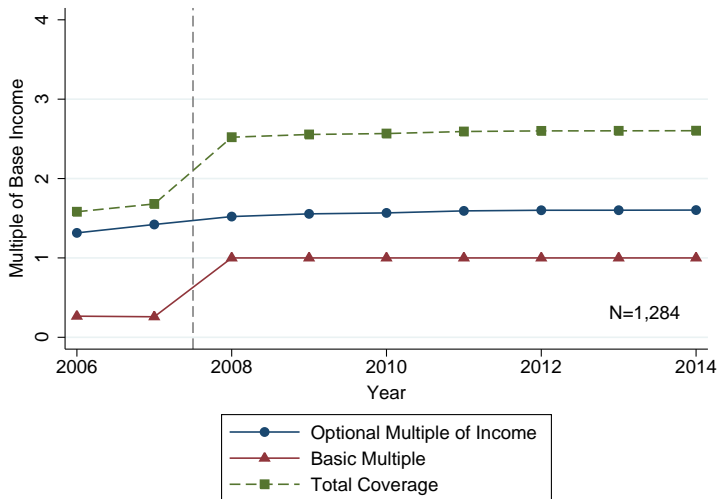
- The following fixed effects model estimates the influence of the nudge on total life insurance holdings

$$TotalCoverage_{it} = \gamma_0 + \gamma_1 Post_t + \gamma_2 X_{it} + \alpha_i + \varepsilon_{it} \qquad (2)$$

- $TotalCoverage_{it}$ is coverage in multiples of salary (Employer Basic + Worker Supplemental)
- $Post_t$ is an indicator for being after the policy change in 2008
- X_{it} is a vector of time varying covariates

Fixed Effects Analysis Pre Period: 2006-2007; Post Period: 2008-2009
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

	All	Faculty	Staff	Main Campus	Healthcare
Post Change	0.777***	0.931***	0.747***	0.773***	0.792***
	(0.027)	(0.063)	(0.030)	(0.030)	(0.060)
Age	0.461***	0.485***	0.458***	0.472***	0.378***
	(0.026)	(0.072)	(0.029)	(0.032)	(0.055)
Age Squared	−0.004***	−0.005***	−0.004***	−0.005***	−0.003***
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)
Annual Base Salary ($10k)	−0.000	−0.009	0.021	0.008	0.001
	(0.018)	(0.022)	(0.031)	(0.019)	(0.069)
Healthcare	0.083*		0.078*		
	(0.044)		(0.045)		
Obs.	7,588	1,128	6,460	5,638	1,950
Individuals	1,897	282	1,615	1,469	630
ΔBasic	0.740	0.868	0.717	0.741	0.736
Reject full pass through?	No	No	No	No	No
p-value:	[0.173]	[0.310]	[0.321]	[0.282]	[0.356]

Fixed Effects Analysis Pre Period: 2006-2007; Post Period: 2008-2009
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

	Male	Female	White	Black
Post Change	0.791^{***}	0.770^{***}	0.796^{***}	0.578^{***}
	(0.046)	(0.034)	(0.030)	(0.068)
Age	0.445^{***}	0.471^{***}	0.481^{***}	0.290^{***}
	(0.046)	(0.032)	(0.029)	(0.070)
Age Squared	-0.004^{***}	-0.005^{***}	-0.005^{***}	-0.002^{**}
	(0.000)	(0.000)	(0.000)	(0.001)
Annual Base Salary ($10k)	-0.024	0.017	-0.009	-0.003
	(0.027)	(0.025)	(0.020)	(0.067)
Healthcare	-0.097	0.113^{**}	0.112^{**}	-0.057
	(0.119)	(0.048)	(0.049)	(0.098)
Obs.	2,512	5,076	6,432	820
Individuals	628	1,269	1,608	205
$\Delta Basic$	0.770	0.725	0.748	0.649
Reject full pass through?	No	No	No	No
p-value:	[0.642]	[0.183]	[0.111]	[0.293]

Tenure   Salary   Exclude 2006

Fixed Effects: Pre Period 2006-2007
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

Pre Period: Post Period:	2006-2007 vs. 2008-2009	2006-2007 vs. 2010-2011	2006-2007 vs. 2012-2013
Post Change	0.777*** (0.027)	0.677*** (0.059)	0.659*** (0.106)
Age	0.461*** (0.026)	0.382*** (0.022)	0.357*** (0.022)
Age Squared	−0.004*** (0.000)	−0.003*** (0.000)	−0.003*** (0.000)
Annual Base Salary ($10k)	−0.000 (0.018)	0.014 (0.016)	−0.029** (0.014)
Healthcare	0.083* (0.044)	0.199*** (0.046)	0.227*** (0.056)
Obs. Individuals	7,588 1,897	6,504 1,626	5,520 1,380
ΔBasic Reject full pass through? p-value:	0.740 No [0.173]	0.741 No [0.281]	0.742 No [0.432]

Are Workers Aware?

- Are workers aware of the employer life insurance increase?
  - If they are not aware, then they are not failing to optimize given their information set.
- We use activity with regards to other benefit elections to evaluate activity and awareness.
  - Proximity to life insurance announcement in university's benefits book
  - Changes in other benefit elections (Brown & Previtero 2014, Chetty et al. 2014)

Fixed Effects Analysis Pre Period: 2006-2007; Post Period: 2008-2009
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

Changed Benefit On:	Same Page	±1 Topic	±2 Topics	Any Change
Post Change	1.060***	0.818***	0.793***	0.793***
	(0.120)	(0.033)	(0.029)	(0.029)
Age	0.824***	0.462***	0.465***	0.471***
	(0.111)	(0.032)	(0.029)	(0.029)
Age Squared	−0.009***	−0.005***	−0.005***	−0.005***
	(0.001)	(0.000)	(0.000)	(0.000)
Annual Base Salary ($10k)	−0.079	−0.021	−0.008	−0.007
	(0.089)	(0.022)	(0.019)	(0.019)
Healthcare	0.406**	0.154***	0.092*	0.085*
	(0.172)	(0.054)	(0.047)	(0.047)
Obs.	872	5,464	6,536	6,596
Individuals	218	1,366	1,634	1,649
ΔBasic	0.738	0.746	0.745	0.745
Reject full pass through?	Yes	Yes	No	Yes
p-value:	[0.007]	[0.028]	[0.102]	[0.099]

Further Evidence

- The 46% of workers that have 0x salary in 2007 should experience a mechanical increase
  - "Employer Recommendation" could influence more coverage
- The 32% at the upper corner (3x) could:
  - Increase coverage due to expanding maximum and latent demand for more coverage
  - Or decrease supplemental coverage in response to increased employer coverage.

Fixed Effects Analysis Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

	0x		3x	
Pre Period: Post Period:	2006-2007 vs. 2008-2009	2006-2007 vs. 2012-2013	2006-2007 vs. 2008-2009	2006-2007 vs. 2012-2013
Post Change	0.873*** (0.016)	1.161*** (0.067)	0.948*** (0.022)	0.981*** (0.088)
Age	0.103*** (0.014)	0.101*** (0.013)	0.395*** (0.024)	0.336*** (0.020)
Age Squared	−0.001*** (0.000)	−0.001*** (0.000)	−0.004*** (0.000)	−0.004*** (0.000)
Annual Base Salary ($10k)	0.017*** (0.006)	0.006 (0.006)	−0.001 (0.015)	−0.004 (0.012)
Healthcare	0.079*** (0.028)	0.021 (0.039)	0.055 (0.037)	0.160*** (0.049)
Obs. Individuals	16,004 4,001	11,396 2,849	12,228 3,057	9,252 2,313
ΔBasic Reject full pass through? p-value:	0.726 Yes [0.000]	0.726 Yes [0.000]	0.753 Yes [0.000]	0.753 Yes [0.010]

- Do individual life insurance purchases respond to group life insurance coverage?
  - Survey of Income and Program Participation (SIPP) 2001

Dependent Variable: Individual Market Life Insurance Participation; Age 18-64 and Employed

	(1)		(2)	
ESLI>$50k	−0.044***	(0.008)		
ESLI>$100k			−0.072***	(0.011)
Age	0.003**	(0.002)	0.003*	(0.002)
Age Squared	0.000	(0.000)	0.000	(0.000)
<12th Grade	−0.094***	(0.010)	−0.093***	(0.010)
Some College	0.045***	(0.007)	0.045***	(0.007)
College Degree	0.066***	(0.008)	0.066***	(0.008)
Male	0.027***	(0.006)	0.027***	(0.006)
Married	0.067***	(0.007)	0.067***	(0.007)
Unmarried Partner	−0.022*	(0.013)	−0.022*	(0.013)
Child	0.056***	(0.006)	0.057***	(0.006)
Good Health	0.046***	(0.011)	0.046***	(0.011)
Owns House	0.106***	(0.009)	0.106***	(0.009)
Mortgage	0.064***	(0.008)	0.063***	(0.008)
Personal Income ($1k)	0.013***	(0.001)	0.013***	(0.001)
White	0.137***	(0.008)	0.137***	(0.008)
Black	0.137***	(0.012)	0.135***	(0.011)

Note: There were 25,066 observations for each regression.

Desirability of the Nudge

- Was the nudge beneficial to employees initially at an interior solution?
  - Policy change induced more coverage
  - Premiums cheaper on mandatory plan than supplement plan
  - Substitution from individual market coverage: Depends on health/premiums
  - **ESLI contingent on employment**

Conclusion and Policy Implications

- Main Finding
  - Striking evidence of inertia, increased life insurance coverage, 100% pass through
- Policy options for uninsured financial vulnerabilities
  - Tax Code
    - Expand $50k max
  - Behavioral:
    - Nudges
    - Plan reminders (Madrian 2014)
  - Safety Net
    - Social Security Survivors Benefits

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Fixed Effects Analysis Pre Period: 2006-2007; Post Period: 2008-2009
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

Changed Any Benefit:	Both 06-07 & 07-08	07-08 only	06-07 only	Neither
Post Change	0.804***	0.775***	0.667***	0.647***
	(0.040)	(0.041)	(0.095)	(0.105)
Age	0.584***	0.293***	0.546***	0.238**
	(0.039)	(0.040)	(0.094)	(0.093)
Age Squared	−0.006***	−0.003***	−0.004***	−0.003***
	(0.000)	(0.000)	(0.001)	(0.001)
Annual Base Salary ($10k)	−0.021	0.017	0.029	0.269**
	(0.025)	(0.029)	(0.085)	(0.122)
Healthcare	0.081	0.080	0.044	0.095
	(0.062)	(0.069)	(0.152)	(0.165)
Obs.	4,108	2,488	580	412
Individuals	1,027	622	145	103
ΔBasic	0.755	0.728	0.724	0.682
Reject full pass through?	No	No	No	No
p-value:	[0.217]	[0.251]	[0.546]	[0.741]

Return

Fixed Effects Analysis Pre Period: 2006-2007; Post Period: 2008-2009
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

Hired Since:	1990	1995	2000	2005
Post Change	0.747^{***}	0.745^{***}	0.753^{***}	0.750^{***}
	(0.033)	(0.037)	(0.048)	(0.079)
Age	0.419^{***}	0.399^{***}	0.373^{***}	0.310^{***}
	(0.031)	(0.033)	(0.042)	(0.068)
Age Squared	-0.004^{***}	-0.003^{***}	-0.003^{***}	-0.002^{***}
	(0.000)	(0.000)	(0.000)	(0.001)
Annual Base Salary ($10k)	-0.000	0.000	0.002	-0.023
	(0.022)	(0.026)	(0.035)	(0.058)
Healthcare	0.087^{*}	0.058	0.132^{*}	0.119
	(0.050)	(0.056)	(0.072)	(0.107)
Obs.	5,572	4,396	2,888	1,068
Individuals	1,393	1,099	722	267
$\Delta Basic$	0.725	0.719	0.713	0.710
Reject full pass through?	No	No	No	No
p-value:	[0.508]	[0.482]	[0.392]	[0.606]

Return

Fixed Effects Analysis Pre Period: 2006-2007; Post Period: 2008-2009
Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

Salary Quartile:	1st	2nd	3rd	4th
Post Change	0.565^{***}	0.727^{***}	0.873^{***}	0.920^{***}
	(0.056)	(0.056)	(0.055)	(0.050)
Age	0.372^{***}	0.511^{***}	0.508^{***}	0.509^{***}
	(0.052)	(0.050)	(0.061)	(0.061)
Age Squared	-0.003^{***}	-0.005^{***}	-0.005^{***}	-0.006^{***}
	(0.001)	(0.000)	(0.001)	(0.001)
Annual Base Salary ($10k)	-0.020	0.134^{*}	-0.046	0.005
	(0.064)	(0.070)	(0.051)	(0.022)
Healthcare	-0.019	0.164^{**}	0.208^{**}	-0.209
	(0.084)	(0.071)	(0.097)	(0.134)
Obs.	1,804	1,884	1,984	1,916
Individuals	451	471	496	479
$\Delta Basic$	0.572	0.709	0.793	0.873
Reject full pass through?	No	No	No	No
p-value:	[0.899]	[0.746]	[0.150]	[0.344]

Note: Mean salary is respecively $25k, $36k, $50k, $85k for quartiles 1-4 in 2007.

Return

Evidence of Short-Run Inertia: Exclude 2006

Fixed Effects Analysis, Dependent variable: Total Coverage Multiple (Employer Basic+ Worker Supplemental)

	Pre Period: Post Period:	2007 vs. 2008	2007 vs. 2008-2009	2007 vs. 2010-2011	2007 vs. 2012-2013
Post Change		1.193^{***} (0.060)	0.806^{***} (0.025)	0.768^{***} (0.061)	0.843^{***} (0.118)
Age Squared		-0.004^{***} (0.001)	-0.004^{***} (0.000)	-0.003^{***} (0.000)	-0.003^{***} (0.000)
Annual Base Salary ($10k)		0.006 (0.030)	0.034^{*} (0.020)	0.028^{*} (0.016)	-0.018 (0.015)
Healthcare		-0.212 (0.171)	0.009 (0.041)	0.085^{*} (0.048)	0.089 (0.060)
Age			0.367^{***} (0.034)	0.313^{***} (0.026)	0.287^{***} (0.027)
Obs.		4,200	5,724	4,908	4,167
Individuals		2,100	1,908	1,636	1,389
$\Delta Basic$		0.738	0.740	0.742	0.742
Reject full pass through?		Yes	Yes	No	No
p-value:		[0.000]	[0.008]	[0.667]	[0.394]

Return