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Using administrative data from a large public university, we analyze a policy designed to increase employer-sponsored life insurance. The University always had a supplemental life insurance plan available for its workers. In 2008, it increased its provision of basic coverage from a $10,000 to 1x salary. Workers initially paying for supplemental life insurance were in a position to completely undo the increase in basic coverage by scaling back supplemental elections, yet their default choice in 2008 was to continue at their existing level from 2007. The increased provision of basic coverage therefore represents a nudge for employees to increase life insurance. The nudge increased life insurance holdings one-for-one, both in the short and long-run, even for workers who actively made changes to other fringe benefits. New hires, who had to make an active choice, elected less supplemental coverage after 2008 relative to earlier cohorts of new hires, providing additional evidence of a significant degree of inertia among existing workers. Additionally, we find evidence of inertia for high earners constrained by the maximum limits. Data from a national sample of job changers show minimal crowd-out of individual market coverage from increased employer-sponsored life insurance. Further, we discuss the desirability of the nudge and find that the increase in basic coverage decreased life insurance disparities for two-thirds of employees. *JEL* Codes: D31, G22, D03, J32, J33, J38, H20.

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I. INTRODUCTION

Life insurance ownership is at a 50-year low and sales have declined 45 percent since the mid-1980s (Prudential, 2013; Scism, 2014). Large disparities exist between life insurance holdings and underlying vulnerabilities with some estimates exceeding $15 trillion (Bernheim et al., 2003; Conning, 2014; LIMRA, 2015b). These disparities are partially explained by many individuals' inability to answer rudimentary financial questions and difficulties associated with thinking about death and gauging mortality risk (Kopczuk and Slemrod, 2005; Lusardi and Mitchelli, 2006, 2007).

Notwithstanding these disparities, 70 percent of households have some form of life insurance coverage, which is split between individual and group markets. The two markets differ in that premiums in individual markets are experience rated with extensive underwriting, while group markets typically have some form of community rating and guaranteed issue. Previous work has focused almost exclusively on the individual market (Cawley and Philipson, 1999; Harris and Yelowitz, 2014, 2015; He, 2009, 2011; Hedengren and Stratmann, 2015). Little attention, however, has been given to the group or employer-sponsored life insurance (ESLI) market where 39 percent of households have coverage.

In a recent paper on behavioral economic interventions, Madrian (2014) proposes prompting individuals to make a concrete plan to elect life insurance in order to increase coverage. A different approach to address uninsured vulnerabilities is through an increase in employer provision. As with any type of employer or government provision, there is the principal concern of crowd-out. A growing literature, however, documents considerable levels of inertia that lessens the crowd-out effect (Handel, 2013; Thaler and Sunstein, 2008).

We use administrative data from a large public university ("the University" henceforth) with approximately 16,000 employees to analyze the impact of increased employer provision of life insurance on total life insurance coverage. There are two types of ESLI available for employees at the University: basic, which is automatically provided by the employer, and supplemental. In 2008, the University increased provision of basic life insurance coverage from $10,000 to 1x the worker's annual salary and increased the maximum coverage from $375,000 to $1 million. For existing employees, the choice of supplemental coverage remained at the default level chosen in 2007; to undo the nudge to increase total coverage, an employee would actively have to scale back supplemental coverage. The neoclassical model predicts one-for-one crowd-out for those electing supplemental coverage in

2007.

Using two distinct samples, we observe considerable levels of inertia. The first group we analyze consists of existing employees who elected a multiple of 1x or 2x salary in 2007 (1,867 employees). These individuals were in a position to completely undo the increase in basic coverage and were not constrained by a maximum contribution limit. For example, an employee with 1x salary in supplemental coverage making $60,000 would experience an increase in total coverage from $70,000 to $120,000 (1.17x salary to 2x salary) if they did not reduce supplemental coverage. For this sample, we find full pass-through of the increase in basic coverage in both the short and long-run and for every demographic group. The second group contains highly compensated employees (making $125,000 to $187,500) who were constrained by the maximum contribution limit in 2007 and who chose supplemental coverage worth 3x salary (86 employees). Due to the $375,000 maximum, they were effectively assigned a multiple less than 3x salary. For example, an employee making $160,000 (who elected 3x salary) was constrained to have only 2.34x salary ($375,000) in supplemental coverage. The policy change automatically increased both basic coverage as well as supplemental coverage from 2.34x to 3x salary. In the case of full inertia, this policy change increased total coverage from 2.4x to 4x salary ($385,000 to $640,000). Over 75 percent of this group did nothing in response to this change consistent with inertia.

New employees, however, are not influenced by inertia because they are required to complete a form where they name a beneficiary and make an active decision regarding the multiple of salary for supplemental ESLI. For new hires, we find the increase in basic coverage caused a 19 percent reduction in supplemental life insurance participation. In addition, conditional on electing supplemental life insurance coverage, employees hired after the increase elected 18 percent less supplemental coverage. The reduction in supplemental coverage for those without the influence of inertia is consistent with partial crowd-out. Therefore, we conclude that inertia drives the full-pass through of the increase in basic coverage for existing employees.

Even though we do not find crowd-out of the perfect substitute, supplemental ESLI, for existing employees, it is possible that employees reacted to the increased provision of basic coverage by decreasing an imperfect substitute, individual life insurance (term or whole life policies). We cannot directly observe this response for the University's employees, so we use the Survey of Income and Program Participation (SIPP) and a quasi-experimental approach that examines job switchers to identify the effect. Even among job switchers, who should be the most responsive, we find little substitution between employer-sponsored and individual markets with only 1 in 10 workers changing individual coverage in reaction to changes in ESLI. If University employees react in a similar fashion, then increases in ESLI coverage, by in large, represent increases in total life insurance holdings.

Overall, the nudge was effective in the sense that it increased life insurance coverage, but was it a sensible nudge? We analyze how employees' holdings relate to the recommended levels of life insurance coverage. In 2007, approximately two-thirds of employees were below recommended levels and the remainder were above. The increased provision of basic coverage reduced the average disparity between actual and recommended coverage. Of those with adequate coverage prior to the increase, over 90 percent had no dependents and consequently had little need for coverage.

In addition to analyzing the effectiveness of the increase in basic coverage to 1x salary, we explore alternative expenditure neutral policies. We find that equal contributions to premiums mitigate disparities better than multiples of salary or fixed coverage amounts.

This paper contributes to the body of literature on inertia. Researchers have analyzed inertia on the extensive margin related to default participation in 401(k) plans (Choi et al., 2002, 2004; Madrian and Shea, 2001) and organ donation (Abadie and Gay, 2006; Johnson and Goldstein, 2003). Additional research has explored inertia on the intensive margin in the context of Medicare Part D choice (Ericson, 2014), retirement contribution (Chetty et al., 2014; Messacar, 2014), private health insurance choice (Handel, 2013), income tax refunds (Jones, 2012) and Medicaid plan choice (Marton and Yelowitz, 2015). This study primarily examines the intensive margin where employees first optimize and then encounter frictions that lead to inertia despite a changing default.

The remainder of the paper is organized as follows. Section II describes the policy change and theoretical predictions. Section III describes the data and representativeness of the University sample. Section IV provides the empirical specification. Section V presents our results. Section VI analyzes the relationship between the individual and non-group markets. Section VII explores the desirability of the nudge and alternative policies. Section VIII concludes.

II. POLICY CHANGES AND THEORETICAL PREDICTIONS

In 2008, the University increased basic coverage from $10,000 (0.18x salary on average) to 1x annual base salary for all qualified employees.[1] Employees with larger salaries mechanically benefited more from this policy than individuals with lower salaries. The average worker experiences a $121 annual increase in total compensation because of the increase in basic coverage (based on supplemental premiums). This increase in basic coverage, given no employee response, results in an increase of life insurance of approximately 1x the employees' annual salary. Table I outlines the life insurance parameters both before and after the increase in basic coverage.[2]

Qualified employees could always elect supplemental life insurance in multiples of annual salary. Premiums on supplemental life insurance are assigned based on 5-year age bins and workers pay on an after-tax basis through payroll deductions. Premiums changed between 2006 and 2007 and then remain unchanged for the duration of the sample. Premiums increased by 60 and 50 percent for those aged 18-34 and 35-39 respectively. The increased premiums could cause employees to decrease coverage.[3] If there were a lagged effect—employees react the following year—then this would indicate crowd-out of the increase in basic coverage when it is the result of changing premiums. Therefore, for those under age 40, our analysis will overstate crowd-out. In 2007, employees were required to resubmit a life insurance elections form to update beneficiaries. Therefore, the forced recalibration of ELSI made the price change more salient and if employees wanted to change supplemental coverage, they likely would have done it in 2007. Regardless, we use older employees who did not experience a premium change to verify the robustness of our findings.

As illustrated in Table I, prior to 2008, qualified employees could elect supplemental life insurance at multiples of 1-3x base salary up to a maximum of $375,000.[4] Beginning in 2008, the multiple limit was expanded to include 4x and 5x annual salary with a $1 million maximum contribution limit. The increased maximum election should only affect those individuals who elected 3x annual salary prior to 2008 or those constrained by the $375,000 maximum.

[1] Qualified employees include regular full-time employees or part time $\geq$.75 full-time equivalent and constitute 91 percent of all workers.

[2] The University also switched insurance companies in 2008. Both companies have identical and excellent credit ratings. Given the straightforward nature of these life insurance policies, it is unlikely that this switch significantly influenced participation.

[3] Previous studies have estimated the price elasticity of demand for term life insurance to be between -0.30 and -0.66 (Pauly et al., 2003; Viswanathan et al., 2007)

[4] Individuals were assigned "partial" multiples if the selected full multiple would cause insurance in excess of $375,000. For example, if an employee had a base salary (prior to 2008) of $200,000 he or she could have elected 1.875x salary to be covered at the maximum of $375,000.

We illustrate the increase in basic coverage and the expanded maximum in Figure I assuming that employees are utility maximizers and that life insurance is a normal good. This figure depicts the life insurance decision for a 45-year-old employee with an annual income of $100,000. Prior to the policy change, individuals faced budget constraint BC_0 and optimally choose bundle A, which consists of total life insurance coverage worth 2x annual salary. After the policy change, employees were subject to BC_1, which incorporates the provision of 1x salary in basic coverage and the increase in available multiples. If an employee does not react to the changing budget constraint, she ends up at point C with increased life insurance coverage. Optimally, the employee selects bundle B but due to the restriction of purchasing whole multiples of coverage the individual continues with 2x salary in total ESLI coverage. Therefore, for this interior solution, the increase in basic life insurance from essentially 0x to 1x salary is completely offset due to one-for-one crowd-out such that the individual optimally demands the same level of total coverage. This comes from the requirement of purchasing coverage of discrete multiples of salary and a minuscule income effect. Given the minimal increase in total compensation—on the order of 0.2 percent—the likely prediction is one-for-one crowd-out and no increase in total life insurance holdings for those with 1-2x salary in 2007.

For individuals who did not elect supplemental coverage, the increase in basic coverage mechanically increases ("shoves") total coverage from $10,000 to 1x annual salary. Any change in total coverage above 1x salary could be due to perceived implicit advice from the employer or referencing coverage based on the available maximum.

For those at 3x salary in 2007, it is likely that they were constrained by the maximum and have latent demand for more coverage. As the available multiple increases from 3x to 5x in 2008, they likely elect more coverage. However, if 3x salary was the desired level of coverage then they should experience complete crowd-out of the increase in basic coverage.

Failure to observe crowd-out for employees at the interior solution (i.e. 1x or 2x) could be a result of employee inattention or lack of understanding. The University mails benefit booklets to employees, which inform them of changes and benefit availability (see Appendix A). This information is also available through the Human Resource website. Nonetheless, it is possible that employees were unaware of the increase in basic coverage or did not understand that supplemental elections would remain the same. Later, we use overall activity and changes in other benefits to infer awareness.

An alternative explanation for not finding crowd-out could be prohibitively expensive costs of changing coverage. Various psychological frictions or costs exist that could cause deviations from the rational frictionless model. Implicit costs due to the difficulty of evaluating the relative advantages for the various types of life insurance can decrease coverage (Handel, 2013; Iyengar et al., 2004). Furthermore, the psychological cost of thinking about death decreases the likelihood of changing life insurance elections (Kopczuk and Slemrod, 2005). In addition, employees needed to submit a paper form to the benefits office to decrease supplemental coverage, which represents a time cost for changing the policy. We account for this time cost by analyzing employees that made simultaneous changes to other benefits and consequently have reduced costs for making an additional change to supplemental life insurance.

III. DATA

III.A. Description

We use administrative (payroll) panel data from the University from 2006 to 2014.[5] The data document complete benefit and retirement elections. Employees make benefit elections during the open enrollment period for the University or after a qualifying event, which include birth, adoption, marriage, divorce, or employment status change.[6] All elections made during the open enrollment period take effect July 1 and continue until a new election in made. In general, employees cannot add or drop coverage during the year except in the case of a qualifying event. Supplemental life insurance is distinct from other benefits in that an employee may reduce insurance coverage at any time.

If an employee leaves the University for any reason his or her coverage for either basic or supplemental life insurance lapses unless the individual qualifies for long-term disability (LTD) or the employee dies within the three months.[7] This lock-in aspect of ESLI is contrasted with individual market coverage, which is contingent on premium payments alone and not employment. Evidence of lock-in has been shown in employer-sponsored health insurance and cliff vesting for

[5] For the University, fiscal years go from July to June. For example, fiscal year 2006 begins July 1, 2005 and ends June 30, 2006.

[6] The open enrollment period is approximately 30 days from mid-April to mid-May. In the case of a qualifying event, all changes must be made within 30 days of the event.

[7] If the employee chooses to leave the University, the worker does have the option of switching the policy over to the insurer without health screening. However, according to a Human Resource representative, the worker will "pay dearly" in premiums for the policy. This is referred to as "portability" in the insurance contract. This university is far less explicit than some others with respect to job related leaves and portability, but seems very similar. If a worker qualifies for LTD, the life insurance policy will end upon turning age 67.

defined benefit pensions (Kotlikoff and Wise, 1987; Madrian, 1994).

Table II shows the summary statistics for 23,132 unique workers from 2006 to 2014 who are eligible for supplemental life insurance coverage. The sample is predominately female (63 percent) and white (86 percent). Roughly half of the sample is married and over 40 percent of the sample has a child.[8] Faculty make up less than 20 percent of the sample. In addition to the main campus, the University operates a hospital. The relative employment share for healthcare increased 17 percentage points over the period; all healthcare workers are classified as staff.[9] The data report annual base salary in thousand dollar increments top-coded at $375,000. Median salary increased in nominal terms from $38,000 to $46,000 over the 9 years of the sample. This value does not take into account bonuses, raises that occur during the year, or summer ninths.

Health flexible spending account (FSA) participation increased 3 percentage points (from a base of 16 percent). Health FSA participation is an indicator of active participation in benefit elections, as FSAs require that employees actively specify a contribution amount each year.

Supplemental life insurance participation increased until 2008 and then decreased from 56 percent to 48 percent in the course of six years. The second panel of Table II and Figure II break out supplemental life insurance participation by different demographic groups. The participation profile is hump-shaped with respect to age and peaks between ages 40 and 45. Life insurance's primary purpose is to replace the lost earnings of a breadwinner, which means as the individual approaches retirement demand might decrease as potential lost earnings decrease. For employees under age 55, participation rates increased from 2006 to 2008 and then consistently fell for the remainder of the sample. As shown in the figure, the youngest employees experience the greatest decline. For those under age 35, participation dropped from 46 percent in 2008 to 29 percent in 2014. No decline exists for employees older than 50. Crowd-out from the increase in basic coverage, increased premiums, recessionary forces, or a general trend in society, could be driving this decline in supplemental life insurance participation.

Table II further shows how income levels influence participation. For employees that make less

[8] We do not observe marital status or children directly in the data. The variables are determined based on health, dental, vision, and dependent life insurance elections as well as dependent flexible spending account (FSA). If an employee ever elects either spousal or family insurance (of any type) then the individual is categorized as "Married in Sample." Similarly, if an employee elects child or family insurance (of any type) or uses a dependent FSA then they are classified as having a "Child in Sample." This measure will not pick up individuals who have alternative sources of insurance such as a spouse's employer. In addition, this variable will miss individuals with children who are no longer dependents.

[9] Even though we do not explicitly observe education, the position of faculty or staff at the main campus is correlated with level of education (Brown and Previtero, 2014).

than \$100,000, there is the same trend of increasing participation up to 2008 followed by steady significant decline. This trend exists for faculty, staff, main campus, and healthcare employees. Faculty are less likely to hold supplemental ESLI in comparison to staff for every year except 2006. This perhaps could be the result of differential participation in the individual term life insurance market. There are no significant gender differences.

III.B. Representativeness

Many universities publish online benefits booklets through their human resource offices with varying degrees of detail on fringe benefits, including ESLI. We collected benefits booklets in 2014 from more than 400 institutions. Of these, we select 70 institutions that have well-documented information on both basic and supplemental life insurance coverage. The benefit booklets for many institutions were missing details on life insurance and we are hesitant to conclude that such institutions do not offer coverage. Nearly 70 percent of employees across all occupations are offered life insurance coverage, and the take-up rate is 80 percent. Additionally, half of all employees are offered supplemental coverage (LIMRA, 2015a).

Although many differences exist across universities with respect to their provision of life insurance, several common features emerge for the 70 institutions examined. First, premiums are community rated, often with five-year age bins, similar to the University in this study. Virtually all institutions have an open enrollment period where new employees can purchase coverage without underwriting and where the issuance of policy is guaranteed.

Second, a large majority of basic plans are a multiple of salary. Of the 70 plans, 30 percent had basic coverage at 1x salary, 17 percent at 1.5x salary, and 24 percent at 2x salary. Thus, the University's design of its basic plan from 2008 onward is representative of a much larger set of institutions, both in terms of structure and generosity. Almost all of the remaining plans (12 of the 20 that were not multiples at 1x, 1.5x or 2x salary) offered a flat dollar amount of coverage, most often in the range of \$20,000 to \$50,000. Such flat dollar life insurance plans mimic the basic structure at the University prior to 2008 (where the flat dollar amount of \$10,000 was considerably lower than most plans).

Third, almost half of institutions scale back basic life insurance coverage once employees reach a threshold age, often 65 or 70. Relative to younger employees, the payout typically falls by at least

35 percent. In 2008, the University adjusted the coverage such that payouts fell to a flat amount of $10,000, rather than 1x salary, once an employee reached age 70.

Fourth, three-quarters of supplemental plans also offer coverage in multiples of salary, with maximum payouts that will be binding for higher paid employees. The most common maximum multiple is 5x salary, with a range from 2x to 10x salary. The University's change in 2008 brought the supplemental maximum in line with other universities. The remaining one-quarter of supplemental plans offer flat dollar amounts, which allows lower paid employees to purchase far greater multiples of their salary. The most common flat dollar amount is $500,000.

Table III combines and summarizes some of the salient features for the 70 universities into a maximum "effective salary multiple" (i.e. total coverage divided by salary). The combination basic and supplemental plans, multiples of salary and flat dollar amounts, age adjustments and maximum payouts has implications for the degree of total coverage that an employee can obtain from ESLI. We present the effective salary multiple for three types of earners ($35k, $100k and $400k) and two ages (age 30 and age 65). Several findings emerge. Lower compensated employees typically have the potential to replace more of their salary through life insurance, both due to plans with flat payout and binding maximums on higher paid employees. The median effective multiple is 6.5x salary for young employees making $35k, 6.0x salary for those making $100k, and just 2.2x salary for those making $400k. Second, since the majority of plans do not have steep drop offs based on age, the medians are similar for 65 year olds, but in some cases, the drop offs can be quite substantial. For example, a 65-year-old at Michigan State University making $100k can replace just 5.7x her salary, while a 30-year-old can replace 8.5x her salary. The University considered in this study, after the policy change, falls below the median effective salary multiple for most employees.

The University can also be compared to the more systematic collection of data from the March 2013 National Compensation Survey (NCS)(Bureau of Labor Statistics, 2013). Evidence is presented in Table IV. Across all industries, 60 percent of employees have access to ESLI, and take-up of the benefit is virtually complete. Employees in higher education have far greater access to ESLI, and access is higher still at the University. Consistent with the sample of 70 institutions, the most common form of ESLI is as a multiple of earnings, which is approximately twice as prevalent as flat dollar contributions. In addition, for ESLI plans that are designed as a multiple of salary, almost twice as many cover employees at 1x salary as at 2x salary. Among flat dollar plans, the median payment is $20,000, somewhat lower than the sample of 70 institutions.

In summary, data collected from benefits booklets and from the NCS suggest that the University made changes in 2008 that brought its life insurance offering from below average to the norm for colleges and universities. The NCS demonstrates that colleges as a whole tend to be more generous than other industries in the provision of ESLI, but the design of the University's plan—as a multiple of 1x earnings—is quite common for a broad range of workers.

IV. EMPIRICAL ANALYSIS

IV.A. Existing Employees at the Interior

To test the influence of inertia, we restrict the analysis to those employees that elected either 1x or 2x annual salary in 2007 (interior solution) for whom the increase in basic coverage represents a nudge.[10] The simultaneous increase in the available multiples from 3x to 5x coverage should not influence this population since by revealed preference they demand a multiple lower than the maximum. In addition, they have the flexibility to reduce supplemental coverage to offset the increase in basic coverage. We use the following fixed effects specification to test the effect of the increase in basic coverage.

$$TotalCoverage_{it} = \beta_1 Post_t + \beta_2 X_{it} + \alpha_i + \varepsilon_{it} \tag{1}$$

$TotalCoverage_{it}$ represents the total coverage (basic+supplemental) in multiples of income for individual i at time t, X_{it} is a vector of covariates that vary across time (income, age, and main campus vs. healthcare assignment), and $Post_t$ is an indicator variable equal 1 for years following the increase in basic coverage. If β_1 is zero, then there is no evidence of inertia. The individual fixed effect, α_i, controls for unobserved heterogeneity such as risk aversion, latent health, and human capital. We explicitly look at employees who elected coverage of 1-2x salary in 2007 (interior solution) who were able to completely undo the increase in basic life insurance by reducing their supplemental coverage. This group constitutes 22 percent of the sample of existing employees.

[10] This sample additionally excludes those that elected 2x salary in 2007 and had a salary greater than $125,000 and those that elected 1x salary who had a salary greater than $187,500 because they were potentially constrained by the maximum coverage limit of $375,000. This exclusion represents 1 percent of those at the interior.

IV.B. New Hires

Next, we analyze the effect of the increase in basic coverage for new hires. Several studies have shown that new hires respond more to changes in benefit pricing and more frequently elect new options relative to existing employees (Handel, 2013; Royalty and Solomon, 1999; Samuelson and Zeckhauser, 1988; Strombom et al., 2002). New hires at the University are required to actively choose (no default) if they want supplemental coverage or just basic coverage in addition to listing a beneficiary for basic life insurance. Therefore, in the absence of inertia, new hires should have been less likely to opt into, and choose lower levels of, supplemental coverage after the increase in basic coverage.

Summary statistics for cohorts of new hires within 2 years of the increase in basic coverage (4,298 employees) are presented in Table VIII. The difference in the basic life insurance multiples mechanically reflects the policy change, whereas the decrease in supplemental coverage on the extensive margin (any participation) gives evidence of crowd-out. The multiple of coverage conditional on participation increased potentially due to non-participation by those that initially selected the lowest multiples. The table also shows that the extensive margin response in supplemental life insurance coverage is driven from employees at the main campus. Demographics are very similar across the hiring cohorts except for an increase in age primarily driven by the healthcare sector. Individuals hired after the change receive a higher nominal salary coming mainly from increased salaries in the main campus. The greatest difference is that in 2008 and 2009, the University hired significantly more healthcare positions relative to the main campus. We explicitly control for these differences in the empirical specification using a rich set of controls.

To formally test the hypothesis of no crowd-out among new hires, we estimate the following model:

$$Supplemental_i = \gamma_0 + \gamma_1 Hired\ Post_i + \gamma_2 X_i + \epsilon_i \tag{2}$$

where $Supplemental_i$ represents either having life insurance (linear probability) or the multiple of salary in coverage (Tobit) depending on the specification. X_i represents demographic, family, and employment variables used to control for differences present in Table VIII. In addition, we include controls for dental and vision insurance elections to account for differences in demand for fringe insurance benefits. $Hired\ Post_i$ represents being hired after the increase in basic coverage. If γ_1 is significantly less than zero, then we reject the hypothesis of no crowd-out.

V. RESULTS

V.A. Impact on Existing Employees: Complete Inertia

We illustrate the influence of increased basic life insurance in Figure III for employees who are at an interior solution in 2007. The figure provides strong evidence of inertia and that the nudge significantly increased total life ESLI coverage.

To formally test this finding, we estimate the fixed effect regression given in equation (1). We use the two years on either side of the policy change to capture the short-run effects. In the first column of Table V the coefficient on $Post\ Change_t$ indicates that the average increase of 0.74x salary in basic life insurance (from \$10,000 to 1x salary) caused an increase in multiple of total coverage (basic + supplemental) of 0.78x salary. We cannot reject the null hypothesis of full pass-through of the increase in basic coverage into total coverage (between 98 and 113 percent pass-through at the 95 percent confidence level). This result provides strong evidence that existing employees did not respond to the change in the default level of coverage.

We next consider employees between the ages of 40-44 and 60-64 who did not experience premium changes in 2007 and consequently represent our cleanest sample. This age restriction leads to the same conclusion as the full sample that we cannot reject full pass-through of the increase in basic coverage. We then restrict the sample to include just those individuals aged 18-39. As mentioned, these individuals experienced a sizable increase in premiums (50 to 60 percent) in 2007, one year before the change in basic coverage. If employees react the following year to the price increase then this would indicate crowd-out of the increase in basic coverage. The premium change for this age group should exaggerate any crowd-out that we find or equivalently should understate inertia. The third column of Table V shows that for a 0.71x salary increase in basic coverage, employees increase total coverage by 0.81x salary. Once again, we conclude full pass-through of the increase in basic coverage even with any influence of the premium increase. In addition, we examine employees that experienced an increase in premium due to aging into a higher premium bracket in 2008 and continue to find full pass-through of the increase in basic coverage.

High earners experience the largest increase in basic coverage and therefore should be the most likely to decrease supplemental coverage. For example, someone making $30,000 mechanically received $20,000 more basic coverage whereas someone making $100,000 received an additional $90,000 in basic coverage. The fourth column shows that the result of full pass-through holds even when we restrict the analysis to the highest earning quartile. Additionally, we cannot reject the hypothesis of full pass through when we break out the sample by faculty and main campus staff.

If employees were unaware of the increase in basic life insurance coverage then they would not have reacted to the policy and we would conclude that it is inertia. To investigate this concern, we examine employees that changed other portions of their benefit packages in 2008. The University lists in an introductory page a brief summary of the changes that occurred beginning that fiscal year. Individuals that made changes to any election likely consulted the University's benefits book and were more likely informed about the change in life insurance coverage. The first column of Table VI restricts the sample to individuals that changed any other election (health, vision, dental, etc.) in 2008 and that elected 1-2x coverage in 2007. Even with this restriction, we continue to find full pass-through of the increase in basic coverage.

A potential concern is that individuals that changed a single election only looked at that specific benefit (i.e. health FSA) and did not even notice the change in basic life insurance. To address this, we further restrict the sample to individuals who make changes to a benefit election located on the same page as life insurance in the benefit book. This increases the likelihood that employees are aware of the change in life insurance. We further expand this by varying the sample based on changing benefits listed in varying proximity to life insurance in the benefits book. Through all of these specifications, we find more than full pass-through of the increase in basic coverage, which provides stronger evidence that the pass-through is not merely a result of unawareness.

Although in the short-run we find strong evidence of inertia, the increased coverage could be crowded-out over a longer time horizon. Using continuously employed workers from 2006 to 2010, 2012 and 2014 respectively we see how those individuals initially at the interior (1-2x salary) react. In 2009, the university added the option to make elections online, which should reduce the time costs of changing supplemental coverage and increase the likelihood of crowd-out. The first column of Table VII gives an estimate for years 2006 and 2007 in comparison to 2009 and 2010 just two and three years after the change and we fail to reject full pass-through even with the addition of online elections. The second column compares the same pre-period with 2011 and 2012 as the post period. The coefficient decreases, in relation to the short-run effect, but we still cannot reject full-pass-through. The third column shows that even six years after the change, we still cannot reject the hypothesis of full pass-through with a 0.74x salary increase in basic coverage resulting in a 0.58x salary increase in total coverage.

Other possible explanations for the increase in total coverage include reference-dependent preferences and implicit advice (Benartzi and Thaler, 2001; Kőszegi and Rabin, 2006). For example, employees could have referenced their elected coverage based on the maximum available. Therefore, when the options expanded, the employee could have purchased a larger amount of coverage in relation to the new higher maximum. Additionally, employees could take the increase in available multiples as implicit advice from the employer that they need more coverage. The announcement of increased coverage by the employer also could have induced individuals to re-evaluate their life insurance needs and optimally elect more coverage.

To gauge these influences, we look at individuals who did not elect supplement coverage in 2007 and experienced a 1x salary mechanical increase (a "shove") in life insurance coverage in 2008. Of those at 0x salary in 2007, 7 percent began electing supplemental coverage in 2008. This 7 percent can be interpreted as the influence of the implicit advice or reference-dependent preferences. Decreasing marginal returns imply that individuals with some supplemental coverage are relatively less likely to react to implicit advice. Therefore, an increase in coverage for 7 percent of this subsample could represent an upper bound for those with supplemental coverage. However, the sample of individuals that elect no supplemental coverage could be substantively different from those that elect a positive multiple of coverage. Therefore, this increase of 7 percent due to implicit advice or referencing might explain part of the lack of crowd-out but falls short of fully explaining the robust findings of inertia.

V.B. Impact on New Hires: Partial Crowd-out

Next, we examine the extensive margin (participation in supplemental coverage) for new hires at the University who should exhibit less inertia relative to existing employees. We restrict the sample to the first observation for individuals hired between 2006 and 2009.[11] The first columns of Table IX give the linear probability model results from equation (2) with supplemental participation as the

[11] We use the first observation because individuals hired during the fiscal year do not appear in the data until the following fiscal year.

dependent variable. The first column shows that on the extensive margin, individuals hired after the increase in basic coverage are 9.4 percentage points less likely to elect supplemental coverage from a base of 50 percent participation consistent with the theoretical prediction of crowd-out.

Those under age 40 experienced increased premiums in 2007—on the order of 50 to 60 percent—which would bias our results toward finding larger crowd-out effects. We break out the response by ages to address this concern. The same approximate reduction holds for those 40 and over who experienced smaller premium changes—ranging from 0 to negative 12 percent—as well as those under 40.[12] Through all specifications, having a child or spouse increases supplemental life insurance participation.

We next estimate a Tobit model to analyze how the change in basic coverage influenced the intensive margin for supplemental coverage. We use a Tobit model to account for individuals who select 0x salary in supplemental coverage and for those that are restricted to purchasing 3x annual salary before the change and 5x annual salary following the change. The latter columns of Table IX presents the marginal effects from equation (2) with multiple of supplemental coverage as the dependent variable. The coefficient on *Hired Post Change* in the fourth column implies that the increase in basic coverage caused a multiple reduction of 0.19x salary for those who selected an interior multiple. The other columns show that this result does not significantly vary across different age groups despite the premium changes in 2007.[13]

Overall, for new hires—who presumably exhibit less inertia—the increase in basic coverage caused a decrease in supplemental life insurance participation by 19 percent. In addition, conditional on electing supplemental coverage, the increase in basic life insurance induced an 18 percent decrease in the amount of coverage elected. These new hire results provide evidence that the lack of crowd-out of supplemental coverage for existing employees is a result of inertia.

V.C. Highly Compensated Employees: Additional Evidence of Inertia

Yet another example of inertia can be found with highly paid employees in 2007 that were constrained at a maximum contribution of $375,000 but that were not constrained by the 3x salary restriction. Individuals that made between $125,000 and $187,500 could not have 3x salary in

[12] For new hires 40 and over, this specification could understate the existence of crowd-out due to the slight (0 to 12 percent) decrease in premiums.

[13] Ordered Probit estimates have consistent qualitative results showing that the increase in basic coverage decreased supplemental coverage for new hires.

coverage due to the $375,000 maximum prior to 2008.[14] For example, an individual that made $160,000 and selected 3x salary would have been assigned a multiple of 2.34 due to the $375,000 limit prior to 2008 despite having picked a whole multiple. The individuals that were constrained by the maximum automatically increased in 2008 to the multiple that they choose previously (in this case 3x salary). Therefore, the policy change not only increased their basic coverage, but also increased their supplemental coverage above what they had.

Among these individuals, many of them presumably had latent demand for more life insurance, which could have been realized following the expansion of the maximum and lead to an election of 4x or 5x salary. Alternatively, they could have satisfied their latent demand for life insurance by purchasing individual market life insurance. In this case, they should decrease supplemental coverage to offset the increased basic life insurance and automatically increased partial multiple of supplemental coverage. Doing nothing in 2008 is an abnormal reaction and indicative of inertia. Of those that were constrained by the $375,000 maximum in 2007 (86 employees), 14 percent increased to a multiple of 4x or 5x annual salary (latent demand), and 7 percent reduced their election (crowd-out). The remaining 79 percent simply allowed a mechanical increase in supplemental coverage to 3x annual salary. Even 3 years after the change over 70 percent remained at 3x salary in coverage. This result provides another example of employees electing coverage and then not responding to external factors that influence their total coverage.

VI. INDIVIDUAL MARKET CROWD-OUT

The market for life insurance differs from other major forms of insurance (such as health insurance prior to the Affordable Care Act) in that there exists an employer market and a well-functioning individual market. Individual and ESLI differ in that individual policies are experience rated (individually underwritten) and ESLI policies are generally community rated. Additionally, ESLI is conditional on employment whereas term life insurance is merely conditional on premium payments. The experience rating in the individual market also represents an additional cost (time, blood tests, lengthy questionnaires, etc.) in comparison to ESLI costs. Notwithstanding these differences, an individual market term policy is an imperfect substitute for ESLI in terms of actual insurance provided. Therefore, even in the absence of the most natural form of crowd-out (supplemental ESLI),

[14] In addition, those that made between $187,500 and $375,000 would only have coverage of less than 2x salary. However, this group could have elected either 2x or 3x salary and either way be constrained by the $375,000 maximum.

it is possible that employees reduced or lapsed individual market policies as basic ESLI increased.

The University data do not provide information on employees' individual market life insurance coverage. To understand this relationship, we turn to the Survey of Income and Program Participation (SIPP), which has information on holdings from the employer-sponsored market and implicit information on holdings from the individual life insurance market. These data have been used in recent studies on demand for life insurance (Harris and Yelowitz, 2014, 2015; Hedengren and Stratmann, 2015). This nationally representative longitudinal sample is constructed through individual interviews in four-month intervals known as waves. Each wave contains responses regarding income, labor force activity, and participation in government assistance programs. In addition to the core monthly questions, the survey covers less-frequently asked subjects in topical modules. The wealth topical modules contain detailed information on assets and liabilities (including life insurance holdings) and are asked at least twice per panel for the survey years used in this analysis. We use SIPP panels from 1996 to 2008 and limit our sample to individuals aged 18 to 64.[15,16]

The SIPP, although the most suitable data set to explore this relationship, is subject to measurement error for individual life insurance. The survey explicitly asks about insurance purchased through an employer and about total life insurance coverage. The difference between total and ESLI holdings allows us to infer individual life insurance holdings. This indirect approach of determining the extensive margin—does the person have individual life insurance or not—is inexact due to differential top coding for ESLI and total life insurance. For example, for the 1996 panel, total holdings are truncated at $999,000 and ESLI holdings are truncated at $400,000. If a worker's ESLI holdings exceed $400,000, it is not possible to conclusively infer individual life insurance holdings. Additionally, prior to the 2004 panel, the survey asks about the "face value" of policies (the amount that would be paid out at death) which applies to all types of life insurance policies. However, for the 2004 and 2008 panels, the questions changed to asking about the "cash value" of a policy, which only applies to life insurance with an investment portion, primarily whole life insurance. Gottschalck and Moore (2006) show that a majority of respondents did not understand the distinction between cash and face value and continued to report face value even though the question asked cash value. However, if individuals who only had term life insurance accurately responded

[15] Following Gruber and Yelowitz (1999), we exclude imputed values for life insurance due to criticism of the SIPP wealth imputation methodology by researchers (Hoynes, Hurd, and Chand, 1998).

[16] Earlier panels of the SIPP do not allow repeat observations of ESLI and individual market elections. Our identification strategy relies on following individual life insurance elections across time which precludes their use.

to the question following the change, then there would be no way of determining if they had both ESLI and individual life (if they did not have ESLI then indicating they had insurance indicates individual life insurance). In summary, the indicator for individual life insurance is measured with error.

Figure IV shows that total, ESLI and individual market life insurance all have decreasing participation over time. Those that held some form of life insurance decreased from 50 to 32 percent from 1996 to 2011. These declines are consistent with industry-level findings that ownership of life insurance is at a 50-year low (Prudential, 2013).

A simple correlation between ESLI and individual life insurance indicates a positive relationship. This could come from the correlation of higher income workers with firms that offer life insurance or represent strong preferences for insurance manifesting itself by having life insurance in both markets.

Looking past a simple correlation, we turn to a quasi-experimental approach that examines how job changers react to differences in ESLI offerings from different firms. Employment changes are endogenous, but these changes are arguably orthogonal to changes in life insurance preferences, much like retirement savings (Chetty et al., 2014). ESLI offerings vary tremendously across industry as seen in both the NCS and in the SIPP, yet take up is very high. For example, in the SIPP, 7 percent of administrative workers—where duties/quality of the job is thought to be fairly homogeneous—in "employment services" have ESLI whereas 61 percent of hospital administrative workers have ESLI.[17] Therefore, a change in workplaces could induce an exogenous increase or decrease in ESLI that will be our source of identification for the following fixed effect regression.

$$Individual\ Life_{it} = \delta_0 ESLI_{it} + \delta_1 X_{it} + \alpha_i + u_{it} \tag{3}$$

$Individual\ Life_{it}$ is an indicator for holding individual life insurance, $ESLI_{it}$ is an indicator for employer-sponsored coverage, X_{it} is a vector of time varying covariates, α_i is the individual fixed effect, and u_{it} is the error term.

We restrict our analysis to the year an individual switches employment and the year preceding the change. We only consider changes from one employer to another and only those that do not experience drastic changes in earned income (Chetty et al., 2014).[18]

[17] See Ahn and Yelowitz (2015) for an example of this type of analysis on paid sick leave.

[18] We define a job change based on a change in employer id and a start date between periods or a change in occupation code. We limit the sample to employees who experienced a change in income from 50 to 150 percent of

Table X shows the results from equation (3). The first column shows that relatively few, 1 in 10, workers have individual market life insurance crowded-out by ESLI. The second column only considers individuals that switch industries but keep the same occupational code in an attempt to hold constant factors other than the changing life insurance benefits. The crowd-out from this specification increases slightly implying that receiving (losing) ESLI causes a 14 percentage point reduction (increase) in the probability of having individual life insurance coverage. Individuals could differentially respond to gaining ESLI in comparison to losing ESLI coverage. Columns 3 limits the sample to job changers who either gained ESLI following a job change and those that experience no change in ESLI coverage as a result of switching jobs. Column 4 similarly looks at those that lose ESLI coverage in comparison to those that do not experience a change in ESLI coverage. The results show individuals are more likely to lapse individual market life insurance coverage when they get ESLI than they are to get individual market coverage in response to losing ESLI.

The last specification examines individuals of differing health. Presumably, individuals in better health should react more to changes in ESLI because they face lower premiums in the individual market. The last two columns show that individuals in excellent health are more likely to experience crowd-out in comparison to those in good health consistent with underwriting.

It is possible that even though roughly 9 in 10 did not react to a change in ESLI in the year of the job change more workers could have reacted in the subsequent years. For example, individuals could let their term policy lapse rather than renewing the policy when it ends. Therefore, two periods may not adequately capture crowd-out. To partially address this concern, we restrict our sample to individuals who change jobs and then stay at the new job for an additional year in the sample. Given that the job change occurred in year t, we use years $t-1$ and $t+1$ in the fixed effect regression. If there is a lagged effect, we should see crowd-out increase in the second year relative to the first as more people adjust to the change. Table XI shows that crowd-out from one year is roughly equivalent to the crowd-out after two years. This does not rule out the possibility of future lagged crowd-out effects, but it does suggest that the cumulative crowd-out is likely not significantly different from the initial crowd-out.[19]

Among job changers, across a wide variety of specifications, between 85 and 90 percent of individuals did not make changes to individual life insurance coverage as their ESLI coverage changed.

previous income.

[19]Data limitation prevent analysis of longer run effects.

As discussed above, job changers should be more responsive in comparison to existing employees. Therefore, the substitution between the individual and ESLI for job changers likely represents an upper bound for the actual level of substitution. Hence, we conclude that crowd-out between the group and non-group market is minimal, suggesting that increases in total ESLI coverage represent increases in total life insurance holdings for a majority of employees.

VII. DESIRABILITY OF NUDGE

To gauge the desirability of the nudge, we evaluate employee holdings relative to financial planners' recommendations. We use a life insurance needs calculator from Prudential to approximate the recommended coverage for each individual. The algorithm uses age, gender, marital status, annual salary, number of children and age of the youngest child for the recommendation.[20]

The University data contain information on all these measures with the exception of number of children and age of youngest child. For 52 percent of the sample, which do not have children, this limitation is inconsequential. For the portion of the sample with children, we turn to the American Community Survey (ACS) from 2005 to 2013, which has information on number of children and their ages. To obtain a sample of likely employees of the University, we restrict observations to full-time employees of a university or college that reside in the same geographical location as the University. We then impute number of children and age of the youngest child using random draws from the ACS sample conditioned on gender and age bin. With this information, we approximate the recommended amount of coverage for each employee.

To analyze the effects of the increase in basic coverage, we look at coverage averages from 2007 and 2008 in comparison to the average recommended amount. Figure Va shows that the mean multiple of ESLI coverage in 2007 is significantly below the mean recommended multiple. The difference between recommended total coverage and actual ESLI coverage is largest for those aged 30 to 40 and then decreases for older individuals. The increase in basic coverage lessened the gap between recommended and actual coverage. However, the increase in basic coverage also induced

[20]The calculator uses data from the Federal Reserve 2010 Survey of Consumer Finances, College Board, 2012 Bureau of Labor Statistics NAHB Survey, Current Population Survey Annual Social and Economic Supplement, and the Consumer Expenditure Survey to calibrate the model. Estimated needs seems to reflect the principal purpose for life insurance of replacing the lost earnings of a breadwinner. For example, needs decrease as an individual approaches retirement. Nonetheless, Prudential sells life insurance and may have the incentive to overestimate needs. The website explicitly states that the amount given should be a starting point for estimating needs. See https://isso.prudential.com/simplifiedneeds/life for documentation on the needs calculator.

excessive coverage for the oldest employees.

Given that employees do not react to changes in basic coverage, we examine the increase to 1x salary in comparison to alternative policies. The disparity between recommended and actual coverage is greater for lower paid and younger employees. Provision of 1x salary in basic coverage inherently favors those with higher salaries and older employees (where premiums are significantly higher). Hence, uniform provision of a multiple of salary in basic coverage—although the most common form of basic life insurance (57 percent)—is not the most effective for reducing the average disparity. An alternative policy, which is used for 38 percent of workers with basic coverage, is to provide a fixed amount of coverage (keeping total expenditures constant: $59,024) to each employee eliminating the advantage for higher earners (Figure Vb) (LIMRA, 2015a). This policy decreases the disparities more relative to 1x salary but still induces excessive coverage for the oldest employees. Inherently, this policy redistributes to lower paid employees. Providing a fixed amount of coverage however, does not address the concern that younger employees generally have larger disparities in coverage.

A final policy, which is not commonly used, is to provide equal dollar contributions toward premiums for each employee (keeping total expenditures constant: $146). This policy would not favor the higher paid employees and would implicitly provide more coverage for the young who face lower premiums. Figure Vc shows that this scenario decreases the disparity between recommended and actual coverage more effectively than a fixed benefit or multiple of salary. One important caveat with these alternative policy predictions is they assume the same level of crowd-out as provision of 1x salary, which might not be the case. For example, a 30-year-old employee that makes $30,000 would receive 5x salary in coverage under the equal dollar contribution (rather than 1x) which would likely elicit more crowd-out. Nonetheless, the alternative policies discussed do provide some insight into design for basic coverage to more closely align coverage with recommended levels.

If ESLI was the only avenue for obtaining life insurance, we could conclude that the increase in basic coverage in 2008 helped the average employee obtain an amount closer to the recommended level. However, the existence of the individual market makes this conclusion less certain.

Those individuals at an interior solution of 1x to 2x salary in 2007 probably do not have individual market coverage. If individual market coverage were the better option then they should not have any supplemental ESLI. Conversely, if ESLI were the better option, then they should elect the maximum supplemental ESLI multiple prior to purchasing any individual life insurance. Therefore, differences between actual and recommended coverage likely represent disparities in insurance rather than inability to observe full life insurance holdings for the 22 percent at an interior in 2007.

Next, we consider individuals who have no supplemental ESLI or have 3x salary in 2007. Using the SIPP, we identify individuals who work at universities or colleges for a rough comparison. Given the data obtained through the benefit books, we use the modal provision of 1x salary for our assumption of basic ESLI coverage. We also assume individuals that have more than 1x salary in ESLI were constrained by a maximum. With these assumptions, 39 percent of individuals with no supplemental coverage and 29 percent that had more than 1x salary additionally had individual market life insurance coverage.

Under these assumptions, approximately 30 percent of all employees at the University have some individual life insurance. If these 30 percent of employees represent those with the greatest disparities, then the overall disparity in coverage could be much less than Figure Va illustrates.

Looking at averages ignores heterogeneity in life insurance needs among University employees. Figure VIa depicts how the increase in basic coverage influenced total ESLI holdings relative to recommended levels. In 2007, 33 percent of employees had more than the recommended amount principally due to not having a spouse or child. The increase in basic coverage caused a 7 percentage point increase in employees with more than the recommended amount of coverage. This highlights the major trade-off for the employer of inducing too much coverage for those who either do not need coverage or already have enough and not inducing enough coverage for those that have less than the recommended amount.

Figure VIb shows that the increase in basic coverage caused a 15 percentage point increase in those with at least the recommended level of coverage (from 13 to 28 percent) for employees aged 18-34. The figure also shows a 22 percent decrease in the number of employees that had less than half of the recommend level (significantly under-insured) and an 8 percent increase in individuals having more than twice the recommended coverage (over-insured) in part due to not having a dependent.

Figure VIc shows that the oldest employees (aged 50-64) were more likely to have at least the recommended level in 2007 (50 percent). The biggest effect was the 12 percentage point decrease in those that were significantly under-insured.

Another aspect to consider with provision of basic life insurance is the individual market response. ESLI coverage is inferior to term life insurance because ESLI is conditional on employment whereas term is conditional on premium payments alone. If someone loses their job they simultaneously lose ESLI coverage. Would it be better for the employer to remove the option of ESLI? Earlier we found that roughly 1 in 10 would purchase individual market coverage in response to a lapse in ESLI. Therefore, even though term life insurance is a more complete form of life insurance not enough people would take it up in response to an employer forgoing ESLI coverage to increase overall life insurance.

VIII. CONCLUSION

In 2008, a large public university increased provision of basic life insurance coverage to employees. Contrary to theory, we find significant levels of inertia and full pass-through of the increase in basic life insurance for existing employees with supplemental coverage. In addition, we find considerable levels of inertia for highly compensated employees who were initially constrained by a maximum contribution limit. However, new employees, who were forced to make an active decision, decreased supplemental coverage. Therefore, we conclude that the increase in total coverage is driven by inertia.

Death in the working age population is a low probability event with catastrophic consequences that can be mitigated through life insurance. However, life insurance ownership is at a 50-year low and research shows uninsured vulnerabilities (Bernheim et al., 2003; Prudential, 2013). Consequently, difficulties arise for many surviving dependents. Using Danish data, Fadlon and Nielsen (2015) find that widows increase their labor force participation by 10-11 percent to compensate for lost earnings. In addition, McGarry and Schoeni (2005) find high rates of widow poverty in the U.S. due in part to insufficient life insurance. Our findings shed further light on the potential role of behavioral economics in reducing disparities between recommended and actual levels of life insurance coverage.

We show that the increase in basic life insurance to 1x salary reduced disparities between recommended and actual levels for two-thirds of the University's employees. Given the lack of significant crowd-out, it appears that many firms with basic coverage below 1x salary could nudge employees to have more coverage without significant employee response. The question remains of how far employers could go before inducing significant crowd-out. Could more ambitious expenditure neutral policies like fixed contributions be effective? The outcome is speculative, but considering our results of high levels of inertia and only partial crowd-out for those who make active decisions, it is likely that such a policy would increase total coverage.

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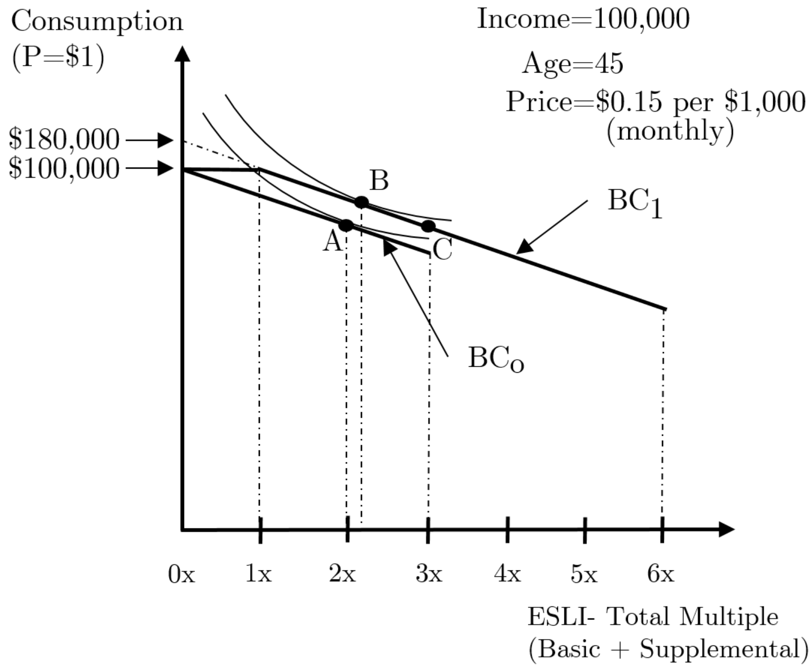
Figure I: Interior Solution



Note: Figure not drawn to scale. BC_0 represents the initial budget constraint with optimal bundle A. BC_1 is the budget constraint which depicts the increased provision of basic life insurance (1x salary) and the expanded maximum multiple. The optimal bundle for BC_1 is given by B. Due to a small income effect and discrete choices, the employee will optimally elect 2x salary in total coverage both before and after the policy change.

Figure II: Supplemental ESLI Participation: University Data

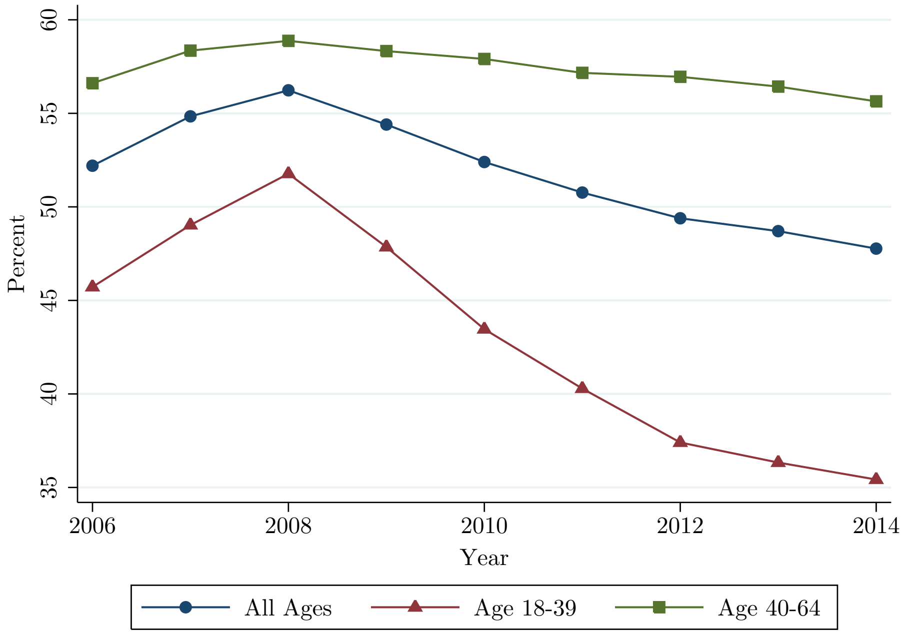
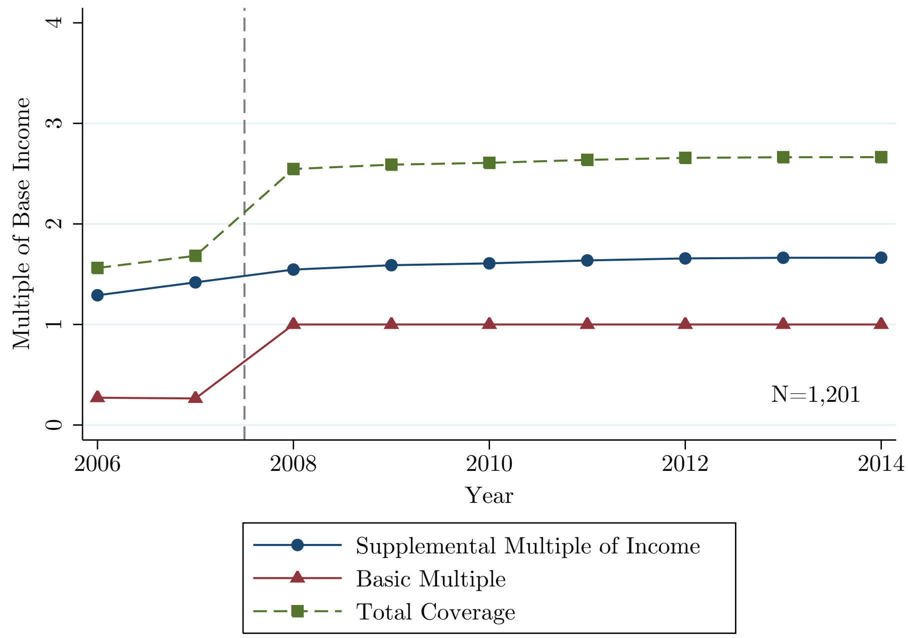
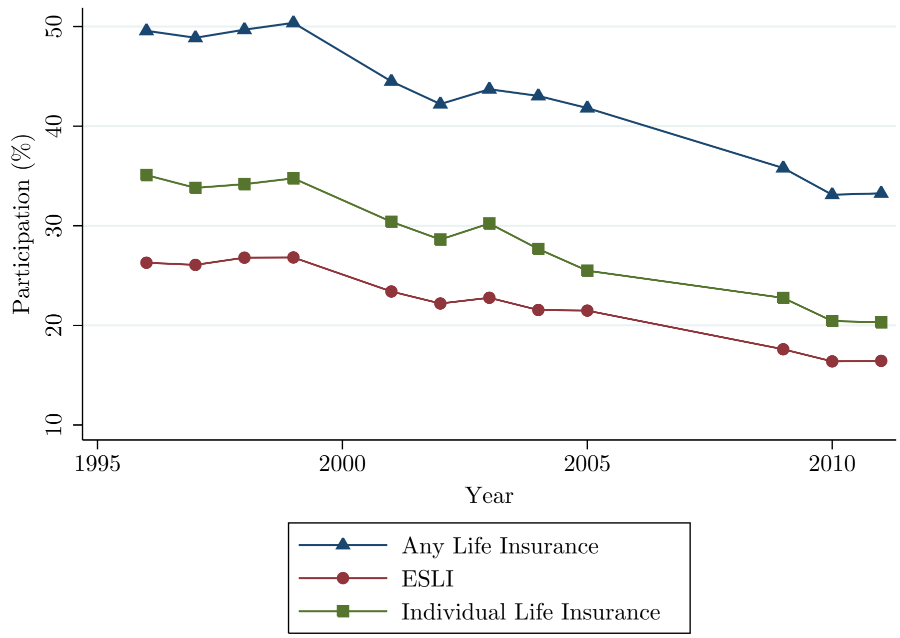


Figure III: Evidence of Inertia: Life Insurance Multiples



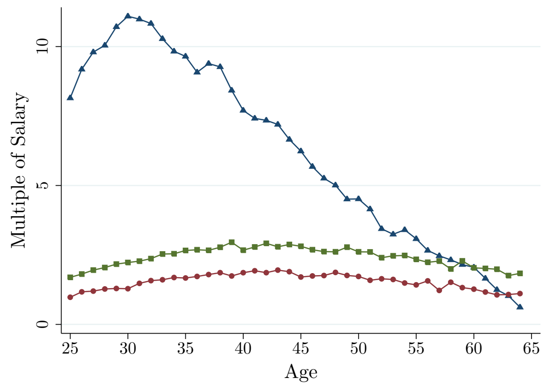
Note: The figure considers continuously employed full-time workers who purchased 1-2x salary in supplemental coverage in 2007.

Figure IV: Life Insurance Participation Trends: SIPP

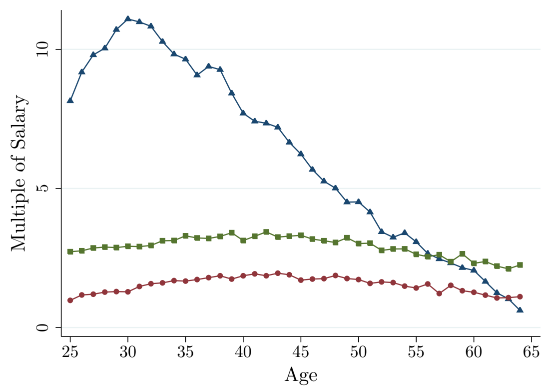


Note: The figure uses data from the 1996, 2001, 2004, and 2008 panels of the SIPP limited to individuals aged 18-64.

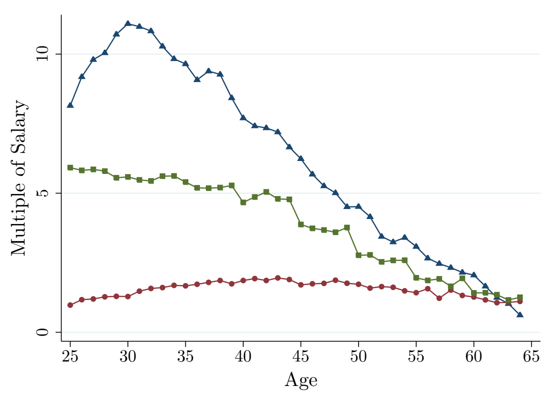
Figure V: Recommended versus Actual Coverage: Expenditure Constant Policy Options



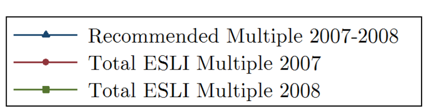
(a) 1x Salary



(b) Fixed Coverage Amount: $59,024

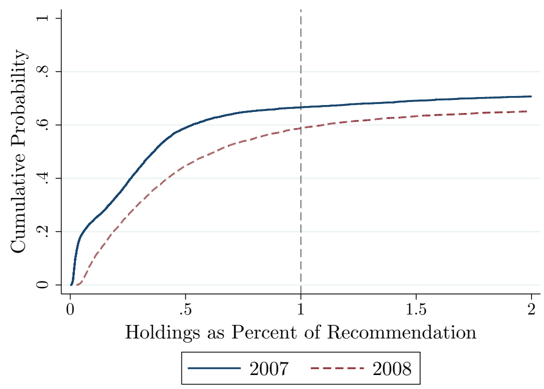


(c) Fixed Contribution Toward Premium: $146

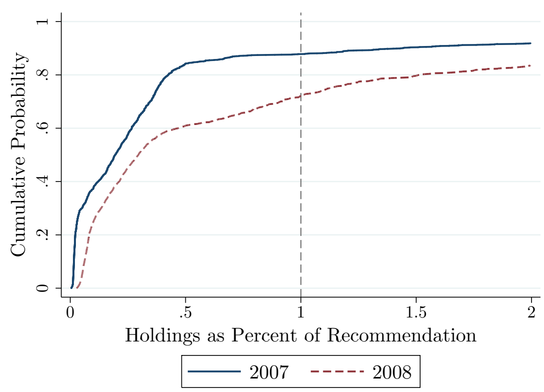


Note: Panel (a) depicts the actual effects of the increase in basic coverage from $10,000 to 1x salary. Panel (b) shows the alternative of providing a fixed dollar amount of coverage ($59,024). Panel (c) represents spending an equal amount (the average premium paid for 1x salary: $146) on each employee calculated using the supplemental premium schedule. The sample consists of employees at a large public university in fiscal years 2007 and 2008. The recommended multiple comes from Prudential's life insurance needs calculator.

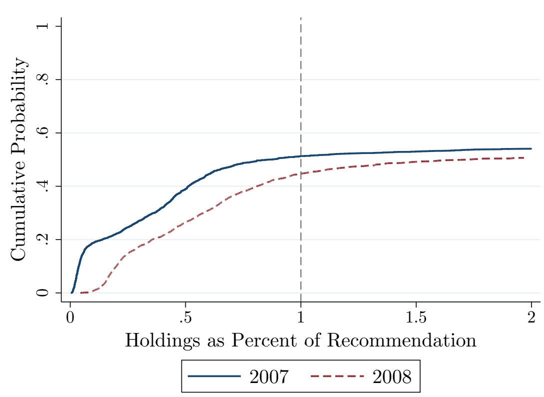
Figure VI: Recommended Versus Coverage with Provision of 1x Salary in Basic Coverage: CDF



(a) All Employees



(b) Age 18-34



(c) Age 50-64

Note: Panel (a) shows the CDF for employees aged 18-64. Panels (b) and (c) show the CDFs for the youngest and oldest employees respectively. The sample consists of employees at a large public university in fiscal years 2007 and 2008. The recommended multiple comes from Prudential's life insurance needs calculator.

Table I: Employer-Sponsored Life Insurance Policy Details

	Pre (2006-2007)	Post (2008-present)
Basic	$10,000	1x salary
	(≈ 0.2x salary)	(≈ $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	2006	2007-present
Age<35	$0.05	$0.08
Age 35-39	$0.06	$0.09
Age 40-44	$0.10	$0.10
Age 45-49	$0.17	$0.15
Age 50-54	$0.28	$0.25
Age 55-59	$0.44	$0.43
Age 60-64	$0.69	$0.69

Table II: Summary Statistics and ESLI Participation:
University Data; Numbers in percents unless denoted otherwise

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Demographics									
Male	38.2	38.1	37.3	37.3	36.9	36.6	36.3	36.5	36.0
Age (years)	42.4	43.4	43.6	43.7	43.7	43.8	43.6	43.8	43.7
White (non-Hispanic)	86.0	86.1	85.8	85.8	85.7	85.7	85.8	85.8	85.9
Married	47.6	48.4	49.2	49.7	49.4	49.4	48.7	48.3	47.5
Child	44.6	45.7	47.1	47.8	48.4	49.2	49.2	49.6	49.1
Employment									
Nominal Salary ($1,000)	38.0	39.0	41.0	42.0	42.0	42.0	44.0	45.0	46.0
Faculty	16.0	16.1	15.6	15.6	15.5	15.4	15.2	15.2	14.8
Staff	84.0	83.9	84.4	84.4	84.5	84.6	84.8	84.8	85.2
Main Campus	75.5	75.5	72.6	63.9	62.2	61.7	60.0	59.5	58.1
Healthcare	24.5	24.5	27.4	36.1	37.8	38.3	40.0	40.5	41.9
Elections									
Health Ins.	89.6	91.5	91.5	91.6	92.0	92.7	92.5	93.3	93.4
Health FSA	15.6	17.4	17.3	17.0	19.1	18.2	18.4	18.6	18.8
Voluntary 403(b)	12.0	13.9	14.5	13.7	12.6	13.0	12.8	12.6	12.6
Voluntary 457(b)	4.2	4.6	4.5	4.3	4.1	4.2	4.4	4.4	4.6
ADD Ins.	49.7	53.2	52.9	51.0	48.6	47.4	46.1	45.5	44.6
Vision Ins.	39.0	42.4	46.1	47.7	49.8	51.3	53.5	55.3	57.2
Dental Ins.	66.0	69.1	68.4	70.6	71.5	73.3	74.1	75.3	76.6
Supplemental Life Insurance	52.2	54.8	56.2	54.4	52.4	50.8	49.4	48.7	47.8
Multiple (0x-5x)	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.3	1.3
Multiple (1x-5x)	2.4	2.4	2.6	2.6	2.6	2.7	2.7	2.7	2.7
Observations	11,883	11,479	11,748	12,244	12,859	12,983	13,393	13,465	13,586
ESLI Supplemental Participation by Group									
Age Bins									
Age<35	40.0	43.4	45.8	41.2	36.4	33.3	30.8	29.6	28.7
Age 35-39	58.4	60.1	63.6	60.6	57.4	54.3	51.1	49.5	48.5
Age 40-44	61.7	65.2	66.6	65.1	63.6	60.9	60.2	60.1	58.0
Age 45-49	60.5	63.1	63.9	63.4	64.3	63.5	62.8	60.8	59.8
Age 50-54	54.6	57.6	59.6	60.1	59.5	60.3	60.0	60.1	58.9
Age 55-59	53.1	52.4	51.8	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
Income Bins									
<$20,000	31.3	35.4	35.3	32.9	30.9	29.6	22.2	25.6	21.2
$20,000-$49,999	49.6	52.7	54.2	52.2	49.4	47.5	46.1	45.3	43.5
$50,000-$99,999	62.2	62.8	63.7	61.5	60.9	59.6	58.2	56.6	56.0
$100,000-$149,999	56.7	57.8	56.9	56.3	56.4	57.0	56.7	56.6	56.2
$150,000+	51.7	53.0	50.7	48.2	43.9	41.9	38.2	36.8	36.9
Race/Ethnicity									
White (non-Hispanic)	53.1	55.5	56.7	54.8	52.6	51.0	49.8	49.0	48.1
Black (non-Hispanic)	45.6	50.2	54.7	52.7	51.7	51.2	49.0	49.6	49.1
Other	48.8	51.5	51.3	50.3	49.7	45.5	43.8	42.2	40.2
Employer Group									
Faculty	53.5	54.1	54.4	51.5	49.8	48.2	45.9	44.2	44.1
Staff	51.9	55.0	56.6	54.9	52.9	51.2	50.0	49.5	48.4
Main Campus	52.3	54.1	55.6	53.4	51.6	50.0	49.1	48.0	47.4
Healthcare	52.0	57.2	57.8	56.2	53.6	52.0	49.8	49.7	48.3
Gender									
Female	51.2	54.7	56.0	54.2	52.1	50.4	49.0	48.7	47.6
Male	53.8	55.1	56.7	54.7	52.9	51.4	50.1	48.7	48.0

Note: Median Salary (rather than mean) is reported due to top coding at $375,000. The sample consists of employees aged 18-64 who are eligible for ESLI.

Table III: University Comparison, Maximum Effective Multiple

	Age 30			Age 65		
School Name	$35k	$100k	$400k	$35k	$100k	$400k
American University	6.0	6.0	4.8	6.0	6.0	4.8
Amherst College	6.5	6.5	1.9	6.0	6.0	1.9
Anderson University	6.1	5.4	1.4	4.0	3.5	0.9
Andrews University	9.9	8.0	2.1	9.9	8.0	2.1
Arizona State University	4.4	4.2	3.5	4.4	4.2	3.5
Austin College	6.5	6.5	2.8	6.5	6.5	2.8
Austin Peay State University	8.4	5.5	1.4	7.9	5.3	1.3
Bates College	4.0	4.0	2.1	4.0	4.0	2.1
Belmont University	6.0	6.0	1.5	4.3	4.3	1.1
Beloit College	15.3	5.5	1.4	15.3	5.5	1.4
Bennington College	15.3	6.0	1.8	9.9	3.9	1.1
Bentley University	6.0	6.0	2.4	6.0	6.0	2.4
Berea College	6.5	4.5	1.5	6.5	4.5	1.5
Boston College	6.0	6.0	3.5	5.0	5.0	3.3
Bradley University	6.0	5.8	1.4	5.6	5.5	1.4
Bryant University	4.0	4.0	2.5	4.0	4.0	2.5
Buena Vista University	7.0	7.0	2.4	7.0	7.0	2.4
Carnegie Mellon University	5.0	5.0	2.5	5.0	5.0	2.5
Castleton State College	6.4	5.5	1.4	4.3	3.6	0.9
Charles R. Drew University of Medicine & Science	6.0	6.0	1.5	3.9	3.9	1.0
Clarkson University	4.0	3.7	1.4	4.0	3.7	1.4
Colorado State University	16.3	5.7	1.4	16.3	5.7	1.4
Cornell College	8.0	6.0	2.0	8.0	6.0	2.0
Cornish College of the Arts	6.0	6.0	5.6	4.5	4.5	4.2
Drake University	16.3	7.0	3.3	16.3	7.0	3.3
Drury University	6.0	6.0	2.0	3.9	3.9	1.3
Eastern Kentucky University	6.0	5.5	5.1	6.0	5.5	5.1
Eastern Michigan University	7.0	7.0	1.9	4.6	4.6	1.3
Flagler College	5.7	5.3	1.6	5.7	5.3	1.6
George Mason University	7.0	7.0	6.0	7.0	7.0	6.0
George Washington University	6.4	6.0	2.9	6.4	6.0	2.9
Kansas State University	8.6	4.0	2.1	8.6	4.0	2.1
Kentucky State University	6.4	5.5	1.4	5.9	5.3	1.3
Loyola University Chicago	6.5	6.5	2.5	4.8	4.8	2.1
Michigan State University	9.0	8.5	5.1	6.2	5.7	3.4
Mississippi State University	7.0	6.0	2.1	7.0	6.0	2.1
Mount Holyoke College	5.7	5.3	1.3	5.3	5.1	1.3
Ohio Northern University	6.4	5.5	1.4	6.4	5.5	1.4
Oklahoma State University System	7.0	7.0	2.4	7.0	7.0	2.4
Pennsylvania State System of Higher Education	8.1	8.1	3.8	5.3	5.3	2.5
Pittsburg State University	8.6	4.0	2.1	8.6	4.0	2.1
Principia College	7.0	7.0	2.6	7.0	7.0	2.6
Purdue University System	9.5	9.5	6.3	6.7	6.7	4.5
Randolph-Macon College	7.0	7.0	1.8	7.0	7.0	1.8
Saint Michael's College	7.0	7.0	2.5	7.0	7.0	2.5

Table III (continued): University Comparison, Maximum Effective Multiple

	Age 30			Age 65		
School Name	\$35k	\$100k	\$400k	\$35k	\$100k	\$400k
Saint Petersburg College	6.0	6.0	1.9	6.0	6.0	1.9
South Texas College of Law	7.0	7.0	3.3	7.0	7.0	3.3
Southern Utah University	16.3	7.0	2.3	16.3	7.0	2.3
Southern Vermont College	4.3	1.5	0.4	2.8	1.0	0.2
Syracuse University	11.4	10.5	5.1	10.9	10.3	5.1
Texas A&M University System	6.6	6.2	3.8	6.6	6.2	3.8
Tufts University	6.0	6.0	6.0	6.0	6.0	6.0
Tulane University	6.4	5.5	2.6	6.4	5.5	2.6
University of Alaska System	12.9	4.5	1.1	2.1	0.8	0.2
University of Central Missouri	6.0	6.0	3.1	5.7	5.7	3.1
University of Chicago	8.0	8.0	3.8	8.0	8.0	3.8
University of Dallas	6.0	4.0	1.0	6.0	4.0	1.0
University of Kentucky	6.0	6.0	3.5	6.0	6.0	3.5
University of Louisville	10.6	5.0	1.3	10.6	5.0	1.3
University of Maine System	6.0	6.0	3.5	6.0	6.0	3.5
University of Minnesota System	6.2	6.2	3.0	6.2	6.2	3.0
University of Mississippi	8.0	7.0	6.3	8.0	7.0	6.3
University of Montana System	18.5	6.5	1.6	18.5	6.5	1.6
University of Northern Iowa	10.1	4.5	1.4	9.7	4.1	1.2
University of Southern Indiana	9.5	5.8	1.4	9.5	5.8	1.4
University of Texas System	6.6	6.2	3.8	6.6	6.2	3.8
Virginia Polytechnic Institute & State University	6.0	6.0	3.9	6.0	6.0	3.9
Washington College	4.5	3.9	1.2	4.5	3.9	1.2
Western Kentucky University	15.3	5.4	1.3	15.3	5.4	1.3
Yale University	5.7	5.3	2.5	5.7	5.3	2.5

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

Table IV: National Compensation Survey 2013, ESLI

	All Industries			Education	Colleges &
	All Workers	Full-time	Part-time	Services	Universities
Access	60%	75%	15%	76%	83%
	(0.8)	(0.8)	(0.9)	(1.1)	(1.6)
Take-up	97%	98%	88%	98%	96%
	(0.2)	(0.2)	(2.1)	(0.4)	(1.2)
Structure					
Multiple of Salary	56%	56%	55%	42%	60%
	(0.8)	(0.8)	(0.8)	(2.1)	(3.8)
Flat Dollar	39%	39%	38%	51%	33%
	(0.8)	(0.8)	(0.8)	(2.1)	(3.8)
Multiple					
1x	61%	-	-	48%	51%
	(1.1)			(3.9)	(6.3)
2x	22%	-	-	26%	28%
	(1.0)			(5.0)	(8.1)
Mean	1.3x	-	-	1.4x	1.4x
Flat Dollar					
25 percentile ($1k)	10	-	-	10	10
50 percentile ($1k)	20	-	-	20	20
90 percentile ($1k)	50	-	-	50	50

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

Table V: Inertia Analysis Pre Period: 2006-2007; Post Period: 2008-2009

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

	All	Constant Premium	Age 18-39	Premium Increase	High Salary	Main Campus Faculty	Main Campus Staff
Post Change	0.780***	0.752***	0.811***	0.779***	0.941***	0.943***	0.733***
	(0.028)	(0.053)	(0.060)	(0.058)	(0.051)	(0.066)	(0.035)
Age	0.460***	0.567***	0.210**	0.300***	0.564***	0.571***	0.458***
	(0.027)	(0.073)	(0.095)	(0.077)	(0.069)	(0.083)	(0.037)
Age Squared	−0.004***	−0.005***	−0.001	−0.003***	−0.006***	−0.006***	−0.004***
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
Annual Salary ($10k)	−0.011	−0.066*	−0.034	0.012	−0.017	−0.029	0.046
	(0.019)	(0.037)	(0.054)	(0.044)	(0.025)	(0.024)	(0.037)
Healthcare	0.093**	0.009	0.124	−0.001	−0.138		
	(0.044)	(0.096)	(0.086)	(0.093)	(0.134)		
Obs.	7,468	1,507	2,216	1,328	1,871	1,052	4,462
Individuals	1,867	608	616	332	532	263	1,174
$\Delta Basic$	0.738	0.751	0.708	0.745	0.874	0.866	0.709
Reject full pass through?	No	No	Yes	No	No	No	No
p-value:	[0.127]	[0.989]	[0.083]	[0.548]	[0.185]	[0.248]	[0.501]

Note: $\Delta Basic = Basic_{2008} - Basic_{2007}$ and the formal hypothesis for full pass through is $H_0: \beta_1 = \Delta Basic$. The sample is restricted to employees who are eligible for supplemental life insurance coverage, were present continuously from 2006 to 2009. and had 1x or 2x salary in supplemental coverage in 2007. Post Change indicates observations for 2008 and later. No Prem Δ restricts the sample to employees aged 40-44 and 60-64 who did not experience a premium change in 2007. Premium Increase restricts the sample to employees who age into a higher premium bracket in 2008. High Salary indicates being in the highest quartile (> $60k). Standard errors are shown in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table VI: Active Changers Inertia Analysis, Pre Period: 2006-2007; Post Period: 2008-2009

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

	Any Change	Same Page	±1 Topic	±2 Topics
Post Change	0.798***	1.069***	0.824***	0.797***
	(0.030)	(0.121)	(0.033)	(0.030)
Age	0.469***	0.786***	0.459***	0.463***
	(0.030)	(0.116)	(0.033)	(0.030)
Age Squared	−0.005***	−0.008***	−0.004***	−0.004***
	(0.000)	(0.001)	(0.000)	(0.000)
Annual Salary ($10k)	−0.019	−0.077	−0.038*	−0.021
	(0.020)	(0.090)	(0.022)	(0.020)
Healthcare	0.086*	0.398**	0.155***	0.092*
	(0.048)	(0.172)	(0.055)	(0.048)
Obs.	6,488	852	5,376	6,428
Individuals	1,622	213	1,344	1,607
$\Delta Basic$	0.743	0.736	0.744	0.743
Reject full pass through?	Yes	Yes	Yes	Yes
p-value:	[0.065]	[0.006]	[0.017]	[0.067]

Note: $\Delta Basic = Basic_{2008} - Basic_{2007}$ and the formal hypothesis for full pass through is $H_0 : \beta_1 = \Delta Basic$. The sample is restricted to employees who are eligible for supplemental life insurance coverage, were present continuously from 2006 to 2009. and had 1x or 2x salary in supplemental coverage in 2007. Post Change indicates observations for 2008 and later. Standard errors are shown in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table VII: Long-Run Inertia Analysis, Pre Period: 2006-2007

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

Pre Period: *Post Period:*	2006 & 2007 vs. 2009 & 2010	2006 & 2007 vs. 2011 & 2012	2006 & 2007 vs. 2013 & 2014
Post Change	0.747***	0.637***	0.584***
	(0.043)	(0.083)	(0.136)
Age	0.399***	0.376***	0.333***
	(0.024)	(0.023)	(0.024)
Age Squared	−0.004***	−0.003***	−0.003***
	(0.000)	(0.000)	(0.000)
Annual Salary ($10k)	0.024	−0.014	−0.026*
	(0.018)	(0.016)	(0.014)
Healthcare	0.192***	0.267***	0.211***
	(0.044)	(0.052)	(0.060)
Obs.	6,872	5,776	4,804
Individuals	1,718	1,444	1,201
$\Delta Basic$	0.739	0.739	0.736
Reject full pass through?	No	No	No
p-value:	[0.857]	[0.215]	[0.266]

Note: $\Delta Basic = Basic_{2008} - Basic_{2007}$ and the formal hypothesis for full pass through is $H_0: \beta_1 = \Delta Basic$. The sample is restricted to employees who are eligible for supplemental life insurance coverage, were present continuously from 2006 to the last year of comparison, and had 1x or 2x salary in supplemental coverage in 2007. Post Change indicates observations for 2008 and later. Standard errors are shown in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table VIII: New Hire Mean Comparison
University Data; Numbers in percents unless denoted otherwise

	All		Main Campus		Healthcare	
Hired:	06/07	08/09	06/07	08/09	06/07	08/09
Life Insurance						
Basic Mult. of Salary	0.32	1.00***	0.32	1.00***	0.31	1.00***
Supplemental Life Ins.	0.44	0.38***	0.45	0.33***	0.43	0.40
Multiple (0x-5x)	1.00	0.91**	1.00	0.83***	1.01	0.96
Multiple (1x-5x)	2.27	2.42***	2.22	2.49***	2.36	2.39
Demographics						
Age (years)	35.48	37.60***	37.21	38.01*	32.53	37.33***
Male	0.31	0.31	0.39	0.43**	0.19	0.22*
Indicator for Children	0.47	0.47	0.47	0.47	0.46	0.48
Ever Married	0.46	0.45	0.48	0.48	0.42	0.43
White	0.87	0.86	0.84	0.84	0.92	0.87***
Employment						
Faculty	0.11	0.11	0.17	0.27***	.	.
Staff	0.89	0.89	0.83	0.73***	.	.
Annual Salary ($1k)	42.69	47.19***	45.60	59.77***	37.72	38.90
Main Campus	0.63	0.40***	.	.	.	.
Healthcare	0.37	0.60***	.	.	.	.
Other Elections						
Health Insurance	0.86	0.89***	0.88	0.89	0.83	0.88***
Vision Insurance	0.53	0.55*	0.51	0.53	0.55	0.57
Dental Insurance	0.68	0.73***	0.67	0.68	0.70	0.75***
Voluntary 403b	0.05	0.07***	0.06	0.08	0.03	0.07***
Voluntary 457b	0.02	0.02	0.03	0.03	0.01	0.01
Observations	1,971	2,327	1,243	924	728	1,403

Note: The sample is restricted to the first observation for individuals hired between 2006 and 2009 and who are eligible to elect supplemental coverage. For mean and proportions comparisons: *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table IX: Supplemental Crowd-out Estimation: New Hires, 2006 & 2007 vs. 2008 & 2009

	Linear Probability			Tobit: Marginal Effects		
	All Ages	Age 40-64	Age 18-39	All Ages	Age 40-64	Age 18-39
Hired Post Change	-0.094^{***}	-0.097^{***}	-0.094^{***}	-0.194^{***}	-0.219^{***}	-0.182^{***}
	(0.015)	(0.026)	(0.018)	(0.021)	(0.038)	(0.025)
Age (years)	0.054^{***}	0.019	0.027	0.086^{***}	0.021	0.054^{*}
	(0.005)	(0.031)	(0.020)	(0.008)	(0.047)	(0.028)
Age Squared	-0.001^{***}	−0.000	−0.000	-0.001^{***}	−0.000	−0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	−0.001	−0.006	0.001	0.008	−0.015	0.016
	(0.016)	(0.027)	(0.020)	(0.022)	(0.039)	(0.027)
Faculty	−0.030	−0.033	−0.036	−0.031	−0.060	−0.033
	(0.030)	(0.047)	(0.040)	(0.040)	(0.067)	(0.051)
Hospital Staff	0.050^{***}	0.060^{**}	0.043^{**}	0.072^{***}	0.099^{**}	0.055^{**}
	(0.016)	(0.028)	(0.019)	(0.022)	(0.040)	(0.026)
Black	0.025	0.053	0.002	0.003	0.050	−0.032
	(0.026)	(0.040)	(0.035)	(0.036)	(0.058)	(0.046)
Other Race	0.026	0.107^{**}	−0.027	0.025	0.134^{*}	−0.034
	(0.032)	(0.054)	(0.041)	(0.044)	(0.077)	(0.053)
Annual Salary ($10k)	−0.000	−0.000	0.000	−0.000	−0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Indicator for Children	0.137^{***}	0.149^{***}	0.131^{***}	0.179^{***}	0.193^{***}	0.173^{***}
	(0.017)	(0.027)	(0.021)	(0.023)	(0.039)	(0.028)
Ever Married	0.112^{***}	0.138^{***}	0.097^{***}	0.160^{***}	0.230^{***}	0.117^{***}
	(0.016)	(0.026)	(0.021)	(0.022)	(0.037)	(0.028)
Vision Insurance	0.062^{***}	0.067^{**}	0.059^{***}	0.070^{***}	0.069^{*}	0.068^{***}
	(0.015)	(0.027)	(0.019)	(0.021)	(0.039)	(0.025)
Dental Insurance	0.078^{***}	0.096^{***}	0.067^{***}	0.113^{***}	0.157^{***}	0.091^{***}
	(0.017)	(0.029)	(0.021)	(0.024)	(0.041)	(0.028)
Obs.	4,298	1,603	2,695	4,298	1,603	2,695
Participation Hired 2007	0.496	0.582	0.450			
Hired 2007: Ave. Multiple				1.077	1.276	0.972
$\Delta Basic$				0.838	0.869	0.824

Note: Hired Post Change indicates being hired in 2008 or 2009. The sample is restricted to the first observation for individuals hired between 2006 and 2009 and who are eligible to elect supplemental coverage. The Tobit model accounts for the censoring at 3x and 5x salary respectively for the pre and post periods as well as for the 0x lower bound. $\Delta Basic = Basic_{2008} - Basic_{2007}$. Marginal effects report the effect of being hired after the change conditional on being at an interior multiple. Standard errors are shown in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table X: Is There Crowd-Out of Individual Life Insurance? Examining Job Changers

Dependent Variable: Has Individual Life Insurance

		Industry Δ	Gain	Lose	Health	
	All	Same Occupation	ESLI	ESLI	Excellent	Good
ESLI	−0.100***	−0.140***	−0.112***	−0.091***	−0.113***	−0.091***
	(0.007)	(0.025)	(0.010)	(0.011)	(0.016)	(0.011)
Obs.	54,668	3,870	50,784	50,142	10,850	24,384
Individuals	27,334	1,935	25,392	25,071	5,425	12,192

Note: Sample consists of individuals aged 18-64 without imputed life insurance that switched jobs between waves. Industry change considers only individuals who keep the same occupation code, but changed industries. Standard errors are shown in parentheses and clustered at the household level *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table XI: Is There Crowd-Out of Individual Life Insurance?
Examining Job Changers: Second Year

	1st Year	2nd Year
ESLI	-0.089^{***}	-0.086^{***}
	(0.015)	(0.016)
Obs.	10,912	10,912
Individuals	5,456	5,456

Note: Sample consists of individuals aged 18-64 without imputed life insurance that switched jobs between waves and remained at the same job for a second year. First year indicates the effect for the first year of employment at the new firm. Second year indicates the change from one year before the job change to the second year at the new firm. Standard errors are shown in parentheses and clustered at the household level *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Life Insurance and AD&D

For your loved ones—and for your piece of mind—
life insurance equal to your annual salary, on us.
Additional coverage is also available.

New for 2007-08:

The University is increasing the basic life insurance amount to one times (1x) your salary for all regular full-time (actively working) employees as of July 1, 2007. We're providing expanded coverage at no additional premium cost to you. For new employees, your basic coverage becomes effective on your first day of regular, full-time employment.

Premiums for coverage above $50,000 are subject to taxation per IRS guidelines.

Optional life insurance provides additional protection for those who depend on you financially. Your need varies greatly upon age, number of dependents, dependent ages and your financial situation. Principal Life Insurance Company is the new carrier for the life insurance offered by the University. The life insurance is offered on two levels, basic and optional coverage. In addition, you may purchase dependent and spouse life insurance.

Also new for 2007-08, employees may purchase additional life insurance coverage in higher amounts than in past years. Eligible employees may purchase optional life insurance in increments of:

- 1 x your salary
- 2 x your salary
- 3 x your salary
- 4 x your salary
- 5 x your salary

You are responsible for the cost of the optional life insurance coverage you choose. Optional life insurance premiums are paid through payroll deductions on an after-tax basis.

Any optional life insurance coverage that exceeds 3x your salary or $375,000 is subject to medical evidence of insurability. Coverage will not become effective until receipt of approval by Principal Life Insurance Company.

Newly eligible employees may elect up to 3x salary without medical evidence of insurability if coverage does not exceed $375,000.

Employees with existing coverage may increase optional coverage by one level without medical evidence of insurability if coverage does not exceed $375,000. All optional coverage elections in excess of $375,000, or elections that are increasing more than one level of coverage, are subject to medical evidence of insurability and will not become effective without approval of Principal Life Insurance Company. If you are making an election of more than $375,000 or increasing by more than one coverage level, then you will be sent a Medical Evidence of Insurability form. This form must be completed and returned to Principal Life Insurance Company at the address provided. If approved, Principal Life Insurance Company will notify you and the University by mail.

Current recipients of long-term disability benefits are not eligible to increase life insurance elections. The basic life insurance amount for LTD participants will remain at $10,000.

Your Beneficiaries

Your beneficiary(ies) is the person you choose to receive your basic and optional life and AD&D insurance benefits in the event of your death. If you select family AD&D coverage or dependent life, you are the primary beneficiary for your dependents. You will need to provide Social Security numbers for all beneficiaries. You can change your beneficiary listing at any time.