



Appendix

A. Boston College Center for Retirement Research Report

Report on Design of Connecticut's Retirement Security Program

December 2015

Report on Design of Connecticut's Retirement Security Program

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Executive Summary of Full Report

The Center for Retirement Research at Boston College (“CRR”) was hired to investigate how workers and employers in Connecticut would react to the introduction of a state-sponsored retirement savings program (“the Program”). This research needed to answer two key questions about workers: 1) at what rate would workers opt out of the Program?; and 2) how would Program features affect the opt-out rate? The market research also sought to answer several questions about Connecticut employers: 1) to what extent would they support the Program?; 2) what factors would drive this support or opposition?; and 3) what practical barriers exist to employers’ participation in the Program? Prior to its market research, the CRR explored several issues related to the Program design and provided the State with this analysis in a series of background memos, which are included in this report. After the background research, the CRR conducted the market research using an online enrollment experiment for workers and a series of focus groups and a telephone survey for employers.

In the enrollment experiment, workers participating in an online Internet panel were randomly assigned to programs with different features and queried on their decisions to remain enrolled or to opt out. Differences in behavior among participants facing alternate features were used to quantify the effect of program design on the opt-out rate. Using this methodology, the CRR found that approximately 19 percent of workers in Connecticut would opt out of the Program if it had a 6-percent default contribution rate directed into a Roth IRA, along with standard features such as a target date fund as the default investment choice and no guaranteed returns or annuitization at retirement. This high participation rate paints an optimistic outlook for the Program, particularly because survey respondents in the most vulnerable groups – woman, minorities, and younger workers – were most likely to participate.

Workers in the study were sensitive to the Program’s design. Some features significantly increased opt-out rates: 1) by 12.9 percentage points when contributions were invested in a fund with a guaranteed, but limited, rate of return; 2) by 6.1 percentage points when a deferred annuity was the default withdrawal option; and 3) by 5.5 percentage points when contributions were automatically increased over 4 years from 6 to 10 percent. Other features marginally reduced opt-out rates: 1) by 4.3 percentage points when half of the assets were used to buy an immediate annuity at retirement; and 2) by 3.9 percentage points if a 3-percent contribution rate was used instead of a 6-percent rate.

On the employer side, the focus groups highlighted a range of reactions to the Program. Small employers in Connecticut agreed that their workers are not saving enough for retirement but had many questions and concerns about the State getting involved. Employers welcomed action if it involved compensation from the State to help offer a plan or cheaper/better retirement savings options for their workers. But a mandate to offer a retirement savings plan (or to enroll employees in a State program) was perceived to result in increased costs to employers to comply with new regulations, facilitate payroll deduction, and educate employees. Employers also thought the State was unable to manage money or run operations efficiently compared to the private sector and worried the program would be run similarly to the state pension system.

Finally, they questioned the value added by a State-sponsored program relative to the options currently available to employers.

As foreshadowed by the focus groups, the phone survey showed that employer support for the Program was mixed: 38 percent supported the Program while 48 percent opposed it. Employers who supported it tended to do so because it does not require a match, because they would not have legal responsibility for contributions, or because administration was simple. As in the focus groups, opposition was driven by the feeling that any state-run program would fail or by an ideological opposition to a state mandate on retirement savings, either for employers or employees. These findings suggest support can be increased by presenting the Program as: 1) voluntary for employees; 2) easy to administer; 3) private sector run but with state oversight. The good news is that few employers translated their opposition to the Program into a desire to encourage their employees to opt out – fewer than 10 percent of respondents said they would do so. While the state should be mindful of employer opposition and try to ensure employers don't deliver a negative message to employees, the survey suggests this would be unlikely.

One additional concern of the State is that the small employers affected by this policy will face difficulty administering payroll deductions for the program. The employer survey suggests this outcome is unlikely. First, about half of employers without a plan outsource their payrolls to a provider, most commonly ADP or Paychex, which should make managing an additional deduction both easy and low cost. Second, among employers that manage their own payrolls, opposition is just slightly higher than for employers that outsource (49 vs. 46 percent).

For employers that already offer a plan, the State's Program does not seem to register as: 1) an alternative to their existing plans; or 2) an option to cover their ineligible workers. Just 1 percent of employers said they would switch from their current plan to the State's Program and just 7 percent said they would enroll their ineligible workers (who represent 16 percent of their employees). These results suggest that while some workers may remain uncovered even after the Program takes effect, the State Program is not likely to squeeze out private sector plans.

This report is organized as follows. The first section provides background research on five program design features: 1) automatic enrollment; 2) Roth vs. traditional IRA; 3) default contribution rates; 4) withdrawal options; and 5) rate of return guarantees. The report then provides a full report on each of the three market surveys: 1) the worker enrollment experiment; 2) the employer focus groups; and 3) the employer phone survey. Each full report has its own Executive Summary as well as an Appendix that has been included in separate files.

Background Memos on Program Design

Opt-in vs. Opt-out

Connecticut will have to decide how to design the State's proposed defined contribution (DC) plan to achieve high participation rates in the Program. In the absence of a requirement that all uncovered Connecticut employees must participate, automatic enrollment will be fundamental to attaining this goal, particularly among the poor, minorities, and women.

Prior to 1998, private sector DC plans required workers to actively elect to participate, or “opt-in” to the plan. In other words, the default was “no participation.” Average participation in DC plans at that time hovered around 40 percent during the first few years of tenure, although it increased thereafter. In 1998, the Treasury and the Internal Revenue Service changed the rule that required employees to opt-in to one that allowed plans to automatically enroll employees, leaving them an option to opt-out. After this rule change, a handful of plans automatically enrolled new workers at default contribution levels and investment allocations. After adopting this feature, plans with automatic enrollment reported dramatically higher participation rates among newly hired employees. Automatic enrollment is now the industry standard for DC plans, and many DC plans have adopted this feature – at least for new hires.¹

A number of academic studies since 2000 have documented the effect of automatic enrollment and explained why this relatively simple feature is so powerful. The most widely cited study, published in 2001 by economists Brigitte Madrian and Dennis Shea, found that automatic enrollment increased participation among newly hired employees from 49 percent to 86 percent. Even after three years of service, participation with automatic enrollment was a third higher than before the feature was adopted. Automatic enrollment also led to a large share of participants sticking with their plan's default contribution rates and investment options. Numerous other studies confirmed this finding and have shown that automatic enrollment boosts participation among the groups least likely to save for retirement under traditional opt-in plans, including lower-income workers, minorities, and women (see Bibliography).

Analysts attribute the success of automatic enrollment to several factors, including employee inertia (a tendency to follow the path of least resistance), employer endorsement (of enrollment in the plan), and control (the ability to reverse the enrollment decision). These factors tend to counteract the widespread phenomenon of present bias – the tendency to place far greater importance on the immediate present compared to the future. Present bias limits take-up in opt-in plans, because the immediate pain of signing up for a 401(k) (due to the complexity of the decision) is greater than the pleasure of more expected money in the distant future (even if a worker knows that saving is important). Not knowing how much to contribute or how to invest in a plan only increases the pain of enrolling, and the net result is procrastination, putting off enrolling until tomorrow. By eliminating decision-making for workers altogether and setting a contribution rate and investment option to ensure that most are clearly better off than not participating, defaults make participation the painless option or path of least resistance.

Under automatic enrollment only workers with a strong incentive to opt-out will do so, a prediction supported by Beshears et al. (2010), who reported a 75-percent opt-out rate in a plan with a default contribution rate of 12 percent (which was deemed high for most participants). In

¹ PSCA's *Annual Survey of Profit Sharing and 401(k) Plans*, 2012.

other words, automatic enrollment is suboptimal when it puts workers in a situation where they do not want to be; they must think they are better off participating under plan defaults.

International experience with automatic enrollment also supports its importance in achieving meaningful participation in voluntary savings plans. In 2001, the United Kingdom required employers to offer a voluntary workplace saving plan. However, few workers participated because workers were required to opt-in and plan administration fees were high. A sweeping report on rebuilding the U.K. pension system, released in 2005 and 2006, concluded that education alone could not raise participation rates in DC plans and recommended introducing a new national savings plan with automatic enrollment (and lower fees). The United Kingdom rolled out such a plan – the National Employer Savings Trust (NEST) – in 2012. Opt-out rates reported by NEST in 2013 were very low: only 9 percent of employees in the initial roll-out of the program opted out of the plan.²

Most proposals for State-administered DC plans in the United States include a provision for automatic enrollment. Of the 17 States that have introduced bills to set up or study state-run DC plans, six include a provision for automatic enrollment, two are opt-in plans, and the remainder do not specify whether workers will be automatically enrolled or not. Illinois' Secure Choice Savings program, signed into law in January 2015, automatically enrolls employees at a 3-percent contribution rate. California's Secure Choice plan, which is currently undergoing a financial feasibility assessment, would also automatically enroll participants if implemented. Maryland, Minnesota, New Hampshire, and Arizona all introduced bills proposing State-administered DC plans with automatic enrollment. The only state DC initiatives that do not include automatic enrollment are Massachusetts's State-sponsored retirement plan for non-profits, North Dakota's proposed voluntary retirement investment program, and Indiana's proposed Hoosier Employee Retirement Option, which would create IRAs for employees whose employers do not provide a DC plan. At the federal level, the U.S. Treasury Department set up MyRA as an opt-in plan, because creating an opt-out IRA would require legislation (the 1998 rule change applied to 401(k) plans). The Obama Administration's Auto-IRA proposal (H.R.2035 - Automatic IRA Act of 2013), which provides an outline for a more robust workplace IRA, includes provisions for automatic enrollment.

In short, more than a decade of evidence confirms that only automatic enrollment can achieve the level of participation required to make Connecticut's initiative a success.

² NEST was initially rolled out to large employers, which tend to pay higher-than-average wages; thus, the opt out rates will likely increase as smaller employers with lower-wage workers are automatically enrolled into the plan in the future.

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Roth vs. Traditional IRA

Connecticut faces the choice of using a traditional or a Roth IRA. While the two approaches are virtually identical in theory, the Roth seems better suited to the lower-income population whose employer does not provide a retirement plan.

The traditional IRA allows the participant to make a contribution that reduces his taxable income and to accrue investment earnings tax free until the money is withdrawn in retirement. In contrast, initial contributions to a Roth are not tax deductible, but earnings accrue tax free and no tax is paid when the money is withdrawn in retirement.

Although the traditional and Roth IRAs may sound quite different, they offer virtually identical tax benefits, assuming a constant tax rate before and after retirement. If an individual contributes \$1,000 to a traditional IRA, then after n years, the IRA would have grown to $\$1,000(1 + r)^n$, with r an estimate of the annual rate of return. When the individual withdraws the funds, both the original and accumulated earnings are taxable. Thus, the IRA account's after-tax value in retirement is $(1-t)\$1,000(1+r)^n$, with t representing the tax rate. In the case of a Roth, an individual pays tax on the original contribution, so he puts $(1-t)\$1,000$ into the Roth. After n years, these after-tax proceeds would have grown to $(1-t)\$1,000(1+r)^n$. Since the proceeds are not subject to further tax, the after-tax amounts under the traditional and Roth IRAs are identical.

Despite this theoretical equality, however, the Roth is better suited for the population that Connecticut seeks to cover under its new Program.

1. A Roth provides a balance between retention and liquidity for a population that may need to access its funds for emergencies. Since the tax is paid up-front, contributions can be withdrawn tax free, whereas an individual withdrawing funds from a traditional account would have to pay income taxes plus a 10-percent penalty. While the conventional account has the appeal of an up-front tax break, this instant gratification is probably much less salient to those in lower tax brackets. Considering the population targeted, the possibility of a newspaper story – about a family paying a 10-percent penalty to use money in their account to repair their roof – could be fatal to this initiative.
2. To the extent that low earners see their earnings rise over the course of their careers and therefore face higher tax rates in retirement, a Roth would allow them to pay low taxes upfront and withdraw retirement income without being taxed.
3. Determination of eligibility is simpler in Roth IRAs, which have a straightforward income limit: \$131,000 of modified adjusted gross income for a single person and \$193,000 for a married couple in 2015. Traditional IRAs have an income limit only if an individual is covered by an employer-sponsored plan; otherwise, they have no limit, which might be confusing for people going in and out of the state system.
4. Contribution amounts are greater for a Roth. Although individuals can contribute \$5,500 under both plans, a \$5,500 after-tax Roth contribution is equivalent to \$6,875 before tax for an individual in the 20-percent personal income tax bracket. The result is that while both IRAs produce the same pre-tax replacement rate – the replacement rate is the share

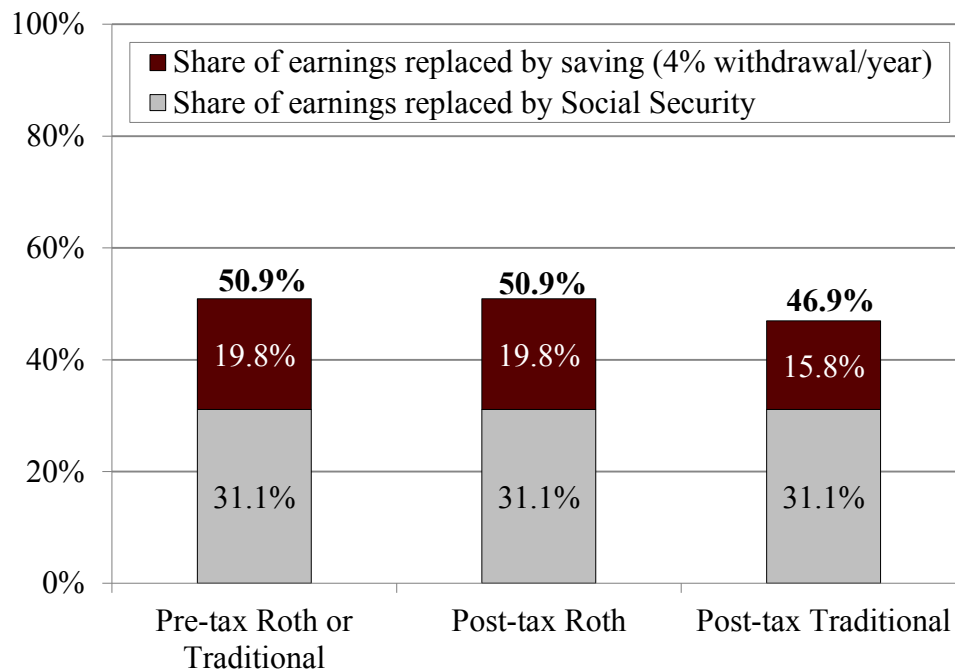
of a worker's earnings that would be supplied by the IRA in retirement – the Roth provides more retirement income on an after-tax basis (see Figure 1).

5. Several other factors that are less important to low-income workers might nevertheless argue for a Roth:
 - a. Roth IRAs are not subject to the required minimum distribution requirements at age 70½.
 - b. Roth withdrawals are not counted toward the taxation of Social Security benefits.

These advantages explain why the Administration adopted a Roth IRA for its Auto-IRA and MyRA proposals, and virtually all states considering a system for their uncovered workers are focused on a Roth.

In addition to the suitability of Roth IRAs to the needs of the uncovered workers, a Roth IRA will not result in a loss of State income tax revenue in the short term – an important consideration in light of the legislative requirement for the proposed program to be self-financed.

Figure 1. *Replacement Rates for the Median Uncovered Worker under Traditional and Roth IRA Pre-tax and Post-tax*



Source: Authors' calculations

Initial Contribution Rates and Automatic Escalation

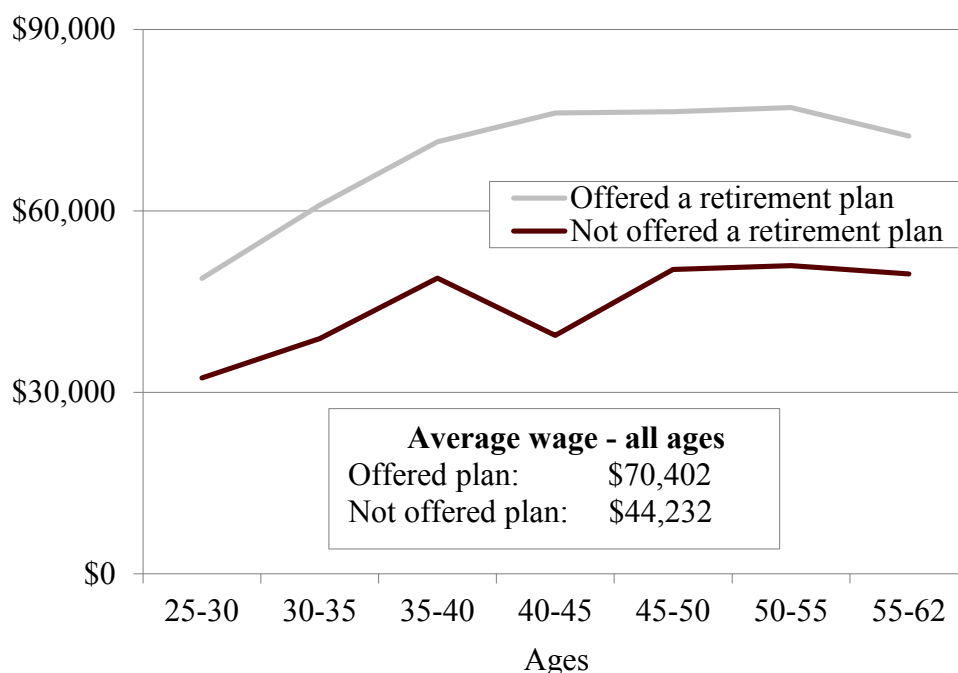
Introduction

Connecticut will choose the default contribution rate for individuals enrolled in the Program and decide whether that rate should automatically increase over time. The goal of setting these parameters is to ensure maximum savings with minimum opt-out. Connecticut's ultimate decision should be informed by three considerations. First, workers will require significant savings to replace their pre-retirement income and will need to make substantial contributions. Second, workers anchor their chosen contribute rates around the default rate set by their plan, so higher default contribution rates and auto-escalation will produce more saving. Finally, a default rate as high as 6 percent and auto-escalation seem feasible, given that research suggests these features do not cause participants to opt out of the plan. However, because research to date has focused on covered workers, tests are needed to confirm the results for uncovered workers.

Ensuring adequate retirement income for uncovered workers in Connecticut will be difficult. For the average uncovered worker who claims Social Security at age 62, Social Security will replace just 29 percent of his pre-retirement earnings, well short of commonly cited retirement targets of 70-75 percent.³ This low replacement rate stems from the fact that uncovered workers in Connecticut, while earning much less than Connecticut pension-covered workers (see Figure 1), earn close to the national average earnings and thus benefit only slightly from Social Security's progressive formula that benefits low-wage workers.

³ For more details on this calculation and results under the assumption that workers claim at the Full Retirement Age of 67, see the Technical Notes.

Figure 1. *Average Earnings for Private Sector Wage and Salary Workers by Retirement Plan Coverage, 2009-2013 (2013 dollars)*

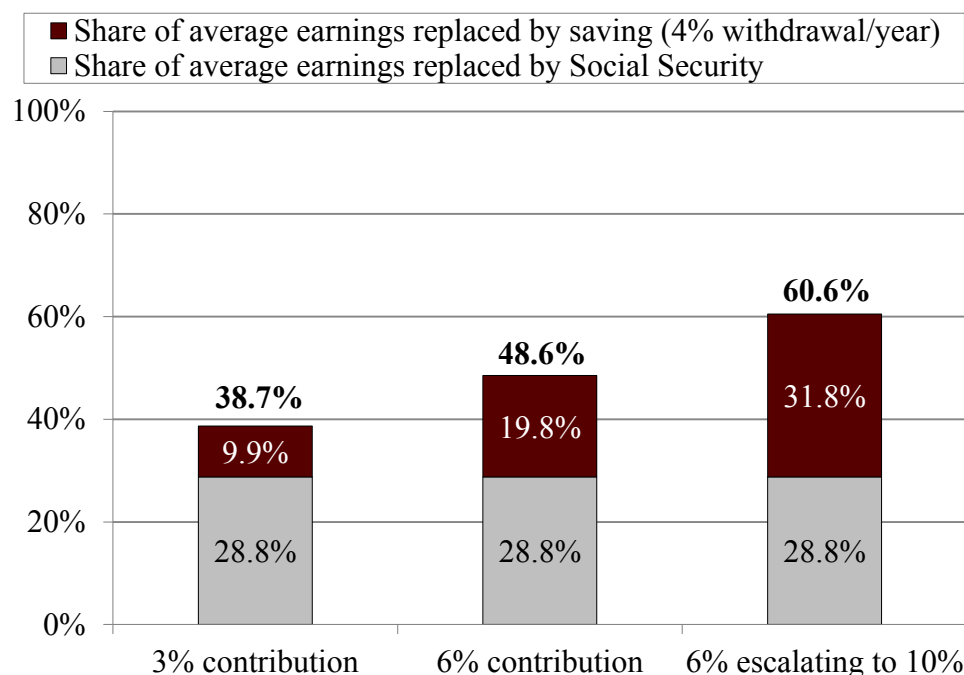


Source: *Current Population Survey March Supplement, 2009-2013.*

Because of Social Security's low replacement rate, even individuals who start saving early at age 25 will fall short of the 70-75 percent target.⁴ The shortfall exists under constant contribution rates of 3 percent or 6 percent (commonly used defaults) and even under auto-escalation from 6 percent to 10 percent over the first four years in the plan (see Figure 2). An individual contributing just 3 percent per year will achieve only a 38.7-percent replacement rate (28.8 percent from Social Security and 9.9 percent from retirement savings). Replacement rates rise as the contribution rate increases, but even with auto-escalation to 10 percent the replacement rate reaches only 60.6 percent. If workers delay claiming until their Full Retirement Age (FRA) of 67 under the Social Security program, replacement rates are considerably higher, because this delay increases the Social Security replacement rate from 29 percent to 41 percent (see Technical Notes). Even so, total replacement rates fall short of the benchmark under most scenarios. And most uncovered workers are likely to retire early.

⁴ This estimate assumes a 4-percent real rate of return on investments. For details on this calculation, as well as versions of the calculation under different rates of return, see the Appendix.

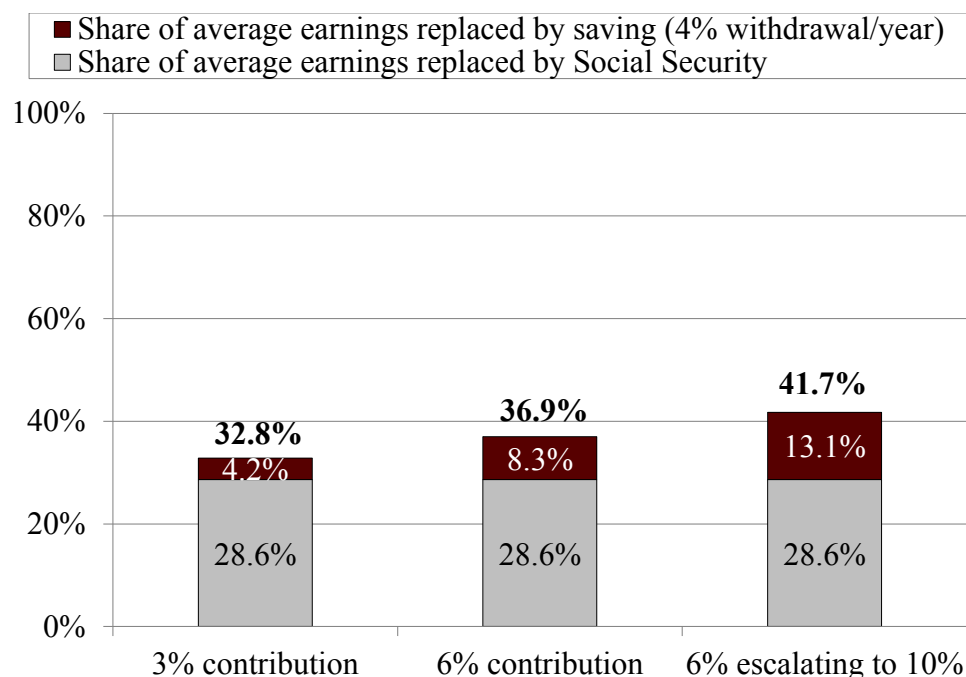
Figure 2. *Replacement Rates for Individuals Starting Participation at 25 Under Various Contribution Designs*



Source: Authors' calculations from the *Current Population Survey March Supplement*, 2009-2013.

Moreover, not all workers in Connecticut's program will start saving at 25. An obvious example is workers in mid-career when the Connecticut program starts. Workers who start saving later will accrue less in their retirement savings account and will replace less of their pre-retirement income. These lower replacement rates are shown in Figure 3 for workers who start saving at age 42 (the average age of Connecticut uncovered pensioned workers), with replacement rates ranging from 32.8 percent to 41.7 percent – far below the target replacement rates.

Figure 3. *Replacement Rates for Individuals Starting Participation at 42, Under Various Contribution Designs*



Source: Authors' calculations from the *Current Population Survey March Supplement*, 2009-2013.

Contribution Designs

These calculations make clear that to get anywhere close to the recommended target replacement rates, participants in Connecticut's Program will have to contribute substantial amounts.

Workers Anchor around Defaults

Because workers anchor around defaults, the best way to ensure higher contributions is to set the default contribution rate at a relatively high level. This reasoning would argue for a default rate of 6 percent rather than 3 percent.

Several studies have demonstrated the importance of defaults. In one, 33 percent of individuals automatically enrolled in a 401(k) plan at a 3-percent contribution rate ended up contributing 3 percent or less, compared to just 19 percent contributing 3 percent or less for those automatically enrolled at 6 percent.⁵ In two other studies, workers who were defaulted in at a 3-percent rate contributed lower amounts to their 401(k)s than workers who had to opt-in to the plan and choose their initial contribution rate.⁶ These results suggest that workers automatically enrolled at low rates tend to stay at that low contribution rate, even if they would have chosen a higher rate on their own. Of special interest to Connecticut, several studies show that this inertia is

⁵ Beshears et al. (2009).

⁶ Madrian and Shea (2001) and Choi et al. (2005).

likely to be especially acute among lower-income workers.⁷ The tendency to stick with the default rate is one reason auto-escalation is an important feature to consider.

An exception to this anchoring is when default contribution rates are set very high. One study of a U.K. firm found that workers who were defaulted in at a contribution rate of 12 percent were likely to reduce their contributions below the default. After one year, over half of all workers had reduced their contribution rate below 12 percent, with 31 percent of workers reducing their contribution to 4 percent (the minimum contribution rate for the plan). By contrast, in the studies above that involved default contribution rates of 3 percent or 6 percent, over 85 percent of workers remained at or above the default.⁸

Higher Defaults and Auto-Escalation Do Not Cause Opt-Out

Although the research to date has focused on workers whose employers offer a retirement plan, it suggests that a default contribution rate of 6 percent will not cause large amounts of opt-out. In a study comparing workers auto-enrolled at a 3-percent vs. a 6-percent contribution rate, researchers found no significant difference in the opt-out rate between the two groups.⁹ Furthermore, in several studies of workers choosing their initial contribution rates (as opposed to being automatically enrolled at a pre-determined rate) the 6-percent rate was the most commonly chosen rate – likely because at several of the firms in question 6 percent was also the maximum employer match.¹⁰ These studies suggest that workers in firms offering retirement plans do not view a 6-percent withdrawal from their paycheck as prohibitive.

Less is known about the effect of auto-escalation on opt-out, but the limited results suggest it does not have a large impact. An industry study conducted by Principal Financial Group found only 14 percent of employees automatically enrolled in plans with auto-escalation elected not to allow it (it is unclear whether they participated at a fixed rate).¹¹

Despite these positive results, because the literature has generally relied on case studies of workers already in private sector plans, Connecticut has tested default rates of 3 percent and 6 percent and an option of auto-escalation from 6 percent to 10 percent to see if the targeted population will behave in the manner predicted by the literature above (see Final Report on Employee Market Analysis, below). One concern in setting a relatively high initial default rate is that many individuals will end up exceeding the \$5,500 contribution limit. However, only 10.5 percent of uncovered workers will hit that threshold at a contribution rate of 6 percent, which should alleviate that concern (see Figure 4).

⁷ For example, Madrian and Shea (2001), Choi et al. (2001), and Beshears et al. (2010).

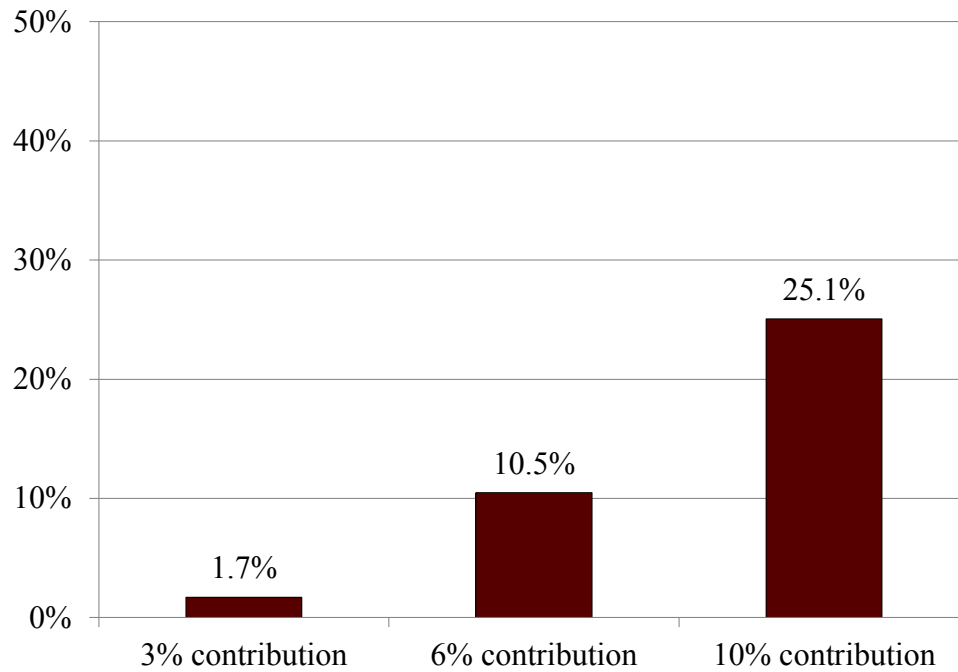
⁸ Beshears et al. (2010).

⁹ Beshears et al. (2009).

¹⁰ For example, Choi et al. (2001).

¹¹ Principal Financial Group (2015).

Figure 4. *Share of Uncovered Workers Over \$5,500 Contribution Limit At Various Contribution Rates*



Source: Authors' calculations from the *Current Population Survey March Supplement*, 2009-2013.

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Technical Notes

Calculating replacement rates requires a measure of pre-retirement income (the denominator) and post-retirement income (the numerator). These Technical Notes describe how these quantities were calculated in constructing Figures 2 and 3.

Calculating Pre-Retirement Income

Pre-retirement income is the wage for uncovered workers in Connecticut as calculated from the *Current Population Survey*, which averaged \$44,232 between 2009 and 2013. The average wage of uncovered workers in Connecticut is close to the wage index used by Social Security, which was approximately \$44,600 in 2013 dollars, on average, between 2009 and 2013.

Calculating Post-Retirement Income

Post-retirement retirement income comes from two sources: 1) Social Security; and 2) income from retirement savings.¹² For an individual who claims Social Security at age 62 and who has average earnings of \$44,232, the Social Security benefit is \$12,726 and would replace 29 percent of pre-retirement income. If workers delay claiming until their Full Retirement Age of 67, replacement rates are considerably higher, because the Social Security replacement rate increases from 29 percent to 41 percent (see Table A1).

Table A1. *Total Replacement Rates under an Assumption of Age 67 Claiming (with 4-Percent Withdrawal at Retirement and 4-Percent Real Rate of Return on Investments)*

Start age	3% cont.	6% cont.	6 to 10% cont.
25	51.0%	60.9%	72.9%
42	45.1	49.2	54.0

Source: Authors' calculations from the *Current Population Survey March Supplement*, 2009-2013.

Retirement income from the Connecticut Program depends on four factors: 1) the contribution rate; 2) the age at which saving starts; 3) the individual's strategy for drawing down their savings; and 4) the real rate of return on investments. Variations of the first two assumptions were shown in Figures 2 and 3. In both figures, workers were assumed to follow a commonly cited rule-of-thumb, withdrawing 4 percent of their account balance per year as income. However, the Connecticut legislation suggests another option for drawdown – the purchase of an inflation-indexed annuity, with options for spousal benefits. To test the sensitivity of the replacement rate calculations to this mode of withdrawal, Table A2 assumes that an individual uses 100 percent of his account balance to purchase an inflation-indexed annuity with a survivor benefit. In this calculation, each \$100,000 invested in the annuity at age 62 purchases a yearly benefit of \$3,614 (at an annuity rate of 3.614 percent).¹³ This assumption reduces replacement

¹² This analysis ignores the role of home ownership, which can make it easier to replace pre-retirement earnings should the mortgage be paid off prior to retirement. Because two-thirds of uncovered workers own their residences, replacement rates here should be viewed as conservative.

¹³ The reported annuity rate was obtained from IncomeSolutions.com on April 21, 2015. The quote represents the Principal Financial Group's Inflation Adjusted (CPI-U) Joint and Survivor Life Only product.

rates slightly relative to those in Figures 2 and 3, because the 3.614-percent annuity rate is less than the assumed 4-percent withdrawal rate.

Table A2. *Total Replacement Rates under Purchase of Inflation-Indexed Joint and Survivor Annuity (with Age 62 Social Security Claiming and 4-Percent Real Rate of Return on Investments)*

Start age	3% contribution	6%	10%
25	37.7%	46.6%	57.5%
42	32.4	36.2	40.5

Source: Authors' calculations from the *Current Population Survey March Supplement*, 2009-2013 and IncomeSolutions.com.

Finally, Figures 2 and 3 also assumed a real rate of return of 4 percent. Because this assumption is somewhat conservative, Table A3 shows the total replacement rate (Social Security + retirement savings) under assumptions of 4.5- percent and 5.5-percent real rates of return. The results show that, even with relatively returns, a replacement rate of 70-75 percent is difficult to achieve except under auto-escalation.

Table A3. *Total Replacement Rates under Alternative Real Rate of Return Assumptions and Contribution Amounts (with Age 62 Social Security Claiming and 4-Percent Withdrawal at Retirement)*

Start age	4.5% Rate of Return			5.5% Rate of Return		
	3% cont.	6%	6 to 10%	3 % cont.	6 %	6 to 10 %
25	39.8%	50.7%	63.9%	42.4%	56.0%	72.2%
42	33.0	37.4	42.5	33.5	38.4	44.0

Source: Authors' calculations from the *Current Population Survey March Supplement*, 2009-2013.

Default Withdrawal Option

Connecticut must pick a default withdrawal option for its Program, and its legislation suggests an inflation-indexed annuity with a spousal benefit. Automatic enrollment puts participants in a plan in which most of them benefit from participation, but it is less clear that annuitizing all assets upon retirement will similarly benefit most participants. Practically speaking, good annuities are not available for uncovered workers in Connecticut, and account balances in the plan will be too small to be worth the cost of annuitizing for the first few years of the Program. In the short-term, Connecticut should consider the extent to which annuities affect participation, as is done in the Final Report on the Employee Market Analysis, and should set up a commission to study the most suitable withdrawal option using data on workers who participate in the program.

The Lump Sum Option

If no wealth is annuitized at retirement, participants would have to decide how much to withdraw each month. On one hand, participants risk drawing income too quickly and, on the other, run the risk of holding on too tightly to their assets and forgoing much-needed income. Drawing income from a DC plan is further complicated by their potential for poor investment returns, rising prices, and unexpected expenses. The popular 4-percent rule provides reasonable income while preserving liquidity but presents considerable longevity risk. A more conservative approach, such as using IRS minimum distribution requirements, can lessen the risk of outliving one's money. However, this approach reduces income available for consumption, especially in the years immediately following retirement. A similar tradeoff exists with respect to investment risk and inflation – one can invest conservatively or buy inflation-protected bonds but both strategies reduce income.

Full Annuitization

An annuity eliminates longevity risk and also makes it easy to make a retirement spending budget. Since annuities pool mortality risk – i.e., the payments are based on average life expectancy – they provide more income than other lifetime income strategies. Annuities also simplify the drawdown decision by making regular monthly payments, which help individuals overcome behavioral biases that cause them to either spend assets too quickly or too slowly.

But annuities have drawbacks. Annuitizing all assets leaves nothing for unexpected expenses, a particular concern for workers who do not save outside of the Program. In addition, annuities are typically invested in safe investments with low expected returns, which prevent annuitants from benefiting during good times. When given the option, most 401(k) participants do not choose an annuity, a preference explained by rational motivations (such as a bequest motive or poor health), but also assumed to be influenced by behavioral factors (such as present-bias and an aversion to loss). Another drawback in the short term is that the existing market for annuities serves high-net-worth individuals who expect to live a long life. As a result, annuities are not fairly priced for Connecticut uncovered workers who will have a much lower life expectancy, on average, than existing annuity customers.

According to economic theory, annuities should be part of an optimal drawdown strategy. But the benefit of an annuity is greatest when no income is already annuitized. This theoretical prediction is reflected in the structure of national pension systems: most developed nations pay

their national pension benefit in the form of an annuity, while employer and individual savings plans are not universally required to be annuitized. An uncovered worker in Connecticut earning median wages can expect to replace between 29 percent (at age 62) and 41 percent (at age 67) of his pre-retirement income with income from Social Security. Workers who have paid off their mortgage by the time they retire also have annuitized income in the form of rent-free living in their house. As a result, the benefits of full annuitization are likely to depend on individual characteristics and preferences.

Partial Annuitization

Other options can balance the benefits of an annuity with the need to keep cash on hand for emergencies. Instead of converting all assets to an annuity, the default withdrawal option could, for example, annuitize half of participants' assets. Similarly, a deferred annuity – one that is bought at retirement and begins payments when an individual reaches his or her 80s – can provide longevity insurance at a fraction of the cost of an immediate annuity. Uncovered workers in Connecticut who wish to annuitize can also delay claiming Social Security, which effectively allows them to “buy” an inflation-indexed annuity with a survivor benefit at a fair price.

Practical Considerations

Offering an annuity to uncovered workers poses practical problems in the short term. Most participants who retire in the first few years of the Program will have very small account balances, which cannot be annuitized efficiently. Perhaps as a result of this and other considerations listed above, most state initiatives have taken a wait-and-see approach; in contrast to language stipulating auto enrollment, most proposed programs fail to specify a withdrawal option.

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Rate of Return Guarantee

Connecticut will also have to decide the extent to which participant contributions and returns should be guaranteed. This analysis considers both guarantees purchased from financial institutions and guarantees provided by the State of Connecticut. It considers three levels of guarantees: 1) a return of contributions at retirement; 2) a return of contributions plus a 1-percent average nominal rate of return at retirement; and 3) a 1-percent nominal rate of return *each year* (i.e., balances would not increase by less than 1-percent from one year to the next).

Guarantees purchased from financial institutions

The cost of a guarantee depends on its generosity, the extent to which participants are permitted to invest in risky assets, and the guarantee period. For a guarantee that applies at retirement for participants investing in a target date fund, financial institutions quoted an annual premium of 0.95 percent of plan balances for a return-of-contributions guarantee and 1.50 percent for a 1-percent-nominal-rate-of-return guarantee. At current interest rates, financial institutions can only offer a 1-percent-nominal-rate-of-return guarantee *each year* by requiring participants to give up all, or almost all returns in excess of 1 percent.¹⁴ Table 1 reports the impact of guarantees on minimum and average replacement rates under the above assumptions.

Table 1: *Impact of Guarantees on Minimum and Average Replacement Rates*

Guarantee type	Minimum replacement rate	Average replacement rate
None	0%	27.4%
Return of contributions at retirement	5.9%	21.7%
1-percent nominal rate of return at retirement	6.7%	18.7%
1-percent nominal rate of return each year	11.0%	11.0%

Source: Authors' calculation, and financial institution data.

All three guarantees put a low floor on replacement rates but substantially reduce average replacement rates – from 27.4 percent to 21.7 percent for the return-of-contributions guarantee at retirement, from 27.4 percent to 18.7 percent for the 1-percent-nominal-rate-of-return guarantee at retirement, and from 27.4 percent to 11.0 percent for the guarantee of a 1-percent nominal rate of return each year.

It would be historically unprecedented for either of the available guarantees of assets at retirement to be called. Based on historical data, the chance of a return-of-contributions guarantee being called is less than 0.05 percent (five in 10,000). The chance of a 1-percent-nominal-rate-of-return guarantee being called is 1.1 percent. On the other hand, over a one-year

¹⁴ The current one-year interest rate is about 1 percent. Offering a guaranteed return of 1-percent plus some upside potential violates the “no arbitrage” condition – that financial markets do not permit investors to earn above market returns without taking on more risk.

time horizon, a 50:50 stock-bond portfolio has an approximately 36 percent probability of providing a negative return.

Connecticut provides a guarantee

If the State of Connecticut provided the guarantee, it would have to decide how to manage the risk. One option is to hedge the liability and pass the cost on to the participant. Connecticut could purchase these hedging instruments from insurers by paying the same 0.95 or 1.50 percent of assets under management referred to on the previous page. The only effective means of hedging the annual return guarantee is by investing almost exclusively in short-term U.S. Treasuries.

A second option would be to make a commercial judgment that the risk was acceptable. Table 2 reports the probability of the guarantees at retirement being called, and the expected payout in millions of dollars, conditional on it being called, for cohorts turning age 62 in 2025, 2035, 2045, and 2052.

Table 2: *Probability of Guarantee Being Called and Expected Payout*

Year cohort turns 62		2025	2035	2045	2052
Return of contributions at retirement	Probability of being called	2.4%	0.5%	0.1%	*
	Expected payment (millions)	\$24.7	\$46.4	\$56.4	*
1-percent nominal rate of return at retirement	Probability of being called	4.7%	1.3%	0.4%	0.2%
	Expected payment (millions)	\$28.9	\$57.3	\$81.0	\$99.5
1-percent nominal rate of return each year	Investments limited to Treasuries, no cost to State				

Source: Authors' calculations.

If the State provided an annual guarantee, and permitted participants to invest in risky assets, the expected payout on an annual guarantee would be prohibitively large. If participants invested in a 50:50 bond portfolio, the expected annual claim would be 2.7 percent of assets under management.

A third option would be for the State to create a reserve to meet potential claims under the guarantees, which apply at retirement. The question then arises, how big a reserve? It is neither feasible nor reasonable to create a reserve sufficient to meet the largest possible claim. An alternative might be to use the tools of finance theory to value the guarantee, and to create a reserve in that amount. Finance theory yields valuations of 0.10 and 0.20 percent of plan balances for the two guarantees of assets at retirement, substantially less than the 0.95 and 1.50 percent quoted by financial institutions, reflecting the assumption of finance theory that hedging instruments are available. Since the expected payout under an annual guarantee would be very

large, the State of Connecticut would need to limit participants to investing in short-term Treasuries (rather than build a reserve) to provide a 1-percent-annual-rate-of-return guarantee.

Methodology

The above calculations of guarantee costs assume that nominal stock and bond returns are log-normally distributed. We use Ibbotson (2013) data for large-company stocks and long-term corporate bonds for 1926-2012. We assume that the risk-free rate has declined by 1 percent relative to historic norms, but that there has been no change in the equity and corporate bond risk premiums. We therefore reduce historic nominal returns by 1 percent. We further reduce returns by the 0.437 percent by which the average inflation rate during 1926-2012 exceeded our 2.5 percent inflation projection. This calculation yields the following distribution:

$$\square = \begin{pmatrix} 0.0846 \\ 0.0498 \end{pmatrix}, \square = \begin{pmatrix} 0.0390 & 0.0024 \\ 0.0024 & 0.0058 \end{pmatrix}$$

The estimates of the impact on replacement rates of guarantees priced using the tools of finance theory assume the above distribution of returns and that insurers' aversion to risk matches the market average. The estimates of the impact on replacement rates of guarantees purchased from financial institutions assume that the annual cost of return-of-contributions guarantee is 0.95-percent of the plan balance, and that the annual cost of the 1-percent-nominal-rate-of-return guarantee is 1.5 percent of the plan balance, or the average of the two quotes. Participants invest in a target date fund in which the share of the employee's portfolio invested in equities is 100 percent minus the participant's age. Participants assumed to join the plan at age 25 and retire at age 62. Workers' earnings profiles are based on the same data presented in Figure 1 of the memo "Initial Contribution Rates and Auto-Escalation" provided to the Connecticut Retirement Security Board. The denominator in the replacement rate is average real lifetime earnings.

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Reports on Market Research for Connecticut Retirement Security Program

Final Report on Employee Market Analysis

Executive Summary

The Center for Retirement Research (CRR) was tasked with answering two key questions regarding workers: 1) what share of workers would opt out of the Program?; and 2) to what extent would program features affect opt outs?

To study opt-out behavior, the CRR performed an online benefit-enrollment experiment in which participants were randomly assigned to programs with different features and asked about their decisions to remain enrolled or opt out. Differences in behavior among respondents facing alternate features were used to quantify the effect of program design on the opt-out rate. This methodology avoids the pitfalls of asking someone their preferences over many features, instead identifying preferences by presenting different subjects a single design and examining differences in decisions among the various plan designs presented to them.

Using this methodology, the CRR found that approximately 19 percent of workers in Connecticut would opt out of the Program if it had a 6-percent default contribution rate directed into a Roth IRA with other standard features: a target date fund as the default investment choice and no guaranteed returns or annuitization at retirement. This opt-out rate is comparable to the opt-out rate observed in 401(k) plans with automatic enrollment.

Respondents were sensitive to program design. Three test case scenarios led participants to opt out at a rate that was significantly higher than 19 percent in the base case scenario:

- 1) Opt-out rates increased by 12.9 percentage points to 31.9 percent when contributions were invested in a fund with a guaranteed, but low, annual rate of return;
- 2) Opt-out rates increased by 6.1 percentage points to 25.1 percent when a deferred annuity was bought at retirement;
- 3) Opt-out rates increased by 5.5 percentage points to 24.5 percent when, by default, the contribution rate automatically increased from 6 percent to 10 percent of pay.

Two test case scenarios reduced opt-out rates compared to the base case but were only marginally statistically significant:

- 1) Opt-out rates decreased by 4.3 percentage points to 14.7 percent when half of assets were used to buy an annuity at retirement.
- 2) Opt-out rates decreased by 3.9 percentage points to 15.1 percent when the default contribution rate was 3 percent instead of 6 percent.

Other plan features did not affect the opt-out rate: buying an annuity at retirement by default had little effect on the opt-out rate, and allowing participants to change contributions only once a year did not result in an opt-out rate different from the case in which workers could change their participation rate once every quarter. Table 1 reports the opt-out rates observed in each of the scenarios examined by the study.

Table 1. Opt-out Rate, by Enrollment Scenario

Enrollment Scenario	Opt-out rate
Base case	19.0%
Partial annuity purchased at retirement	14.7*
3 percent instead of 6 percent default contribution rate	15.1*
Full annuity purchased at retirement	16.1
Roth instead of traditional IRA contribution and withdrawal rules	16.7
Quarterly instead of annual contribution rate changes	17.1
Automatically escalating contribution rate (from 6 percent to 10 percent)	24.5**
Deferred annuity purchased at retirement	25.1**
Annual rate of return guarantee	31.9**

* marginally statistically significant ** statistically significant

Source: *Authors' calculations.*

Aside from a participation rate that was similar to the rate found in academic studies, uncovered workers in the study behaved like workers in 401(k) plans in other ways as well. For example, women, minorities, and younger workers opted out at lower rates than men, whites, and older workers. Another consistency is that changing the default contribution rate from 6 percent to 3 percent resulted in an insignificant change in the opt-out rate.

The study paints an optimistic picture for participation in Connecticut's proposed Program. A program with almost all of the features specified in the legislation is likely to result in a participation rate of around 80 percent. Vulnerable groups are also likely to benefit disproportionately from the proposed program, because they are less likely to opt out. Finally, several Program features that are desirable – either to improve retirement security (e.g., a 6 percent contribution rate and annuitization) or to reduce administrative costs (e.g., allowing changes in contributions just once per year) – do not appear to affect participation significantly.

Introduction

For workers with access to employer-sponsored retirement savings plans, plans designed to make saving the path of least resistance (through automatic enrollment and payroll deductions) tend to be most successful in increasing retirement preparedness. For this reason, Connecticut has modeled its proposed retirement savings program as an IRA with automatic enrollment. But the success of this approach rests on the untested assumption that – despite differences in demography and economic circumstances – uncovered workers will act like covered workers and not opt out of the Program.¹⁵

To test this assumption, Connecticut hired the CRR to analyze the likelihood that uncovered workers would opt out of the Program and to see if any specific program features were beneficial (or detrimental) to participation. Estimating opt-out under programs with different features is important for several reasons: 1) the retirement security of uncovered workers will depend on whether they participate and how much they contribute; 2) participation and default program parameters, such as the contribution rate, will determine how soon a program can achieve the economies of scale necessary to make it cost-effective to operate.

The CRR studied opt-out behavior by performing an online benefit-enrollment experiment in which participants were randomly assigned to programs with different features¹⁶ and asked about their decisions to remain enrolled or opt out. Differences in behavior among respondents facing different features were used to quantify the effect of program design on the opt-out rate. This methodology avoids the pitfalls of asking someone their preferences over a complicated set of features and instead presents different subjects one choice and explores how those facing different features behave.

This report proceeds as follows. The first section discusses the experiment methodology and data, including the experiment design, program features studied, and data quality. The second section reports the opt-out rate observed for each group and also presents the effect of program features on opt-out rates. The third section reports correlations between demographics and the opt-out rate. The final section concludes that uncovered workers appear to respond to Program design in the same way that covered workers respond to 401(k) plan design: approximately 20 percent of uncovered workers opted out; women, minorities, and younger workers opted out at lower rates than men, whites, and older workers; and changing the default contribution rate from 6 percent to 3 percent did not significantly change the opt-out rate. The study also found that three Program features significantly increased opt-out rates: 1) a rate of return guarantee; 2) automatically escalating contributions; and 3) offering a deferred annuity as a default withdrawal option.

¹⁵ While the relationship between 401(k) plan design and employee behavior has been extensively studied, the extent to which uncovered workers will behave similarly to workers in 401(k) plans is currently unknown.

¹⁶ Connecticut's Retirement Security Board selected Program features for testing based on whether the features were specified in the Program described in Connecticut's legislation and on the potential for features to affect retirement security or Program administration costs.

Experiment Methodology and Data

To predict how workers in Connecticut might respond to a State-sponsored auto-IRA, uncovered workers in a nationally-representative internet-panel were asked to imagine that they had access to a State-sponsored retirement program at work. After reading a description of the program in non-technical terms, participants were given the option to remain in the program or opt-out.

Base Case

Using the literature on how covered private sector workers respond to 401(k) design, the project developed a Base Case Program that enrolled uncovered workers into a Roth IRA with 6 percent of their pay deducted and invested in a target date fund selected by the State (see box).

Base Case Enrollment Scenario

Imagine you're offered the chance to participate in a retirement program at work. Please read the information about the program offered (below) and select the choice you'd likely make if this program were offered to you in reality.

Your employer will automatically deduct a contribution each paycheck (just like it does for Social Security), and deposit the money into a retirement account in your name. Your savings will be invested and grow over time to provide you with income in retirement. Some important features of this program:

- 6 percent of your pay, or \$60 per every \$1,000 you earn, will be deducted and deposited into your account. You can change how much you contribute to your account once a year and can stop contributing at any time by opting out of the program.
- The money will be invested in a fund appropriate for someone your age, managed by a private company selected by the State of Connecticut.
- You can withdraw your contributions without penalty at any time; you pay taxes on your contributions up-front.
- You can access *all* of your account balance (contributions plus investment earnings) without penalty or taxes when you retire.

Detailed information on the program can be found [here](#).

Test Cases

To measure the effect of Program features on opt-out rates, the project team developed eight test cases that were identical to the Base Case – except for one program feature. For example, to test the difference in opt-out rates between a program with a 6-percent default contribution rate and a 3 percent default contribution rate, only two numbers in one sentence of the base case were modified to create a test case: “**3** percent of your pay, or **\$30** per every \$1,000 you earn, will be deducted and deposited into your account.” Table 1 lists all 8 of the alternative program features tested, and Appendix A presents each test case in detail and highlights differences between the Base Case and each test case.

Table 1. *Test Cases with Differences between the Base Case and Test Case*

- 1) 3 percent instead of 6 percent default contribution rate:
“3 percent of your pay, or \$30 per every \$1,000 you earn, will be deducted and deposited into your account”
- 2) Automatically escalating contribution rate (from 6 percent to 10 percent):
“This contribution rate will be increased by 1 percent each year until you are contributing 10 percent of your pay.”
- 3) Allowing quarterly instead of annual contribution rate changes:
“You can change how much you contribute to your account once every three months.”
- 4) Roth vs. traditional IRA contribution and withdrawal rules:
“Prior to retirement, you can withdraw your savings at any time after paying taxes and a 10-percent penalty; you pay no taxes on your annual contributions.”
- 5) Partial annuity purchased at retirement:
“You can access half of your account balance without penalty or taxes when you retire. The remaining half of your account balance will be used to provide you with a monthly income that will continue as long as you live, and will increase in value each year to keep up with inflation (like your Social Security benefit). If you die before your spouse, he/she will continue to receive half of your monthly benefit for as long as he/she lives.”
- 6) Full annuity purchased at retirement:
“At retirement, your entire account balance will be used to provide you with a monthly income that will continue as long as you live and that will increase in value each year to keep up with inflation (like your Social Security benefit). If you die before your spouse, he/she will continue to receive half of your monthly benefit for as long as he/she lives.”
- 7) Deferred annuity purchased at retirement:
“You can access 85 percent of your account balance without penalty or taxes when you retire. The remaining 15 percent of your account balance will be used to provide you with monthly payments that will start at age 82 and continue as long as you live (like your Social Security Benefit). If you die before your spouse, he/she will continue to receive half of your monthly benefit for as long as he/she lives.”
- 8) Annual rate of return guarantee:
“Your assets will be guaranteed to grow by at least 1 percent per year. Your assets will be unlikely to grow by more than the guaranteed 1 percent per year.”

Source: Authors' excerpts from the survey.

Experiment

To measure the effect of program features on the opt-out rate, participants were randomly assigned to either the Base Case or one of the eight test cases. By randomly assigning participants to a case, the study can assume that characteristics which might influence the decision to opt-out (e.g., a desire to save) were randomly distributed among the groups. Thus differences in opt out rates between the Base Case and test cases can be attributed to the Program feature being tested.¹⁷

¹⁷ The difference in opt out rates can be attributed to the Program features being tested if the difference is large enough relative to random variation to be statistically significant.

The experiment was conducted by administering an online survey to members of the GfK™ Internet panel. GfK was chosen because it maintains the only large-scale, nationally representative Internet panel suitable for this project.¹⁸ It also maintains information on panelists' demographics, household income, and savings balances, so the survey needed to ask only six additional questions to help segment the opt-out rates observed and to weight the national results to be representative of uncovered workers in Connecticut. These additional questions included: 1) specific monthly expenses; 2) access to existing retirement plans; 3) size of employer; 4) length of tenure with employer; 5) hours worked per week; and 6) annual salary of respondent. The survey also attempted to assess respondents' interest in rolling over existing retirement plans into the State-sponsored IRA described in the enrollment experiment. Appendix A contains the full survey used in the experiment.

The experiment was fielded in two stages between July and August 2015. First, the survey was sent out to 200 panelists to make sure that participants provided reliable responses to the questions (see Appendix B for the results of this pre-test). Next, after modifying the survey based on pre-test results, 17,604 panelists were invited to participate in the experiment. Of the panelists invited, 10,850 (62 percent) responded to the questions regarding their employment status and workplace retirement plan. 3,044 (28 percent of respondents) qualified for the survey because they were employed but did not have access to a retirement plan at work. This process yielded an average of 338 participants per retirement plan scenario.

Sample

Panelists who responded to the survey were more likely to be older, white, and have higher incomes compared to non-respondents. Table 2 compares demographic information among non-respondents, respondents, and qualified respondents, as well as the population of employed individuals without access to an employer-based retirement plan, from the *Current Population Survey* (CPS). To account for the difference between eligible participants and the Connecticut population of uncovered workers, the study weights responses by age, gender, income, race, and employer size to adjust the population of respondents to be representative of the population of uncovered workers in Connecticut.¹⁹

¹⁸ For more information about the GfK panel, see www.gfk.com/us/Solutions/consumer-panels/Pages/GfK-KnowledgePanel.aspx.

¹⁹ For more information on weighting techniques, see Cameron and Trivedi (2005).

Table 2. *Demographics, by Source*

Characteristics	CPS	Respondents	Non-respondents	Qualified respondents
Average age	41.2	47.4	42.3	45.8
Median household income	56,233	65,000	55,000	55,000
Percent married	50.5%	64.1%	48.7%	58.9%
Percent female	48.2%	58.8%	63.8%	64.8%
Percent with children	38.4%	29.8%	41.2%	30.3%
Percent white	79.3%	77.3%	61.4%	74.7%
Percent non-Hispanic	80.5%	90.5%	80.7%	88.5%
Education, >high school	88.5%	97.9%	96.7%	96.5%
Education, >Some college	58.3%	82.4%	81.5%	76.5%
Total	35,446	10,850	6,214	3,061

Source: Current Population Survey (2014) and authors' calculations from survey.

Since panelists were randomly assigned to a case, the number of responses to each ranged from 293 to 373 per case. Data quality tests suggest the data are near-complete: less than 1 percent of respondents skipped or refused to answer one or more questions; and all qualified respondents answered the question regarding whether they would stay in or opt out of the program. Even though participants were randomly assigned to each group, the number of people in each group was small enough that several groups contained people with demographics that differed from the Base Case. Because of these demographic differences, the project controls for their potential effect using regression analysis.

Empirical Strategy

For each scenario, differences in opt-out rates were measured between the Base Case and each test case using the following ordinary least-squares regression model:

$$T_i = \alpha + \beta_1 \text{Test Case}_j + \beta_2 X_i + \varepsilon_i \quad (1)$$

where T_i is the predicted opt-out rate by individual i . This rate is a function of the characteristics of the enrollment scenario person j participated in (Test Case_j). It is also a function of individual characteristics (X_i) that could influence demand for benefit b , including age, income, gender, and race, and ε_i is a normally distributed idiosyncratic error term. This regression is necessary because differences can arise between groups, even in random assignment, that could potentially bias the interpretation of results (e.g., if more women were assigned to one scenario, the opt-out rate could look artificially low). Indeed, data quality tests suggest a few groups might vary significantly from others with respect to individual characteristics. Equation (1) addresses this issue by estimating the difference in opt-out for two otherwise similar individuals facing different program designs.

The effect of specific program features might also vary based on demographics or economic circumstances. For example, individuals with student loans or other debt might be more likely to participate in the Program if the default contribution rate is 3 percent instead of 6 percent. To test whether such results are observed in the data, the study refines the model to include an interaction between individual characteristics (expressed as binary variables) and the enrollment scenario.

$$T_{ib} = \alpha + \beta_1 Treatment_{ib} + \beta_2 Treatment_{ib} * X_i + \beta_3 X_i + \varepsilon_{ib} \quad (2)$$

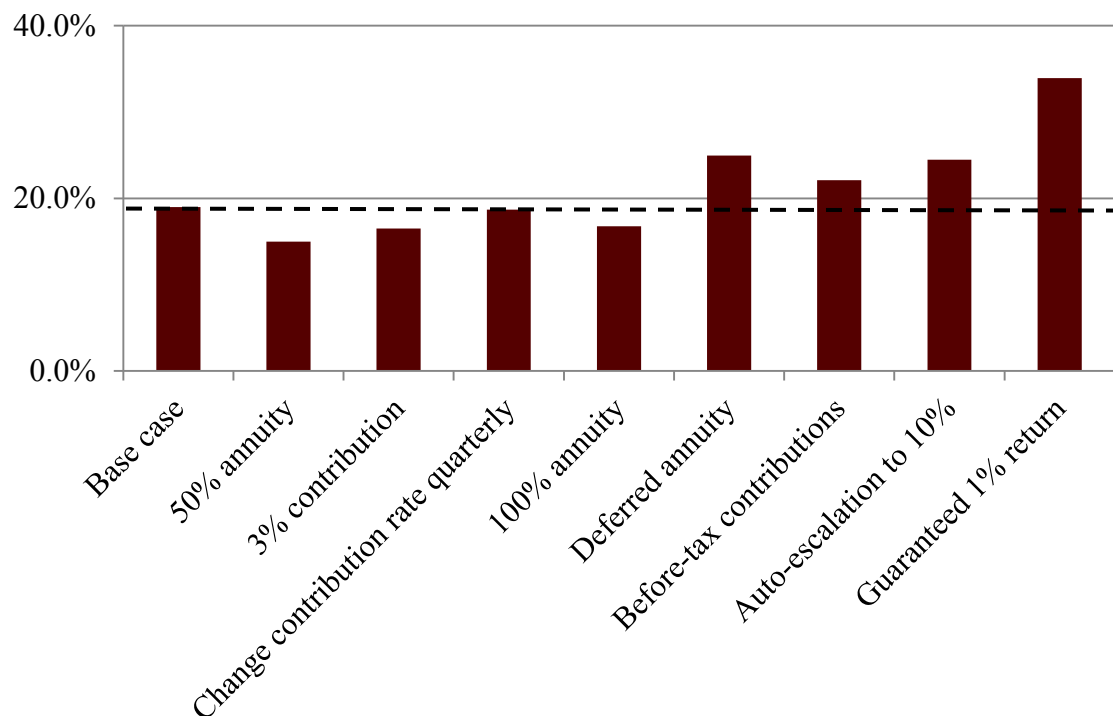
The following characteristics are tested to see if they affect the responses to various test cases:

- Income
- Gender
- Race
- Existence of monthly expenses (student loans, car loans)
- Size of employer
- Tenure
- Education
- Age
- Children
- Marital status

Effect of Program Features on Opt out

Without controlling for differences in demographics among the groups, the opt-out rate ranged from 15 percent (in the case where half of assets would be used to buy an annuity at retirement) to 34 percent (in the case where contributions would earn a guaranteed annual rate of return of 1 percent) (see Figure 1). This section reports differences in the opt-out rate between the base case and each test case controlling for demographic differences and taking statistical significance into account. Results are weighted to be representative of uncovered workers in Connecticut.

Figure 1. *Opt-out Rate, by Scenario*



Source: Authors' calculations from survey.

Results by Program Features

1) Contribution rate

Since participants tend to stick to the default contribution rate, it must be sufficiently high to improve retirement security, or automatically increase to a higher level (see CRR memo on the subject for more information). The experiment tested two features that affected the contribution rate – a lower default and automatic escalation.

- a. Lower default contribution rate (reduce opt-out rate by 3.9 percentage points, marginally significant):

Changing the default contribution rate from 6 percent to 3 percent of pay reduced the opt-out rate by 3.9 percentage points compared to a rate of 19 percent in the Base Case. However, a 1-in-5 chance exists that this finding was due to random variation rather than a true difference in opt-out rates between cases. This result is statistically insignificant using the conventional statistical standard, which requires a less than 1-in-10 chance that the results observed were due to random variation in means. This result is consistent with studies showing that a higher

default contribution rate has a minor impact on participation in 401(k) plans with automatic enrollment.²⁰

- b. Automatic escalation of contribution rate (increase opt-out rate by 5.5 percentage points, statistically significant):

Increasing contributions from 6 percent to 10 percent over four years resulted in a 5.5-percentage-point increase in the opt-out rate compared to the Base Case. This result is statistically significant. While studies have not isolated the effect of automatic escalation on 401(k) plan participation, studies have reported that approximately 5 percent of employees whose contributions automatically escalate drop out in the first year.²¹

- 2) Frequency of contribution rate changes (reduce opt-out rate by 1.9 percentage points, not statistically significant):

Restricting contribution rate changes to annually during the enrollment period has the potential to simplify the administrative work required by employers. Allowing participants to instead change their contribution rates once every three months had virtually no effect on the opt-out rate compared to the Base Case allowing annual rate changes. While the opt out rate was 1.6 percentage points lower when participants could change their contributions quarterly, this difference is likely due to statistical noise or random variation. Since 401(k) plans generally allow participants to change their contribution rates every month, studies of 401(k) participants have not examined this issue.

- 3) Roth vs. traditional IRA (reduce opt-out rate by 2.3 percentage points, not statistically significant):

Roth and Traditional IRAs each have a variety of pros and cons, with national automatic IRA legislation favoring the use of Roth IRAs for the kind of workers that State auto-IRA initiatives are targeting (see CRR background memo for more information on this topic). Changing the contribution and withdrawal rules to reflect the use of a traditional IRA rather than a Roth IRA resulted in a statistically insignificant increase of 2.3 percentage points in the opt-out rate.

- 4) Annuity withdrawal options: 401(k) plan participants face the challenge of how best to draw down their nest egg after they retire. They face the risk of either spending too fast and running out of their money or spending too slowly and constraining their consumption. Annuities can help participants convert retirement assets into lifetime income. For that reason, Connecticut's legislation states that the Program should include a default annuity withdrawal option at retirement (see CRR memo for more information on this topic).

²⁰ Beshears (2009).

²¹ Benartzi and Thaler (2007).

- a. Partial annuitization at retirement (reduce opt-out rate by 4.3 percentage points, marginally statistically significant):

Specifying a partial annuity as the default withdrawal option (communicated using an analogy to Social Security benefits) resulted in an opt-out rate 4.3 percentage points lower than the Base Case (in which the default withdrawal option was a lump sum). However, this result is only marginally statistically significant. While prior studies of 401(k) plan participation have not examined the effect of a default withdrawal option on the opt-out rate, this result is consistent with economic theory, which suggests that most would be better off if they annuitized a significant proportion (but not all) of their assets.

- b. Full annuitization at retirement (reduce opt-out rate by 2.9 percentage points, not statistically significant):

Specifying a full annuity as the default withdrawal option reduced the opt-out rate by 2.9 percentage points compared to the Base Case. This difference, however, was not statistically significant, and may have been due to random variation in the composition of the groups. While studies have not examined the effect of annuity withdrawal options on the decision to opt-out of a plan, economic theory suggests most people would benefit from converting part of their wealth into an annuity at retirement. The current result suggests that people are indifferent between a lump-sum (the current default in 401(k) plans) and a full annuity (the current default in defined benefit pensions) as the default distribution option.

- c. Deferred annuity at retirement (increase opt-out rate by 6.1 percentage points, statistically significant):

Specifying a deferred annuity as the default withdrawal option raised the opt-out rate by 6.1 percentage points compared to the Base Case. This difference was statistically significant. Since deferred annuities are typically not offered in 401(k) plans, this feature had not previously been studied. The results of the CRR's current study, however, suggest deferred annuities might dissuade participation.

- 5) Annual rate-of-return guarantee (increase opt-out rate by 12.9 percentage points, statistically significant):

A number of studies suggest that low-income households are more risk-averse than high-income households. Since uncovered workers are more likely to be low-income than covered workers, Connecticut's legislation stipulates that an "annually predetermined rate of return guarantee" should be part of the State Program's investment vehicle. The only way to provide an annual rate-of-return guarantee and allow assets to be portable (another stipulation of Connecticut's legislation) is to invest in Treasury bonds or similar low-risk, low-yield investments. Thus the test case for a default investment option with a guarantee clearly communicates both the benefit and cost to participants.

Specifying a guaranteed rate of return in the default investment option resulted in an opt-out rate that was 12.9 percentage points higher than the Base Case (in which the default investment option was a target date fund selected by the State). This difference was statistically significant. These results suggest that an annual rate of return guarantee is likely to dissuade participation if the cost of the guarantee is clearly communicated.

Opt-Out by Demographics

The average opt-out rate across all scenarios was approximately 20 percent. But this rate varied considerably based on demographics. With the exception of lower-income households, the survey found that various vulnerable groups generally opted out of the Program at a lower rate than other groups: younger workers opted out at a lower rate than older workers; women opted out at a lower rate than men; and minorities opted out at a lower rate than whites. But opt-out rates did not vary as a function of economic conditions, such as the existence of student loans or other debt after demographics were taken into account.

Age and Opt-Out

Opt-out rates were significantly correlated with four demographic characteristics: age, income, gender, and race.²² Without controlling for other factors, 18-24 year olds opted out at a rate of approximately 14 percent, while workers over the age of 55 opted out at almost twice that rate (see Table 3). This result is consistent with literature that finds older workers are less likely to stick with defaults than younger workers (in this case, the default is stay in the Program).

Table 3: *Opt-Out Rate, by Age*

Age group	Opt-out (%)
18-24	13.9%
25-34	18.6
35-44	19.5
45-54	23.1
55-64	25.2
65-74	36.9
75+	32.4
Total	21.2

Source: Authors' calculations from survey.

²² These results mirror findings from studies on employee responses to 401(k) plan features, e.g. Choi et al (2002).

Income and Opt-Out

The opt-out rate generally decreased as income rose, from a 26 percent opt-out rate by households earning less than \$25,000 a year to 18 percent by households earning between \$75,000 and \$100,000 (see Table 4).²³

Table 4. *Opt-Out Rate, by Income*

Household income	Opt-out (%)
Less than \$25,000	25.7%
\$25,000-\$50,000	21.1
\$50,000-\$75,000	19.9
\$75,000-\$100,000	17.8
More than \$100,000	20.7
Total	21.2

Source: Authors' calculations from survey.

Race and Opt-Out

White, non-Hispanic participants opted out at a rate of 22 percent, while Blacks and Hispanics opted out at rates of 18 percent and 15 percent, respectively.

Table 5. *Opt-Out Rate, by Race*

Race	Opt-out (%)
White, non-Hispanic	22.3%
Black, non-Hispanic	18.0
Hispanic	14.5
Other	19.5
Total	21.2

Source: Authors' calculations from survey.

Gender and Opt-Out

While men opted out at a rate of 23 percent, women opted out a rate of 19 percent.

Table 6. *Opt-Out Rate, by Gender*

Gender	Opt-out (%)
Male	23.2%
Female	19.0
Total	21.2

Source: Authors' calculations from survey.

²³ The opt-out rate of households earning more than \$100,000 a year increased to 21 percent, but this increase disappears when age is taken into account.

Conclusion

The results of the benefit enrollment experiment suggest that uncovered workers in Connecticut will respond to a proposed State-sponsored auto-IRA similarly to workers with access to a 401(k) plan with automatic enrollment. Several results support this conclusion: 1) 19 percent of workers opted out of the Base Case State-sponsored automatic IRA program – this is comparable to the rate observed in 401(k) plans with automatic enrollment; 2) women, minorities, and the younger workers opted out at lower rates than men, whites, and older workers; and, 3) changing the default contribution rate from 6 percent to 3 percent resulted in an insignificant change in the opt-out rate.

These results paint an optimistic picture for participation in Connecticut's proposed Program. A Program that conforms to almost all of the parameters specified in Connecticut's legislation (with the exception of a guaranteed rate of return) is likely to result in a participation rate of around 80 percent. The study also suggests that vulnerable groups are likely to benefit disproportionately from the proposed program. Finally, several Program features that are desirable – either because they improve retirement security or reduce administrative costs – did not affect participation significantly: 1) a 6-percent (rather than 3-percent) default contribution rate; 2) restricting contribution rate changes to once per year; and, 3) annuitizing account balances upon retirement.

Final Report on Employer Focus Groups

Executive Summary

On June 24, 2015, Nielsen Inc. conducted three focus groups with small business owners and benefit decision makers in Connecticut to gauge employer reaction to a proposed State-sponsored retirement savings program (“the Program”). Results suggest that small employers in Connecticut agreed that their workers were not saving enough for retirement, but they had many questions and concerns about the State getting involved. Employers welcomed State action if it involved money to help offer a plan or cheaper/better retirement savings options for workers. But a mandate to offer a retirement savings plan (or to enroll employees in a State program) was also perceived to result in increased costs to employers to comply with new regulations, to facilitate payroll deduction, and to educate employees. Employers also characterized the State as unable to manage money or run operations efficiently compared to the private sector and worried that the program would be run similarly to the state pension system. Finally, they questioned the value added by a State-sponsored program relative to the other options currently available to employers.

These results provide valuable information on how to present the Program to businesses. In particular, the State needs to clearly answer several questions when communicating the Program to employers: 1) who would bear the cost of setting up and administering the program; 2) what role would the State play; and 3) what features would make the Program better than existing options for business owners and uncovered workers? Another lesson is that any misconceptions about the State’s ability to manage retirement plans should be considered when setting up and communicating the Program. Finally, two promising ways to increase employer support for a program appear to be: 1) designing a program that meets the needs of both business owners and their employees; and 2) limiting ongoing administration, for example by restricting the number of times contributions can be changed.

Introduction

The success of Connecticut's proposed retirement savings program depends on support from small businesses. Under the Program, businesses that currently do not offer a retirement savings plan for their employees would be required to: 1) provide the information necessary for their employees to automatically enroll into the Program; and 2) make timely and accurate payroll deductions for employees who participate in the Program. Small business owners and their benefit managers (if applicable) are also likely to hold considerable sway over their employees' decisions to opt out of or stay in any proposed Program. While employers can be mandated to offer access to the Program, they cannot be mandated to encourage their employees to participate. Thus, an important part of the market analysis that the CRR conducted on behalf of Connecticut involves anticipating the range of potential employer reactions and identifying the factors underlying support and opposition to a State-mandated Program.

CRR's analysis of potential employer reactions proceeded in two stages. First, focus groups (which are summarized in this report) identified the range of reactions to the proposed Program and the potential drivers of support and opposition. Second, the prevalence of specific reactions and the importance of the drivers of support/opposition were assessed via a telephone survey of 400 business owners and benefit decision makers. Essentially, the focus groups provide qualitative data on the range of employer reactions while the phone survey provides a more quantitative view.

Methodology

On June 24, 2015, Nielsen Inc. carried out three online focus groups, each consisting of three to seven employer participants and lasting between 45 and 60 minutes. Two of the focus groups consisted of business owners and benefit decision makers of firms in Connecticut with fewer than 100 employees that do not offer a retirement savings plan. The third focus group consisted of business owners and benefit decision makers of firms in Connecticut with fewer than 100 employees that do offer a retirement savings plan. Participants were recruited by phone from a Connecticut business directory and offered an honorarium for their time. Individuals who agreed to participate were invited to attend a focus group based on their willingness to share information and to ensure a mix of industries and business-types (see Appendix A for detailed information on focus group invitees).

Each focus group was conducted by two experienced moderators from Nielsen using a guide developed by the CRR with input from the Connecticut Retirement Security Board and Mercer/Oliver Wyman (see Appendix B for the moderator guide). The focus groups were conducted using Nielsen's proprietary online chat room, where participants are given aliases to preserve anonymity and have the ability to view and react to others' responses in real time. During each focus group, the moderators first presented participants with ground rules for participating in the focus groups and then posed questions to the group using the moderator guide as a map. A CRR researcher was present in a virtual "back room" to help the moderator decide which responses to follow up on and when to switch topics. Chat transcripts were analyzed by researchers at the CRR and are summarized in this report (CRR has submitted full, unedited focus group transcripts separately).

Results

This section presents details on the various takeaways from the focus groups, annotated with quotes from the participants. See Appendix C for full transcripts.

Do employees need help?

Consistent with an earlier survey of Connecticut employers conducted by AARP, the CRR focus group participants expressed concern about their employees' retirement preparedness. Indeed, several participants reported taking specific steps to help their employees save for retirement, short of offering a plan. For example, one individual said, "(I) encourage each employee to set aside money for retirement and give them options where to allocate the money." Given their concern, when asked why they did not offer a plan, employers cited the costs: the cost of identifying and administering a good plan and making employer contributions. Several participants also cited the particularly high cost of plans for small employers relative to large employers ("My company is small and the cost is what's holding me back," one employer said.) and a belief that employees would not participate.

Initial reactions to State program

When asked to react to a potential State-sponsored retirement savings program in which employers would be mandated to facilitate the enrollment of and payroll deduction for their employees, participants had a range of gut reactions. On the one hand, participants welcomed State help in addressing retirement security ("If the State would offer a low-budget retirement savings, we would be willing to add extra at the end of the year,"). On the other hand, support faded quickly after learning that the Program would be cost-neutral to taxpayers ("...that makes zero sense,"). Initial responses also typically included a knee-jerk reaction to the idea of a mandate and a negative view of the State's ability to manage money ("The idea of the State touching this money frightens me,"; "They have a terrible track record with health insurance,"). But, by far, the most common first reaction to the Program was a barrage of questions about program details: "who would run the program; who would manage money; who would pay for their administrative costs; and what investment options would be available?" Support for the Program thus appeared to hinge on answers to these questions.

Cost Concerns

Focus group participants were informed that, under the Program, employers would be primarily responsible for making timely and accurate payroll deductions. But this statement did not alleviate concerns about the cost of complying, with some respondents imagining "drowning in paperwork" and characterizing payroll administration as potentially becoming a "nightmare." Participants anticipated two types of costs: 1) start-up costs associated with learning about the Program, educating employees, and providing information necessary to enroll their employees in the program; and 2) ongoing costs associated with payroll deduction, accounting tasks, and filing paperwork necessary to comply with an employer mandate. Employers' concerns about the time necessary to become familiar with a new program and educate their employees warrants particular attention, because such costs are typically borne by financial advisors for individual investors and by sales agents for small defined contribution plans. It is worth noting that these concerns about costs appear to be at least partly driven by the idea that the employer role in the Program would be similar to the role an employer plays in a 401(k). At the end of the day, the focus group participants wanted to be reimbursed for the very real costs they anticipated having

to bear due to the proposed Program. As one participant put it, “make it less costly (for employers) by giving a tax credit for the admin(istration) costs that we will incur.”

Reactions to specific Program features

To uncover potential drivers of support or opposition to the Program, the focus groups solicited participants’ reactions to potential Program features. In general, program design appeared to have little influence on support for the Program. For example, despite the well-documented effect of automatic enrollment on 401(k) plan participation, many employers who did not offer a plan did not appreciate the potential for automatic enrollment to help their employees save for retirement: “If an employee can opt out for any reason, then what’s the purpose of a State plan?” Similarly, employers that did not offer a plan did not have strong views on a 6-percent default contribution rate; did not express a desire to match employer contributions (unless a tax incentive was available for doing so); did not feel that a guaranteed rate of return would be important; and did not appreciate the benefit of not having fiduciary responsibility (“Are businesses usually responsible?”).

Focus group participants did express a preference for a few program features over others, but these preferences were not always consistent and revealed competing interests. Many participants felt that a 401(k)-style, before-tax account would be preferable to a Roth IRA for several reasons: 1) the up-front tax savings; 2) the penalty for withdrawing money prior to retirement; and 3) the high contribution limit. While all three of these features would benefit a business owner (most of whom expressed an interest in joining the program themselves), these features would be unlikely to benefit most uncovered workers who were characterized as “pressed for money” and “unlikely to participate” by focus group participants. Similarly, the ability to change contribution rates and to opt out at any time was viewed positively from the standpoint of employees having choice, but the associated administrative cost was viewed negatively. This administrative cost was perceived to be particularly troublesome if contribution rate changes or opt-out decisions had to be processed frequently (as opposed to only once a year).

Support for the Program

When asked about their level of support for a potential State-sponsored retirement savings program, a slight majority of participants expressed opposition. The employer mandate, perceived employer costs, and perceived incompetence of the State when it comes to managing money were key drivers of opposition. However, at least one participant in each focus group expressed support for the Program, despite hearing opposing viewpoints from other participants. Underlying this support was a belief that State involvement could make it easier for employers to “do the right thing” and help their employees save more for retirement by removing existing barriers like the high cost of small-employer plans.

Employer support for a potential program is important for many reasons, but one key reason is that employers can affect participation by encouraging or discouraging employees to opt out of a program. When asked how they might introduce the Program to their employees, even participants who opposed the Program indicated that they would not actively dissuade their employees from participating (“I will explain the pros and cons...”). This response suggests that employers are likely to act in their employees’ best interests when they discuss the Program with their employees, even if the program places an administrative burden on owners.

Conclusion

Several themes emerged from the three focus groups. First, small employers did not believe that their employees were prepared for retirement and welcomed assistance in providing a plan. In this context, State involvement was viewed as helpful if it subsidizes the cost of providing a retirement plan. Second, the most common initial reaction to a mandatory, State-sponsored Program was a flurry of questions and skepticism about the State's ability to manage money. The questions reveal that the details of the program – which employees must be covered; how the mandate will be enforced; who manages money; and what paperwork would need to be filed? – matter to employers and would drive support for the Program among employers. The skepticism regarding the State's ability to manage money, on the other hand, reflects an inaccurate perception of how the proposed retirement program will be run and how it relates to the State's role in managing its pension system and balancing its budget. Third, employers appear to believe that financial education and tax incentives will be sufficient to increase retirement savings. Consistent with this belief, employers did not have an appreciation for the power of automatic enrollment and default elections to nudge workers, especially workers who tend to under-save, to save more for retirement. Finally, employers did not believe that a program could be cost-neutral to the State without imposing significant costs on small businesses or their employees.

These themes have important implications for the design and rollout of a potential Program. Perhaps the most important lesson from the focus groups is that the State needs to clearly answer several questions when communicating the Program to employers: 1) who will bear the cost of setting up and administering the Program?; 2) What role will the State play and why?; and 3) What features make the Program better than existing options for business owners and uncovered workers in Connecticut? Another lesson is that misconceptions about the State's ability to manage retirement plans need to be considered when setting up and communicating the Program. Finally, two promising ways to increase employer support for a program appear to be to: 1) design a program that meets the needs of both business owners and their employees; and 2) require employers to engage in very little ongoing administration.

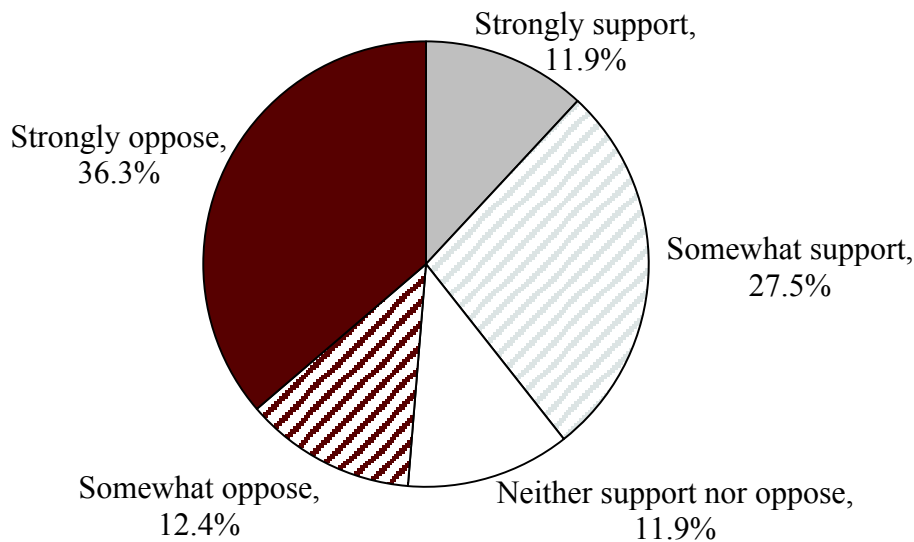
Final Report on Employer Phone Survey

Executive Summary

Boston College was tasked with conducting a telephone survey of Connecticut employers to determine their likely reactions to the State's proposed retirement savings program ("the Program"). For employers without a retirement plan, the main goal was to determine the level and drivers of support/opposition to the Program and whether or not employers would discourage employee participation. For employers offering a plan, the main goal was to determine whether the Program would crowd out private sector plans and whether employers would consider using it to cover workers ineligible for the employer-sponsored plan.

Among employers without a plan, support was mixed (see Figure 1). Employers who supported the Program tended to do so because it would not require a match, because they would not have legal responsibility for contributions, or because administration was simple. Opposition was driven by the feeling that any State-run plan would fail or by an ideological opposition to a State mandate on retirement savings, either for employers or employees. These findings suggest support for the Program can be increased by presenting it as: 1) voluntary for employees; 2) easy to administer; 3) private sector run but with State oversight.

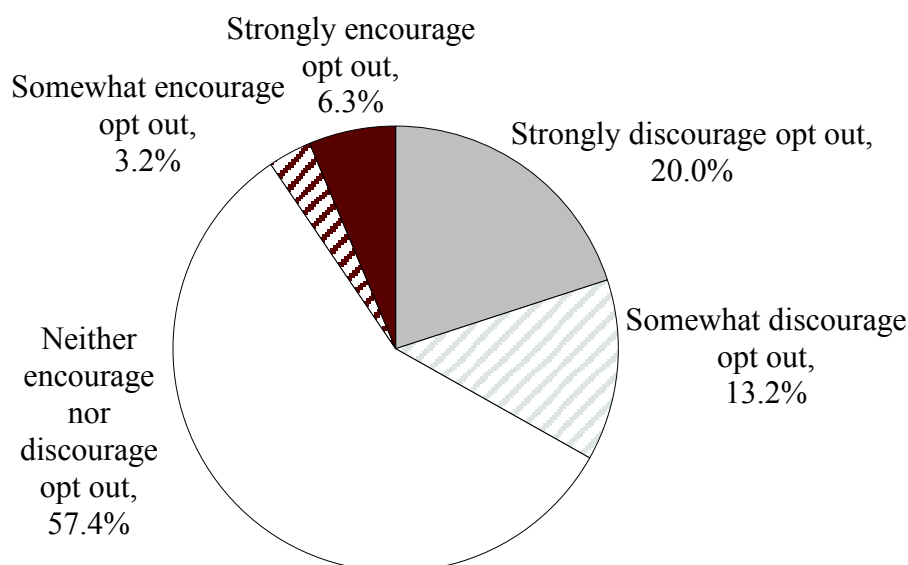
Figure 1. *Support for the State's Proposed Program among 199 Connecticut Employers without a Retirement Savings Plan*



Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

As Figure 2 shows, opposition does not translate to a negative message to employees: despite 47 percent of employers opposing the Program, only 9 percent said they would encourage their employees to opt out.

Figure 2. *Message to Employees Regarding Opt Out by 199 Connecticut Employers without a Retirement Savings Plan*



Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

One additional concern of the State is that small employers affected by this policy will face difficulty administering payroll deductions for the Program. The survey suggests this outcome is unlikely. First, about half of employers without a plan outsource their payroll to a provider, most commonly ADP or Paychex, which should make managing an additional deduction both easy and low cost. Second, among employers that manage their own payroll, opposition is just slightly higher than for employers that outsource (49 vs. 46 percent).

Among employers that already offer a plan, the State's Program does not seem to register as: 1) an alternative to their pre-existing plans; or 2) an option to cover their ineligible workers. Just 1 percent of employers said they would switch from their current plan to the State's program and just 7 percent said they would enroll their ineligible workers (who represent 16 percent of their employees) in the State's program. These results suggest that while some workers may remain uncovered even after the program takes effect, the State Program is not likely to squeeze out private sector plans.

Introduction

The success of Connecticut's Program is contingent on employee participation. But while the decision to participate or opt out is ultimately the employee's, employers will play a large role in communicating the advantages (or disadvantages) of the Program. Understanding how employers are likely to react to a mandated Program, and how to garner their support, is therefore an important part of the CRR market research assignment. Indeed, focus groups of employers without retirement plans conducted by CRR suggested many initially viewed the Program negatively. If these employers were to encourage their employees to opt out, they could impede the Program's success. But, to date, it is unclear whether negative perceptions would actually lead employers to influence employee participation.

Additional questions remain unanswered as well. For one, many small employers might have difficulty administering the Program, especially if they manage their own payrolls. Questions also persist about the reaction of employers who already offer their employees a retirement plan. In particular, it is unclear whether any of these employers would drop their private sector plans and use Connecticut's Program. This development could cause a reaction from employees, who would be losing plans that have features they prefer, like an employer match. Employers offering plans may also want to keep their private sector option but use the Program to cover workers who are ineligible for their plans. This use of the Program would be a positive development, since the 16 percent of ineligible workers at these employers could remain uncovered under the present description of the Program. This use would also have an impact on the number of total Program participants.

To answer these questions, the CRR conducted a survey of small Connecticut employers to determine their likely reactions to the Program. The survey was to include questions targeting both employers that do not offer a retirement savings plan and those that do. Broadly, for employers not offering a plan, the survey was to determine: 1) the level of and reasoning behind support/opposition to the Program; 2) whether that support/opposition would translate to encouragement of participation/opt out for employees; and 3) whether employers faced any barriers to administering the Program. For employers offering a plan, the survey was to determine: 1) the share of workers eligible and participating in their plans; 2) the likelihood of employers voluntarily enrolling any ineligible workers in the Program; and 3) the likelihood of employers foregoing their plans if a State-sponsored program were available.

This report proceeds as follows. The next section discusses the methodology of the phone survey, with details on data collection, the nature of the sample, and the questions asked. The second section reports separate survey results for employers without and with retirement savings plans. The third section concludes that while employers expressed a significant amount of opposition to the Program, this opposition is unlikely to lead to employers discouraging participation. The survey also found that opposition is primarily driven by aversion to any State-run program or to a mandate, not to the Program's design. Finally, the survey suggests that it is unlikely that employers already offering retirement savings will use the State's program, either as a substitute for their private sector plans or as a means for covering their ineligible workers.

Methodology and Sample

To answer the questions above, the CRR contracted with Nielsen, Inc. to survey Connecticut employers, with a focus on employers with 100 or fewer employees. The targeted sample size was 400 completed responses, with no more than 10 percent of the sample employing more than 100 employees. The sample was stratified so that there would be an approximately equal number of employers with and without retirement savings plans. Employers were excluded from the survey if: 1) someone at the management level could not be reached; 2) someone with input into the benefits process could not be reached; 3) the employer was a sole proprietorship; or 4) the employer was in the public sector. Although employers with five or fewer employees are not covered under the proposed legislation, the State was interested in whether these employers would consider participating in the Program voluntarily, so they were included in the sample.

Between August 18 and September 20, 2015, Nielsen Inc. contacted employers in the Dunn and Bradstreet Business-to-Business database until 400 completed interviews were obtained. Of the final interviews, 199 were with employers that did not already offer a retirement savings plan, while the remaining 201 employers did offer a plan. Table 1 provides characteristics of the respondents and Table 2 describes these employers by whether or not they offered a retirement savings plan.

Table 1. *Select Characteristics of Survey Respondents by Retirement Plan Status*

Respondent Characteristic	Does not offer a retirement plan	Offers a retirement plan
<i>Gender</i>		
Men	64.3%	53.7%
Women	35.7	46.3
Average Age	55.8	54.6
<i>Ownership status</i>		
Owner or part-owner	70.9	45.3
Manager	29.1	54.7
<i>Decision making status</i>		
Final decision maker	56.8	38.3
Part of a group of decision makers	43.2	61.7
Number of observations	199	201

Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

Respondents at employers without a retirement plan were much more likely to be that business' owner and also more likely to be the final decision maker at the employer (See Table 1). In the context of Table 2, this pattern makes sense, since employers without retirement plans are generally much smaller than employers with plans and thus more likely to have fewer managers. Indeed, nearly 75 percent of employers without a retirement plan had fewer than 10 employees, compared to just 30 percent of employers offering a plan (See Table 2). As expected, defined contribution plans are the most common kind of plan offered by the surveyed employers. Finally, and importantly for any discussion of feasibility, Table 2 shows that employers without a

pension plan are significantly more likely to manage their payroll internally and to do so manually than employers with a plan.²⁴

The survey was designed to take 15 minutes or less. A full text of the script can be found in Appendix A, but the survey structure was simple. For all potential respondents, an initial screener was fielded asking for the individual- and employer-specific characteristics included in Tables 1 and 2. During this questioning, the exclusion restrictions described above (e.g., no public sector employers, no sole proprietorships) were applied. The final question of the screener, asked only of employers to be included in the final sample, was: “Does your firm offer a traditional DB (defined benefit) pension plan or a DC (defined contribution) retirement savings plan such as a 401(k) plan to any of your employees?” The response to this question then led the respondents to different parts of the survey depending on their answers.

Table 2. *Select Characteristics of Surveyed Employers by Retirement Plan Status*

	Does not offer a retirement plan	Offers a retirement plan
<i>Type of plan</i>		
DC only	--	85.1%
DB only	--	7.0
Both DB and DC	--	8.0
<i>Type of payroll management</i>		
Internal, with software	29.1%	30.8
Internal, manually	19.1	3.0
Outsource to provider	47.2	63.2
<i>Size of employer</i>		
2-9 employees	74.9	30.3
10-19 employees	11.1	18.4
20-29 employees	6.5	9.0
30-39 employees	1.0	6.0
40-49 employees	1.5	4.0
50-99 employees	2.0	19.4
100 or more employees	3.0	12.9
<i>Location</i>		
Fairfield, Hartford, New Haven	70.9	75.6
Other	29.1	24.4
<i>Profit status</i>		
For profit	88.4	81.1
Not for profit	11.6	18.9
Number of observations	199	201

Note: Share of employers by payroll management does not add to 100 because 15 employers answered “other” or “don’t know.” Shares may not add up to 100 percent due to rounding.

Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

²⁴ Statistical significance was measured at the 5-percent level.

For employers not offering a retirement savings plan, the first survey question was designed to see if they had attempted to offer any kind of retirement plan to date. Then, the respondent was provided with a simple description of the State Program, shown in box below. This description was heavily influenced by the employer focus groups, where a more complicated description generated considerable confusion.

Program Description Shown to Survey Respondents

Connecticut is considering requiring that all employers who do not offer a retirement savings plan automatically enroll their employees in either: 1) a retirement savings plan of their choosing; or 2) a program sponsored by the State with the following features:

Under the program, employees would have 6 percent of their paycheck automatically deposited to a Roth IRA in their name:

- The employees' contributions would be invested in a life-cycle fund appropriate for someone their age and chosen by the State;
- The Roth structure implies employees' contributions are taxed up front and there is not a penalty or tax for withdrawal.

Employers' main role is to deposit 6 percent of their employees' salary into a Roth IRA, without any employer match:

- Employers would not have any legal responsibility for the employees' contributions;
- Employers would be required to cease depositing money into the account or change the contribution amount at an employee's request.

Once respondents saw the Program description, they were asked if they would support or oppose the program and asked to then indicate which Program features influenced this position. Respondents were also given the chance to offer any other reason for their support or opposition. Following the questions on reactions to the state's Program, respondents were asked whether they would encourage or discourage their employees from participating and whether or not they would offer the Program or a private sector option of their choosing. Finally, employers with five or fewer employees were informed that they would not have to participate in the program but asked if they would be interested in doing so voluntarily.

For employers already offering a retirement savings plan, the first line of questioning focused on the plan they currently offer to gauge what kind of plan it is, how many workers are covered, and how many participate. In particular, employers were asked if they have hours or tenure requirements for eligibility and what share of their workers are eligible. Worker eligibility is relevant to the Program, because, at this time, workers at employers who offer a plan but who are ineligible would not be covered by the Program. Employers offering defined contribution plans were also asked about the share of eligible workers participating and whether they automatically enrolled employees. Once features of their current plan were established, respondents were shown the program description contained in the above box and asked whether they would stop offering their plan in favor of the Program, would enroll their ineligible workers, or make no change.

Results

This section summarizes the key results, first for employers that do not offer a retirement savings plan and then for employers that do. Appendix B provides detailed data from their responses.

Employers without a Retirement Savings Plan

For employers without a retirement plan, the survey asked about employers' likely reactions to the Program to understand how this reaction would affect the message they gave their employees, and also whether small employers would be interested in participating in the Program voluntarily.

i) Support/Opposition to Program

Employers without a plan were first asked whether or not they had already tried anything to help their employees save for retirement. Interestingly, the majority, 56 percent, had tried something. The most common responses were to have looked into offering a retirement savings plan (31%), to have encouraged employees to open an IRA (31%), or to have offered employees financial education (18%).²⁵ These responses suggest that many Connecticut employers have an interest in helping their employees save for retirement.

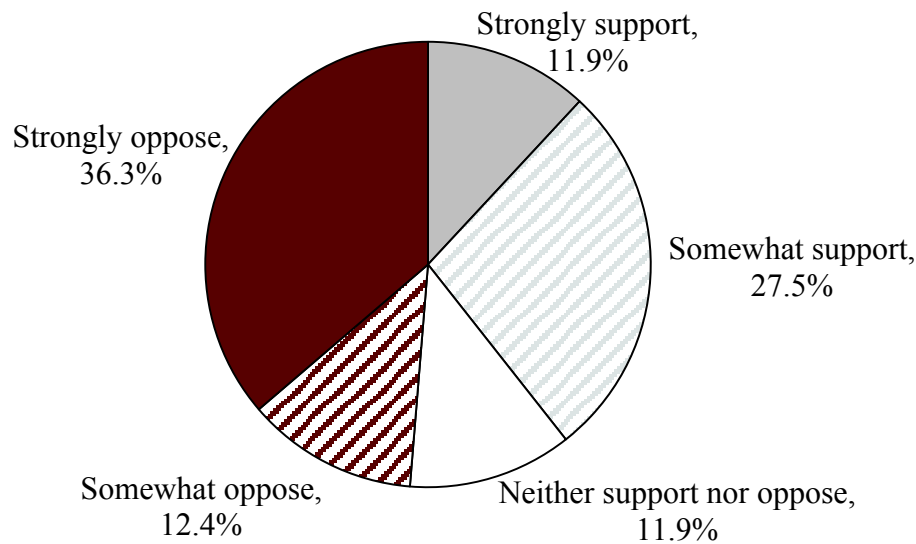
Although the majority of employers indicated they had made an effort to help their employees save for retirement, this interest does not necessarily translate to majority support for the Program. As Figure 1 shows, just 39 percent of the respondents indicated support for the Program described above, while 48 percent opposed it. Indeed, the most common response was to strongly oppose the Program, with 36 percent of respondents choosing this answer.

This opposition was driven mainly by opposition to a State mandated program rather than the Program's specific design features. When asked for the most important reason they opposed it, just 14 percent named a Program feature. But 46 percent said they opposed "Making retirement savings a requirement for employees," and 35 percent said "Other," opting to give a verbatim response.²⁶ The most common verbatim response was opposition to a mandate ("[t]he State mandate; just generally opposed to a State mandate of retirement savings accounts."). Some respondents also indicated a distrust of State government to run the Program at low cost ("The government should mind their business they can't even run their own business so don't try to run mine," and "it costs money to implement program.").

²⁵ Respondents were allowed to indicate multiple answers.

²⁶ A full list of verbatim responses is provided in Appendix C.

Figure 1. *Support for the State's Proposed Program among 199 Connecticut Employers without a Retirement Savings Plan*



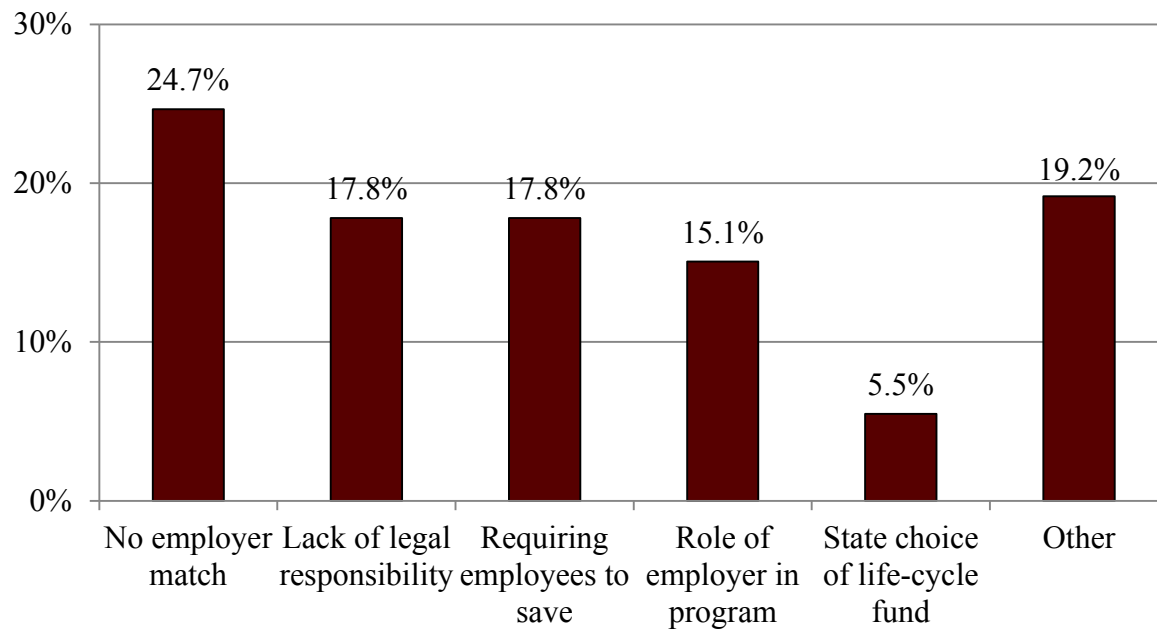
Note: Excludes 6 responses of “don’t know” or “refused.”

Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

The nature of opposition to the Program suggests it will be important for the State to communicate that employees can choose not to participate or can join the Program and later stop – that is, make clear that it is mandated that employers offer the program, but not that employees contribute. Additionally, emphasizing that the state will be minimally involved, most likely overseeing a private sector financial institution that would manage the Program, is also important. The salience of framing can be seen by comparing the results in this Connecticut employer survey to those obtained in a similar AARP survey. In the AARP survey, Connecticut employers were told explicitly that “[i]t is up to each employee to decide if they want to contribute to the plan,” and that “[t]he state plan would be managed by a private sector financial institution and Connecticut would oversee the program with no cost to taxpayers;” those points were less explicit in the Program described in the box above. The AARP survey found higher levels of support than the present survey, at 61 percent.

Program supporters, on the other hand, based their opinions mostly on Program design and appreciated that they did not have to make contributions, that they did not have legal responsibility for contributions, or that the employer’s role was limited. Interestingly, 18 percent of supporters indicated they liked the idea of making retirement savings a requirement for employees, even though this feature also drove opposition to the Program. Figure 2 shows the most important reasons individuals said they supported the Program.

Figure 2. *Most Important Reason for Program Support*



Notes: Excludes 1 response of “don’t know.” The category “other” includes the following responses: “other,” “tax structure of plan (Roth),” “the contribution limits,” and “none of these.”

Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

Combining the information from the screening questions with questions on Program support, it is possible to determine whether any particular type of respondent was more or less likely to support the Program. This information could help the State talk to groups likely to oppose the Program in ways that would make it more appealing. Table 3 shows the results of this analysis. The only statistically significant result is that ownership is more likely to oppose the Program than management (51.1 percent vs. 37.9 percent). Intuitively, this pattern makes sense, since owners may perceive that any cost will fall on them, while managers may see the Program as offering a benefit. One non-significant result worth noting is that employers that manage their payrolls internally have only a slightly higher rate of opposition than those that outsource to a payroll provider.²⁷ This result suggests that employers managing their own payroll do not perceive a significant barrier to administering the Program relative to other employers.

²⁷ For employers who do not offer a plan, the three biggest external payroll providers mentioned verbatim were Paychex (26.3 percent of respondents), ADP (18.8 percent), and Common Sense Payroll (5 percent). For a full list see Appendix C.

Table 3. *Comparison of Opposition to Program by Select Characteristics*

Geography	
Fairfield, Hartford, New Haven	46.8%
Other county	48.3
<i>Difference</i>	<i>-1.5</i>
Ownership	
Owner or Part-owner	51.1
Manager	37.9
<i>Difference</i>	<i>13.2*</i>
Profit status	
For profit	47.7
Not for profit	43.4
<i>Difference</i>	<i>4.3</i>
Payroll	
Internal	49.0
Outsourced	45.6
<i>Difference</i>	<i>3.4</i>
Employer size	
Employer with 2 to 9 employees	49.0
Employer with 10 or more employees	42.0
<i>Difference</i>	<i>7.0</i>

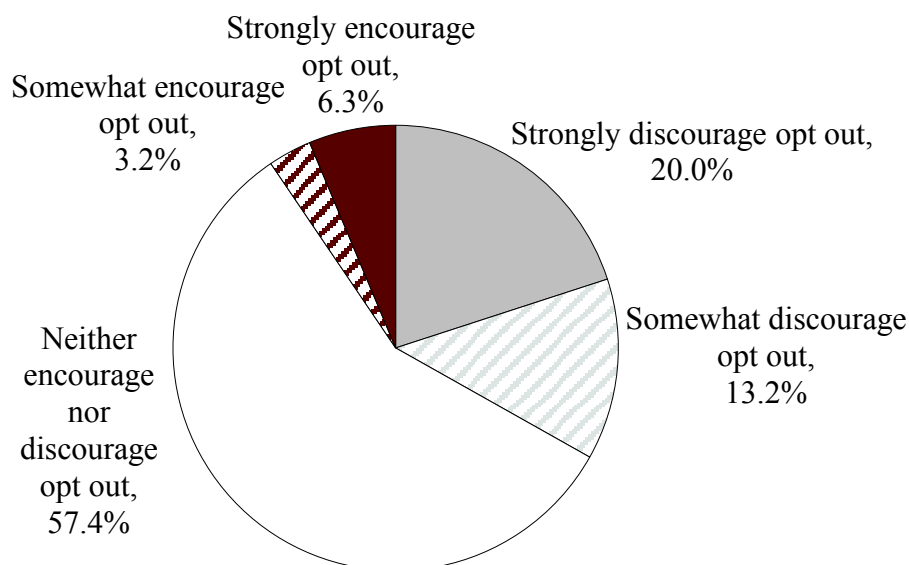
**Indicates statistical significance at the 10-percent level.*

Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

ii) Messaging to Employees

Given resistance to the Program, one concern is that employers will simply tell their employees to opt out. As Figure 3 shows, this concern may be unfounded. Despite the fact that nearly half of employers indicated they opposed the Program, just 9 percent indicated they would encourage their workers to opt out. Still, gaining employer support for the Program does have advantages. Among supporters, nearly 60 percent said they would discourage their employees from opting out, effectively encouraging participation. Among those opposed to the Program, this number was just 13 percent. Still, just 16 percent of those opposed said they would encourage their employees to opt out – the majority said they would neither encourage nor discourage opt out. Thus, even though those opposed had ideological opposition to the Program, it does not seem that opposition carries through to their message to employees.

Figure 3. *Employers' Message to Employees Regarding Opt Out for 199 Connecticut Employers without a Retirement Savings Plan*



Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

Although opposition to the Program did not translate to a negative message to employees, 48 percent of respondents indicated that, if faced with the choice of offering Connecticut's Program or a private sector alternative, they would choose the private sector alternative. Although it is unclear whether such a stated preference would change if actually faced with the task of finding a private sector plan, the finding suggests employer opposition to the Program may spur less use of it.

iii) Employers with Fewer than Five Employees

Finally, although employers with five or fewer employees would not be mandated to offer the State's Program under the current legislation, the State was interested in allowing them to offer it to their employees voluntarily. Surprisingly, 58 percent of these small employers indicated they would be interested in doing so, and another 15 percent indicated they would consider it but needed more information. Even among employers opposed to the Program, 38 percent said they would offer it to their employees as an option. This finding again suggests that very small employers do not see large impediments to offering this plan. The finding also highlights the fact that even among those opposed to the Program, many see its potential value to their employees.

Employers with a Retirement Savings Plan

For employers already offering a retirement savings plan, the first portion of the survey was dedicated to understanding the nature of the plan offered and the level of eligibility and participation in the plan by their employees. The issue of eligibility is particularly relevant, since workers ineligible for an employer provided plan would likely remain uncovered under the proposed Program. Employers were then asked whether they would take any action following introduction of the Program, for example by eliminating their private sector plan in favor of it.

i) Information Regarding Current Plan

Not surprisingly, the vast majority of surveyed employers with a plan offered a defined contribution plan. Of the 201 respondents who offered a plan, 85 percent offered only a defined contribution plan, 8 percent offered both a defined contribution plan and a defined benefit plan, and just 7 percent offered only a defined benefit plan. Once the type of plan was established, employers were asked about any requirements they have for eligibility in their plans. Table 4 shows that 82 percent of employers have an hour requirement for eligibility and 86 percent of employers have a tenure requirement. About 83 percent of workers are eligible, on average, at employers that have hours or tenure requirements, with the eligible share typically decreasing the more stringent the requirement. Because 92 percent of employers have at least one of the requirements for eligibility, across the entire population of employers (including those that have no hours or tenure requirements) a similar average of 84 percent of workers is eligible.²⁸ These figures imply that 16 percent of workers at employers offering a plan would remain uncovered under the proposed Program.

Table 4. *Hours and Tenure Requirements for Eligibility*

	Percentage of employers	Average share of workers eligible
Any hours requirement	81.6%	83.1%
20 or fewer hours	22.1	86.0
21 to 30 hours	25.8	81.6
31 to 42 hours	33.7	82.3
Any tenure requirement	85.8	83.2
3 months or less	25.4	88.1
6 to 9 months	13.2	81.2
1 year	39.6	81.6
Over 1 year	7.6	78.5

Note: Calculations exclude 11 employers answering “don’t know” to the hours eligibility question and 4 employers answering “don’t know” to the tenure eligibility question. Averages are weighted by the number of employers.

Source: Nielsen Inc., Survey of 400 Connecticut Employers, conducted August 18 – September 20, 2015.

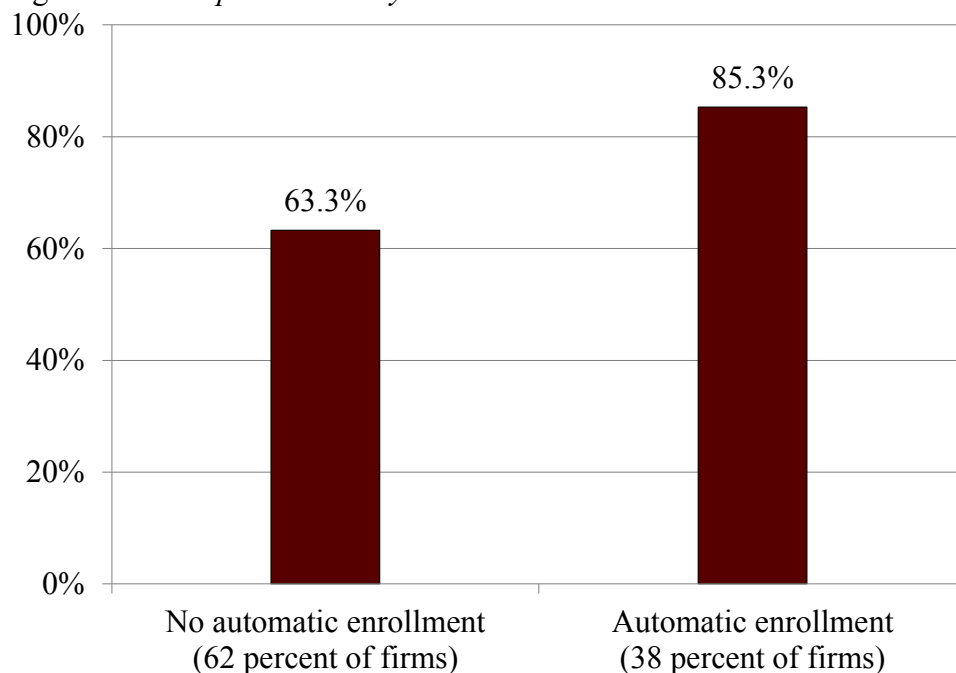
Employers that offered a defined contribution plan were next asked about the use of automatic enrollment and participation rates in their plans (participation in defined benefit plans is typically mandatory). These data were collected to supplement the employee survey, offering additional information on the tendency of Connecticut workers to participate in defined contribution plans and on the value of automatic enrollment.

Figure 4 shows participation rates separately for employers offering defined contribution plans with and without automatic enrollment. The results are consistent with the literature on participation in defined contribution plans; 72 percent of workers participate overall, with 63 percent of workers participating in employers without automatic enrollment compared to 85

²⁸ The number of workers eligible is similar, at approximately 80 percent, when weighted by number of employees at the employer instead of by the number of employers.

percent with it.²⁹ This difference in participation illustrates the importance of automatic enrollment to the Program’s success.

Figure 4. *Participation Rate by Auto-enrollment Status*



Note: Excludes 10 employers who answered “don’t know” to either the question regarding automatic enrollment or the question on the share of workers participating.

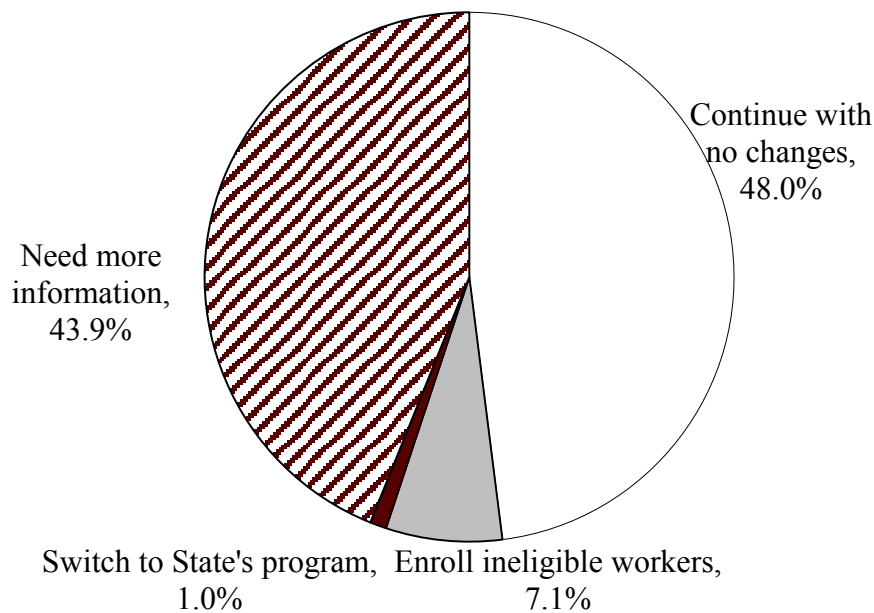
Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

ii) Interaction of Program with Existing Plans

A question of primary interest to the State is how the proposed Program would interact with employers’ existing plans. In particular, two scenarios seem possible: 1) employers cease offering their own plans and switch to the State’s Program; or 2) they enroll their ineligible workers in the State’s Program but maintain their current plan for eligible workers. The first scenario may be negatively perceived by employees who may lose plans that provide features they prefer (especially an employer match) or by plan providers, who would be losing business. On the other hand, the second possibility may be a positive development, allowing the 16 percent of workers at these employers who are ineligible for their employer’s plan to be covered by a State retirement savings plan. However, as Figure 5 shows, neither scenario seems likely to play out. Just 1 percent of respondents indicated they would cease offering their own plans and switch to the Program and just 7 percent said they would enroll their ineligible workers in the State plan.

Figure 5. *Response of Employers with Plan to Availability of State Program*

²⁹ For a comparison to the literature, see Madrian and Shea (2001) who found participation rates of 72 percent overall in 401(k) plans but 86 percent when automatic enrollment was introduced.



Notes: Excludes 3 employers who answered “don’t know” to the question on reaction to the State’s Program.
 Source: Nielsen Inc., Survey of 400 Connecticut Employers, Conducted August 18 – September 20, 2015.

Because many employers indicated they needed more information to make a decision about whether to use the State Program, they were also asked what aspects of the Program would influence their decision. A majority of employers mentioned administration costs for employers (63 percent), administration and investment fees for employees (60 percent), the amount of paperwork required (52 percent), or the investment choices offered (51 percent). These responses indicate that if the Program is inexpensive enough and easy enough to administer, more employers may consider using the Program than indicated in Figure 5. But as of now it seems unlikely the Program will be used by employers that already offer a plan.

Conclusion

For employers already offering a retirement savings plan, the survey points to little action when the State Program begins. Very few employers indicated they would enroll their ineligible workers and even fewer said they would completely switch to the State Program. While this means that employees are unlikely to lose plans they like and plan providers are unlikely to lose their business, it also means that the 16 percent of ineligible workers at these employers are unlikely to gain coverage through this Program.

Of course, the reaction of employers who do not already offer a plan is perhaps more important to the Program’s success. Getting these affected employers to support the State’s Program is likely an important part of putting it into place and ensuring that employees participate. The good news is that some employers seem to appreciate the Program’s simple setup and the fact that they would have little responsibility in administration. The bad news is that many employers are ideologically opposed to a State mandate for retirement savings – either on themselves or on employees – and worry that the Program cannot be administered at low cost by the State. Fortunately, the AARP survey suggests that when explicit attention is drawn to

employees being able to opt out and to the Program being mostly privately administered, then the majority of employers support the Program. In short, messaging is crucial. And, in any case, that ideological opposition does not seem to translate to action; even among oppositional employers very few indicated they would encourage their employees to opt out. Finally, an encouraging sign is that a significant share of employers with five or fewer employees indicated that they would offer the Program voluntarily.

Boston College Center for Retirement Research

Report on Design of Connecticut's Retirement Security Program

Appendices

- Appendix to Final Report on Market Analysis
http://www.osc.ct.gov/crsb/docs/12_02_15/Appendices%20to%20Final%20Report%20on%20Employee%20Market%20Analysis.pdf
- Appendix to Final Report on Employer Focus Group
http://www.osc.ct.gov/crsb/docs/12_02_15/Appendices%20to%20Final%20Report%20on%20Employer%20Focus%20Group.pdf
- Appendix to Final Report on Employer Phone Survey
http://www.osc.ct.gov/crsb/docs/12_02_15/Appendices%20to%20Final%20Report%20on%20Employer%20Phone%20Survey.pdf