

# HOW DOES 401(K) AUTO-ENROLLMENT RELATE TO THE EMPLOYER MATCH AND TOTAL COMPENSATION?

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## Introduction

Many workers eligible for 401(k) plans fail to participate and those who do participate often save too little. In response, policy experts have advocated auto-enrollment, in which employees are signed up at a default contribution rate unless they opt out. Over the past decade, a number of employers have adopted auto-enrollment, and these policies have clearly boosted participation. But the effect of auto-enrollment on workers' total 401(k) saving is unclear, because it depends partly on employer decisions about plan design and worker compensation. And these decisions could be affected by the increase in employers' 401(k) matching contributions generated by auto-enrollment. This *brief*, based on a recent paper, examines the relationship between auto-enrollment and employer decisions on matching contributions and overall compensation.<sup>1</sup>

The discussion proceeds as follows. The first section considers *why* and *how* auto-enrollment could affect these decisions. The second section discusses the data used in the analysis. The third section explores whether auto-enrollment is associated with employers' use of low match rates or low default employee contribution rates. The fourth section examines whether auto-enrollment is related to lower spend-

ing on non-401(k) compensation or higher spending on total compensation. The final section concludes that auto-enrollment is associated with relatively low match rates and default rates, but does not affect wages or total compensation. This finding suggests that firms with auto-enrollment may offset higher 401(k) participation costs by trimming their per-participant contributions.

## Auto Enrollment and Employer Compensation

Auto-enrollment emerged in the late 1990s and spread rapidly after it was encouraged by the Pension Protection Act of 2006.<sup>2</sup> In recent years, though, industry surveys suggest that its growth has moderated.<sup>3</sup> One barrier to more widespread adoption is the increase in the cost of employer matching contributions from increased 401(k) participation.<sup>4</sup> These costs naturally rise because, absent other changes in compensation policies, employers with auto-enrollment contribute to the 401(k) accounts of a larger percentage of their workforce.

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When faced with rising 401(k) costs, a company adopting auto-enrollment has four options. First, it could directly reduce its matching costs by lowering the match rate per dollar of employee contribution and/or by lowering the ceiling on the percent of contributions it will match. These changes would reduce the per-participant match, allowing the company to potentially accommodate an increase in participation without raising total 401(k) costs. Second, the firm could indirectly reduce its matching contributions by setting a default employee contribution rate below the level needed to obtain the maximum employer match. Participants could override the default and choose a higher saving rate but, in practice, participants tend to stay where they are put.<sup>5</sup> Third, the company could decide to offset higher match costs by reducing its employees' wages or other non-401(k) benefits. Finally, it could keep its compensation policies the same and simply allow total compensation costs to rise.

Few researchers have examined employers' compensation decisions under auto-enrollment. An initial study showed that firms with auto-enrollment have lower match rates than those without it. But these conclusions remain tentative due to significant data limitations. For example, the authors did not have actual match rate data for a number of companies so they estimated the rates based on the ratio of total employer contributions to total employee contributions.<sup>6</sup> The study summarized in this *brief* reexamines the issue using better and more recent data and more broadly analyzes the relationship between auto-enrollment and total compensation.

## Data

This study uses restricted data from the *National Compensation Survey* (NCS) conducted by the U.S. Bureau of Labor Statistics. The NCS is a large nationally representative survey that collects data from establishments on earnings, pensions and other benefits, and characteristics such as establishment size, region, and industry. Importantly for this study, the pension data include details on plan type, match structure, match rates, employer contributions, and automatic enrollment. As a result, there is no need to rely on estimates of match rates.

The analysis uses NCS data from 2010/2011. The sample is restricted to single-employer defined contribution plans with a match, specifically those designated as savings and thrift plans with a flat match rate

structure.<sup>7</sup> The final sample includes about 1,200 savings and thrift plans. To make the findings representative of employees, the analyses are weighted by workers rather than plans.

These data make it possible to examine employer behavior under auto-enrollment to assess which of the four options – or combination of options – employers choose in response to the higher cost pressures from increased 401(k) participation. The next two sections discuss the results, covering the options on specific 401(k) design parameters and the options involving broader compensation choices, respectively.

## Does Auto-Enrollment Relate to Match Rates or Default Contribution Rates?

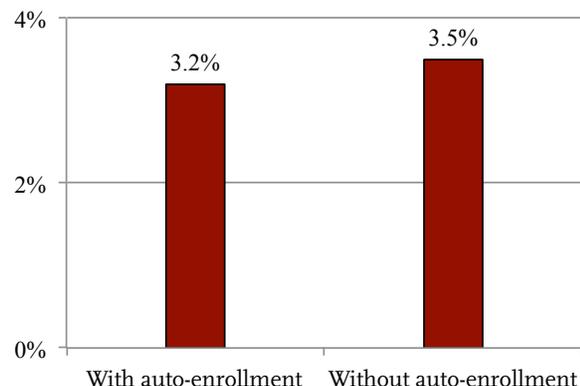
A preliminary step is to simply confirm whether the auto-enrollment plans in the sample have higher participation rates. Indeed, their participation rates are 10 percentage points higher than the plans without auto-enrollment – 77 percent vs. 67 percent.<sup>8</sup> All things equal, these higher rates will increase employers' total compensation costs. If employers seek to offset the higher match costs by adjusting the parameters of their 401(k) plan, they can directly reduce their match rate policy and/or set a low default employee contribution.

### *Match Rate Policy*

The first question examined is whether employers with auto-enrollment have lower maximum matches than employers without auto-enrollment. The maximum match rate is determined by the match rate – the percentage of each dollar of employee contributions that is matched – and the match ceiling – the limit on the percentage of contributions that are matched. If a worker contributes up to the match ceiling, they receive the maximum employer match. For example, if a 401(k) plan has a match rate of 50 cents per dollar up to a ceiling of 6 percent of pay, the maximum match rate is 3 percent of pay.

As shown in Figure 1 on the next page, workers covered by auto-enrollment have a maximum match rate of 3.2 percent of pay compared to 3.5 percent for those in plans without auto-enrollment, and this difference is statistically significant.

FIGURE 1. MAXIMUM MATCH RATE FOR WORKERS IN 401(k)s, WITH AND WITHOUT AUTO-ENROLLMENT, 2010-11



Source: Butrica and Karamcheva (2012).

While this finding shows that, on average, plans with auto-enrollment have lower match rates, this difference might be driven by factors other than the automatic enrollment provision. For example, a larger percentage of the workers covered by auto-enrollment in the sample have defined benefit plans in addition to 401(k)s. Since these workers have an additional source of pension coverage, their employers might offer less generous 401(k) matches. If so, defined benefit plan coverage could be driving the

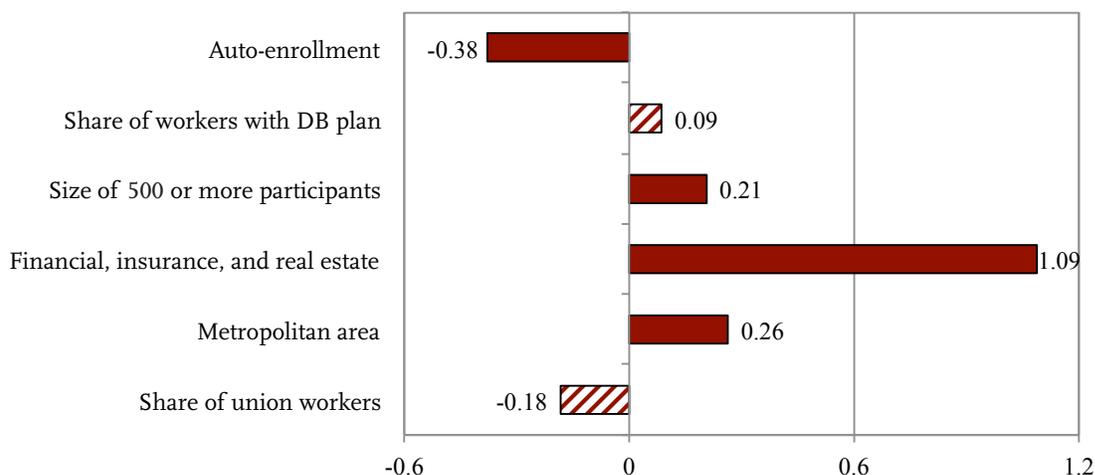
lower matches in auto-enrollment plans. To test this possibility, regression analysis was used with the maximum match rate as the dependent variable and auto-enrollment as the main independent variable, and including controls such as defined benefit coverage, industry size, type, and location, and degree of unionization.

The results of the regression support the descriptive finding – plans with auto-enrollment have a maximum match rate that is 0.38 percentage points lower than those without an automatic provision, even after controlling for other factors (see Figure 2).<sup>9</sup> The coefficient for defined benefit coverage turned out to be positive – rather than negative – but not statistically significant. With respect to industry type, firms in the financial, insurance, and real estate industries have significantly higher maximum match rates as do larger firms and those in metropolitan areas.

### Default Contribution Rates

The second question is whether employers with auto-enrollment choose low default employee contribution rates, which are very influential in determining *actual* employee contribution rates. For this analysis, it is not possible to compare firms with auto-enrollment to those without, because only firms with auto-enrollment have default contribution rates. Within the sample of workers with auto-enrollment plans, the key benchmark is to compare the default contri-

FIGURE 2. RELATIONSHIP BETWEEN SELECTED FACTORS AND THE MAXIMUM 401(k) MATCH RATE, 2010-11



Note: The solid bars indicate the coefficient is statistically significant at least at the 10-percent level.

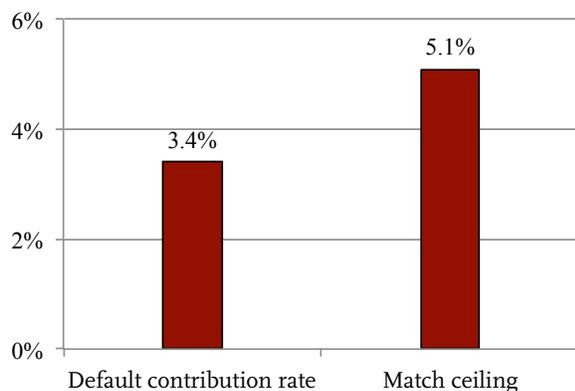
Source: Butrica and Karamcheva (2012).

bution rates to the contribution rate needed for the maximum employer match. If the default rates are significantly lower, it suggests that employers may be using low default rates to limit their own contributions. One point to keep in mind is that some plans with auto-enrollment also include a feature that automatically increases the default rate over time up to a certain limit. These “auto-escalation” plans are included in the sample.

On average, the default contribution rate for the auto-enrollment plans is 3.4 percent; it drops to 2.8 percent if plans with an auto-escalation feature are classified by their initial default rate rather than their full escalation default rate. To receive the maximum match in the sample plans, workers would need to contribute an average of 5.1 percent (see Figure 3). So the default rate is set well below the rate needed for the maximum match.

One other benchmark of potential interest here is the average employee contribution rate in all 401(k) plans, including those without auto-enrollment. These data were not available for the sample plans, but employer surveys typically find a median rate of 6.0 percent, again well above the default rate used by employers with auto-enrollment.<sup>10</sup> Overall, these results suggest that, in addition to offering lower maximum match rates than plans without auto-enrollment, employers with auto-enrollment may be using their default employee contribution rate to help offset the higher costs that come with higher participation rates.

FIGURE 3. DEFAULT EMPLOYEE CONTRIBUTION RATE COMPARED TO MATCH CEILING FOR WORKERS WITH AUTO-ENROLLMENT PLANS, 2010-11



Source: Butrica and Karamcheva (2012).

## Does Auto-Enrollment Affect Compensation Costs?

The third and fourth questions examined in this analysis concern employers’ actual compensation costs – where the rubber meets the road – rather than their 401(k) plan design decisions. Recall that rising 401(k) costs could prompt employers to reduce wages or other non-401(k) compensation. Or, alternatively, employers could decide to simply allow their total compensation costs to rise.

The compensation questions are examined using a series of regression equations with various measures of compensation as the dependent variables and auto-enrollment as the main independent variable. Again, controls are included for a variety of employer and workforce characteristics.

Table 1 reports the relationship between auto-enrollment and selected measures of compensation from different equations. The results of this exercise show no evidence that total compensation, 401(k) costs, non-401(k) costs, or wages differ between plans with and without auto-enrollment. These findings support the notion that employers with auto-enrollment may be aiming to keep their compensation costs roughly constant. While they end up spending more on workers who would not have participated without auto-enrollment, they spend less on workers who would have signed up anyway.

TABLE 1. RELATIONSHIP BETWEEN AUTO-ENROLLMENT AND SELECTED MEASURES OF EMPLOYER COMPENSATION COSTS, 2010-11

Dependent variable	Effect of auto-enrollment
Total costs	No effect
Total 401(k) costs	No effect
Non-401(k) costs	No effect
Wages	No effect

Note: None of the effects are statistically significant.

Source: Butrica and Karamcheva (2012).

## Conclusion

Employer decisions on 401(k) plan design have a significant influence on how much workers save for retirement – both directly through employer matching contributions and, for auto-enrollment plans, indirectly through setting the default employee contribution rate. Auto-enrollment policies are very successful at raising participation rates but may not boost workers' total retirement saving if firms aim to keep their 401(k) compensation costs at a constant level. While auto-enrollment will increase saving for workers who would not have participated without it, those who would have participated on their own may end up saving less due to relatively low employer match rates and low default contribution rates.

Auto-enrollment policies are still quite new and future changes in plan design – such as more widespread use of auto-escalation – could have more positive effects on retirement saving levels. Therefore, it will be important to continue monitoring auto-enrollment both on the employer and the worker side to more fully assess its long-term impact on retirement saving.

## Endnotes

- 1 Butrica and Karamcheva (2012).
- 2 Specific provisions designed to encourage the adoption of auto-enrollment included: 1) providing more attractive “safe harbor” rules for satisfying non-discrimination requirements, such as a lower required maximum employer match of 3.5 percent (compared to 4.0 percent for plans without auto-enrollment); 2) preempting state payroll-withholding laws; and 3) relieving employers of fiduciary liability for the performance of default investments.
- 3 Vanguard (2013).
- 4 A 2011 survey found that 73 percent of plans that responded that they were unlikely to adopt auto-enrollment (during that year) cited higher costs as a primary barrier (Hess and Xu, 2011).
- 5 See Madrian and Shea (2001) and Nessmith, Utkus, and Young (2007).
- 6 A contrasting study (VanDerhei 2010) found that firms adopting auto-enrollment had *higher* effective match rates than they did prior to instituting auto-enrollment, but this study focused on large 401(k) plan sponsors.
- 7 The NCS does not collect data on the plan features of “zero-match” plans and only includes detailed information on the match structure of plans with flat matches.
- 8 A regression analysis with these data also confirmed that auto-enrollment is associated with higher participation rates. For other studies supporting the link between auto-enrollment and higher participation, see Beshears et al. (2009), Choi et al. (2002, 2004), and Madrian and Shea (2001).
- 9 Separate regressions were run to determine whether the lower maximum match is due to a lower match rate or a lower match ceiling. These results show that a lower match rate is the driver. For full results, see Butrica and Karamcheva (2012).
- 10 Vanguard (2013).

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