

**How Automatic Enrollment Affects the Likelihood and Distribution of 401(k)  
Contributions: Evidence from a National Survey**

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While defined contribution (DC) plans have grown in popularity, participation rates, particularly among low-income workers, have declined over the past three decades (Karamcheva and Sanzenbacher 2010). Using various data sources, including household surveys, employer-provided plan data, and administrative records of earnings and contributions, previous studies have established that tax-deferred retirement participation, contributions, and accumulations are concentrated predominantly among higher-income individuals (Bassett, Fleming and Rodrigues 1998, Dworak-Fisher 2011, Dushi, Iams and Tamborini 2011). This, in turn, has raised concerns about growing retirement income inequality and stimulated debate about the best ways of boosting DC plan participation and contributions.

Previous research has demonstrated that switching from opt-in to opt-out enrollment is associated with significant increases in 401(k) plan participation in some firms, and is particularly effective for workers who otherwise would not participate (Choi et al. 2004, Madrian and Shea 2001). However, empirical findings so far have been derived from three main sources, each with disadvantages: 1) individual firm case studies that observe participants' behavior before and after automatic enrollment, but may not generalize to the larger population of workers; 2) proprietary plan-level data from plan sponsors that cover a substantial number of predominantly larger plans, but are not necessarily representative of all covered workers; and 3) firm-level data, such as the Form 5500 series or the National Compensation Survey, which are nationally representative but lack important demographic and socioeconomic information necessary to analyze individual participants' behavior.

This project aims to fill the gap in the literature by reexamining the determinants of 401(k) participation and contributions in the presence of automatic enrollment using data from a nationally representative household survey.

## **Data**

Our data come from the *Health and Retirement Study* (HRS), a large nationally representative survey of Americans age 51 and older that has been tracking households since 1992. The HRS provides valuable information on personal characteristics, employment, earnings, income, and financial assets. In 2006, the HRS began asking household respondents about automatic enrollment, making it the first nationally representative household survey to collect this information. These data allow us to examine the relationship between automatic

enrollment, plan participation, and contributions for a nationally representative sample of workers in their fifties and early sixties, controlling for their demographic and economic characteristics in both a cross-sectional and longitudinal framework. Our sample includes workers ages 55-69 who have positive earnings and are not self-employed.

## Preliminary Results

Overall, we find that DC participation rates among older workers is 92 percent for those with automatic enrollment and only 87 percent for those without automatic enrollment (see Table). The differences in participation rates are especially large for the lowest earners. For this analysis, we define participation as being in a DC plan. When instead we define participation as making contributions to a DC plan, the relationship between participation and automatic enrollment is very different. Overall, we find that participation rates among older workers are only 68 percent for those with automatic enrollment, but 80 percent for those without. While the lowest earners still participate at higher rates if they are automatically enrolled, all other workers participate at lower rates – suggesting that most workers who report being automatically enrolled either opt out or misreport their contributions.

Table. *Participation Rates and Median Contributions Among Older Workers*

	Participation Rate Based on Being in a DC Plan		Participation Rate Based on Making DC Contributions		Median Contribution Among Workers Making Contributions	
	Automatic Enrollment		Automatic Enrollment		Automatic Enrollment	
	With	Without	With	Without	With	Without
<b>Overall</b>	92.2	86.8	67.6	79.9	\$3,829	\$3,670
<b><u>Earnings Quintile</u></b>						
<b>Lowest</b>	75.9	53.6	45.7	42.5	\$702	\$807
<b>Second</b>	84.6	75.2	54.0	64.5	\$1,135	\$1,200
<b>Third</b>	91.3	84.5	60.1	78.6	\$2,028	\$2,232
<b>Fourth</b>	96.6	96.5	75.8	89.5	\$4,748	\$4,457
<b>Highest</b>	99.1	96.9	81.9	93.2	\$8,848	\$11,272

*Notes:* Sample includes workers ages 55-69 who are not self-employed and who report positive wages  
*Source:* Authors' calculations from 2006-2010 waves of the *Health and Retirement Study*.

Among older workers who contribute to a DC plan, median contribution amounts by automatic enrollment are very similar overall and for most earnings levels. The only significant difference appears to be among the highest earners whose median contribution amount is only \$8,848 for those with auto-enrollment compared with \$11,272 for those without.

## **Future Work**

In future work, we will supplement the public HRS data with the restricted, detailed administrative earnings data, which includes respondents' lifetime earnings and actual 401(k) contributions reported on their W-2 forms. These data are considered to be more reliable than self-reports. We will then examine how automatic enrollment affects workers' likelihood of plan participation and their level of contributions, controlling for personal characteristics (such as age, education, race, health, income, and assets), various life events (such as buying a house, having a child, paying for college, experiencing a health shock, or becoming divorced or widowed), and plan characteristics (such as employer match), and we will test whether the presence of automatic enrollment changes these relationships.

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