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## **POLICY BRIEF: THE INTERACTION BETWEEN IRAS AND 401(K) PLANS IN SAVERS' PORTFOLIOS**

William Gale, Aaron Krupkin, and Shanthi Ramnath

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*The opinions represent those of the authors and are not those of the US Department of the Treasury nor any of the institutions with which they are affiliated. The authors thank Alex Gelber for helpful comments.*

## INTRODUCTION

Policy makers have long sought to boost households' preparation for retirement through a variety of tax incentives, including Individual Retirement Accounts (IRAs), 401(k) plans, and other options. The impact of such policies, studied individually, on private and national saving, has led to an extensive literature.<sup>1</sup>

There is little evidence, however, on how the policies interact with each other. To what extent are the retirement programs substitutes or complements? Does eligibility or participation in one such program boost or reduce participation in other similar programs? The programs might logically be thought to be substitutes, since they provide a similar good – a tax incentive for retirement saving. The law essentially treats them as substitutes since the contribution limit of traditional IRAs is lowered by access to an employer-sponsored plan. But it would not be unreasonable, *a priori*, to consider that they might instead be complements – that is, that eligibility or saving in one form could “crowd in” saving in other forms. This could occur, for example, if eligibility for one form of saving made people more aware of the need to save for retirement and they subsequently responded by saving more in several tax-preferred vehicles.

These issues are of relevance to policy makers because of the perennial focus on ways to raise retirement saving and because of the budgetary costs associated with tax expenditures for saving, with current estimates exceeding \$100 billion per year.<sup>2</sup> To the extent that the different tax incentive programs are complements, exposing a worker to one program could raise participation in several programs. To the extent that the programs are substitutes, expansion of one program might cannibalize contributions to the other.

In a recent paper, we examine the interaction between IRAs and 401(k) plans in savers' portfolios – and in particular, the question of whether the programs act as substitutes or complements – using administrative tax data.<sup>3</sup>

A well-recognized problem in the earlier literature on saving incentives is that needs and tastes for saving are heterogeneous across the population. Households with strong tastes or needs for saving may be more likely to save in many forms than those with weak tastes or needs for saving. Not controlling for this heterogeneity will bias analysis toward finding that different forms of retirement saving are complements even if they are not. To address this problem, we

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<sup>1</sup> See Benjamin (2003); Bernheim (2002); Chetty et al. (2014); Engen, Gale, and Scholz (1996); Engen and Gale (2000); Hubbard and Skinner (1996); Poterba, Venti, and Wise (1996).

<sup>2</sup> The U.S. Department of the Treasury (2016) calculates tax expenditures for retirement programs in two ways. The first estimates current-year revenue losses from all existing accounts. The second examines the present value of revenue loss from all new contributions in a given year. Both procedures yield annual revenue loss estimates above \$100 billion in recent years.

<sup>3</sup> Gale, Krupkin, and Ramnath (2017).

use two different control groups in our analysis. One control group plausibly has stronger average needs or tastes for saving than the treatment group, while the other control group plausibly has weaker average needs or tastes for saving than the treatment group.

Our results, however, are not sensitive to which control group is employed. In comparisons of our treatment group with either control group, we find little or no complementarity or substitutability between 401(k) contributions and IRA contributions. As a result, contributions to the two forms of saving appear to be independent.

## METHODOLOGY AND RESULTS

We use administrative tax data that include personal income tax returns, as well as third-party reported information returns. Our data cover the US population for tax years 1999 through 2014.<sup>4</sup> We use a 0.1 percent random sample of individuals ages 18 through 59. For comparability with previous literature, we aim to focus on individuals who are in the first full year of a job.<sup>5</sup> Because the tax data do not explicitly report job changes, we create a proxy for people in their first year of a job.<sup>6</sup> There are two observations for each individual in the dataset, one meant to represent their last year on the previous job and the other meant to represent their first full year on the new job.

Our treatment group consists of individuals who contributed to a 401(k) plan in their first full year on the job (the second year of their observation), but did not contribute to a 401(k) in the first year of their observation (n=13,393). We define two different control groups. Control group 1 consists of individuals who contributed to a 401(k) in both years (n=25,349). Control group 2 consists of individuals who did not contribute to a 401(k) in either year (n=121,212). Thus, the overall sample with control group 1 has 38,742 observations; the overall sample with control group 2 has 134,605 observations.<sup>7</sup>

For comparability with other research, we focus on how 401(k) activity, which is influenced by employer choices, affects individuals' choices regarding individual retirement accounts. We thus employ regression analysis to examine how 401(k) contributions affect (a) the probability of having an IRA (i.e., a positive balance in an IRA)<sup>8</sup>, (b) the probability of contributing to an IRA in the current year, (c) the amount contributed to an IRA in the current year, (d) the IRA balance, and (e) the change in the IRA balance from one year to the next.

Whether a worker contributes to a 401(k) depends on whether the worker is eligible for a plan and whether the worker makes a contribution given eligibility (either by active choice or via passive enrollment). All workers in the sample are in their first full year on a new job in the second year they are observed. Eligibility patterns likely differ across the groups, but differences

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<sup>4</sup> We exclude observations for tax year 2001 due to missing deferred compensation data.

<sup>5</sup> Gelber (2011).

<sup>6</sup> We only include individuals who had two jobs in one year (identified through Employer Identification Numbers, or EINs) and then one job (one EIN) in the following year, where the second-year EIN was one of the two first-year EINs. This is intended to capture workers who changed jobs in one year and stayed in that job through the end of the following year.

<sup>7</sup> These figures refer to the number of observations in each group, not the number of individuals. Each individual has two observations, subject to data availability, and it is possible that individuals show up multiple times throughout the dataset if they switch jobs more than once.

<sup>8</sup> Individuals are recorded as having an IRA if their IRA has positive fair market value as reported on Form 5498. This form is issued to the IRS each year regardless of whether the account owner made a contribution that year.

in 401(k) contribution behavior are likely to reflect – to at least some extent – workers' heterogeneous needs and tastes for saving. For example, it is plausible that members of control group 1 – who contribute to a 401(k) plan in both years of the sample – have higher needs or tastes for saving on average than do the treatment group members – who do not contribute in the first year but do contribute in the second year. Likewise, it is plausible that treatment group members have, on average, higher needs or tastes for saving than do the members of control group 2, who do not contribute to a 401(k) plan in either year observed. Indeed, our results indicate that members of control group 1 are more likely to have an IRA or contribute to an IRA than members of the treatment group, while members of control group 2 are less likely to have or contribute to an IRA than the members of the treatment group. This is consistent with the view in the saving incentive literature that groups with higher needs or tastes for saving tend to save more in all forms of saving.

Our central results illustrate, however, that changes in 401(k) contribution status do not induce changes in IRA behavior. Using two different control groups that have stronger and weaker tastes for saving, respectively, than the treatment group, we show that the results are not sensitive to the choice of control group.

For example, the likelihood of owning an IRA did not rise, and in fact fell significantly, for the treatment group relative to control group 1 in the second period relative to the first. Relative to control group 2, the likelihood of the treatment group owning an IRA in the second period relative to the first also fell, but the estimate was not statistically significant. These results do not suggest any complementarity between 401(k)s and IRAs.

In addition, in regressions where the dependent variable is an indicator for whether an individual contributes to an IRA, the estimated effect is small in absolute value – well below 1 percentage point – and it is negative and insignificant when control group 1 is used. The relevant coefficient is negative and significant when control group 2 is employed. Again, there is no evidence that 401(k)s and IRAs are complements.

Further, the regressions with IRA contributions as the dependent variable show virtually no impact of 401(k) contribution behavior on the level of IRA contributions. The point estimates suggest that 401(k) participation reduces annual IRA contributions, but neither result is precisely estimated. In a more formal analysis of IRA contribution behavior, we use two-limit Tobit models to account for IRA contributions being constrained between zero and a contribution limit. In no case was the result both positive and significant.

Similarly, neither of the regressions where the dependent variable is the IRA balance is consistent with 401(k) contributions crowding-in larger IRA balances.

We also report regression results where the dependent variable is the change in growth of logged IRA balances between periods for each individual. Under both control groups, we find a

small negative relationship between 401(k) contribution behavior and the change in IRA balances that is not statistically significant. Similar to our earlier findings, neither result provides evidence of a crowd-in effect of 401(k) contributions on IRAs.

## CONCLUSION

We examine the relationship between changes in households' 401(k) contribution status and IRA status. If the two savings vehicles were complements, policy makers would obtain a bit of a "free lunch," as they would be able to spur retirement saving through both types of plans merely by encouraging the expansion of one of them. Previous research supports this position.

However, since 401(k)s and IRAs provide similar benefits – tax savings associated with saving for retirement – it would not be surprising if households viewed them as substitutes. This situation would occur if people who contributed to one type of account were also less likely to contribute the other type of account, other things equal.

Our examination of the data suggests an intermediate outcome, as we find virtually no relation between a households' propensity to start contributing to a 401(k) and its propensity to start or continue contributing to an IRA. Our method obtains similar results when using two different control groups: one with stronger saving motives than the treatment group, and one with weaker saving motives than the treatment group. By showing that our results are not sensitive to the presumed heterogeneity in needs and tastes for saving across households, we provide new evidence that policy makers should not expect higher retirement saving in one form to "crowd in" retirement saving in another form.

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