

Changing the required minimum distribution age for retirement accounts

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The Required Minimum Distribution Rule (RMD) has long required individuals to take out a portion of their tax-qualified retirement accounts from age 70.5 onwards. The rationale for the RMD policy was that contributions and investment earnings in both tax-qualified 401(k) and IRA accounts were held as tax-exempt until the money was paid out. This required payout was chosen so that the sum of the retiree's annual payouts starting at age 70.5 would be expected to exhaust her 401(k) balance by her life expectancy. Any retiree withdrawing too little compared to the rule would need to pay a 50% excise tax on the amount under-withdrawn. Of course, if the retiree died before drawing down her entire account, the remaining assets would still pass to her heirs and be taxed over their (longer) remaining years. Particularly when heirs are much younger than the decedent, this could result in much lower taxes collected than otherwise.¹ Therefore the RMD rule was implemented to get retirement account savers to pay income tax on their pre-tax contributions and investment earnings before their deaths.²

The SECURE Act of 2019 recently extended the age for required minimum distributions to age 72; some policymakers seek to raise it even later, to age 75, if not eliminate it. How Americans will respond to the deferral, or indeed the abolition of the RMD, is the subject of this paper. To investigate and quantify potential outcomes, we develop a realistically calibrated lifecycle model with optimal consumption, investment, work hours, and retirement decisions for households with different demographic characteristics (e.g., education, sex, health status). The model also permits us to evaluate the tax implications of alternative RMD rules. Our research, therefore,

¹ The 2019 SECURE Act required that inherited retirement accounts from nonspouses be paid out over a maximum of 10 years, resulting in higher taxable distributions and thus higher tax payments than otherwise.

² Roth account holders are not subject to RMD rules, though their beneficiaries are. We do not consider Roth accounts in this paper.

This material summarizes work reported in detail in our new Working Paper "Would Raising the Required Minimum Distribution Age for Retirement Accounts Enhance Old-Age Security?" by Vanya Horneff, Raimond Maurer, and Olivia S. Mitchell

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contributes to the literature on household finance as well as to the policy debate, by analyzing the implications of delaying the Required Minimum Distribution Rules in tax-qualified retirement plans.

We show that delaying the RMD age has little impact during the worklife, including on savings and asset allocation in and outside tax-qualified retirement accounts; also, Social Security claiming behavior is almost unaffected. During the retirement period, however, the impact of the policy change depends on whether older people have a bequest motive or not. For people lacking a bequest motive, the current RMD rules are not particularly restrictive, as optimal expected withdrawals from 401(k) plans are substantially higher than the RMD pattern required by the IRS. For them, withdrawal behavior at a later RMD, or even with its abolition, would change little. By contrast, for households with a bequest motive, the age-70.5 RMD rule was quite restrictive, since they would have preferred to make fewer withdrawals than required and use the 401(k) plans as a tool to transfer financial wealth to the next generation. A higher RMD age moves taxes paid by the wealthy to older ages, particularly for those with a bequest motive. Yet even if the RMD rule were abandoned, tax revenues would change little overall.

An overview of the model

To examine this problem in detail, we have developed a realistically calibrated discrete time lifecycle model (using U.S. data) for a utility-maximizing investor with endogenous work hours, retirement behavior, consumption/saving, and portfolio choice including risky stocks and bonds held in and outside a tax-deferred retirement plan, building on our previous research. The model embeds several exogenous background risks

(labor income, capital market, out-of-pocket medical expenditures), incorporates realistic rules on income taxes, and includes regulations regarding Social Security benefit claiming options. Just as importantly, the model also integrates real-world rules characterizing tax-qualified 401(k) accounts including pre-tax contributions, employer matches, penalty taxes on early withdrawals, and Required Minimum Distribution withdrawal amounts. Results using calibrated baseline parameters agree closely with observed U.S. household consumption, saving, and Social Security claiming ages. Specifically, our model generates a large peak at the earliest claiming age of 62, along with a second peak at the (system-defined) Full Retirement Age. Our model also matches the current distribution of 401(k) wealth rather nicely. We then use this realistically calibrated life cycle approach to generate optimal consumption, retirement patterns and portfolio allocations in a baseline case, after which we compare outcomes across different RMD scenarios.

A summary of results

When we solve the calibrated lifecycle models for households with and without a bequest motive, we can compare outcomes for four different RMD scenarios. The first assumes the original RMD start age of 70.5, the second has a start age of 72, and the third raises it to age 75. A last setting eliminates the RMD altogether (w/o RMD). Table 1 shows how expected outcomes change for claiming ages, work hours, 401(k) assets, assets in non-qualified accounts, consumption, and tax payments of households over the life cycle. Column A (on the left) represents outcomes for workers having no bequest motive, and Column B (on the right) for those with a bequest motive.

Table 1. Model-generated average outcomes: claiming ages, hours worked, 401(k) and other assets, consumption, and tax payments

	Column A: w/o Bequest				Column B: with Bequest			
	RMD start age 70	RMD start age 72	RMD start age 75	w/o RMD	RMD start age 70	RMD start age 72	RMD start age 75	w/o RMD
1. Average Claiming Age								
Age 62-70	64.9	64.9	64.9	64.9	65.3	65.3	65.4	65.3
2. Average Work Hours per Week								
Age 25-61	33.9	33.9	33.9	33.9	36.8	36.8	36.9	36.7
3. Average 401(k) Assets in \$000								
Age 25-61	101.3	101.3	100.3	102.6	131.7	132.3	131.1	133.1
Age 62-100	55.8	55.0	56.0	56.3	88.7	89.6	89.3	93.2
4. Average Non-Qualified Assets in \$000								
Age 25-61	7.2	7.2	7.9	7.1	7.5	7.3	7.8	7.2
Age 62-100	10.0	10.1	9.8	9.9	15.3	15.1	15.1	12.2
5. Average Consumption in \$000								
Age 25-61	26.2	26.2	26.1	26.2	26.7	26.7	26.7	26.7
Age 62-100	23.0	23.0	23.0	23.0	24.7	24.7	24.7	24.7

Notes: We report average outcomes derived from 100,000 simulated lifecycles based on optimal feedback controls from the life cycle model using income profile for six subgroups. Results for the entire population use education weights for females (males): 61% +Coll; 28% HS; 11% <HS (57% +Coll; 30% HS; 13%<HS). Parameters in the baseline calibration are: risk aversion $\rho = 5$; time preference $\beta = 0.96$; leisure preference $\alpha = 1.2$; endogenous retirement age 62-70. Results with a bequest motive assume $b = 2$. Social Security benefits are based on average permanent income and the bend points in place in 2015. The risk premium for stocks returns is 5% and return volatility 18%; the risk free rate in the baseline case is 1%. Source: Authors' calculations

Here we see in Column A that, for households without a bequest motive, deferring the RMD start age to 72 or even 75, or even eliminating it, has little effect on expected lifecycle patterns. That is, the average claiming age is about age 64.9, work hours average 33.9 per week, and average yearly consumption stands at \$26.2K during the worklife (ages 25-61) and at \$23K in retirement (ages 62-100). Additionally, annual average tax payments are virtually the same across RMD scenarios, as they amount to \$8.4K during the worklife (ages 25-61) and \$2.2K in retirement (ages 62-100). Asset accumulation changes only slightly: workers and retirees have on average \$1.3K more in their 401(k) accounts with no RMD rules, versus the other two cases with RMDs. No major changes are identified for assets held in non-qualified accounts.

More substantive changes are evident when people with bequest motives confront the same three alternative RMD scenarios. Comparing Columns A and B for all three RMD settings, we find that those with a bequest motive claim Social Security about 0.4 years later, work 3 hours more per week, accumulate about \$30K more in 401(k) plans, and hold \$5K more in non-qualified plans. The fact that these individuals work more and accumulate more assets indicates that they not only wish to bequeath more to their heirs, but they also consume more in retirement and pay higher taxes than do people having no bequest motive.

Moreover, a comparison of results across the three RMD settings in Column B shows that claiming ages, work hours, consumption, and tax payments are virtually unchanged across the scenarios, but they do generate

remarkable differences in retiree wealth patterns. For instance, retirees who must comply with age 72 RMD rules instead of age 70.5 hold \$1K more, on average, in their 401(k) accounts. Abolishing the RMD rules boosts average 401(k) assets to \$99.3K, \$3.5K above those seen in the earliest RMD age scenario. At the same time, peoples' investments in non-qualified accounts fall from \$15.3K to \$12.2K.

How restrictive do the RMD rules turn out to be?

Next, we investigate whether, and for whom, the RMD age serves as a binding constraint for households' optimal withdrawal behavior; our working paper provides full detail, while here we simply summarize results.

For those who do not wish to leave a bequest, expected optimal withdrawals are significantly above the required minimum withdrawal levels at all ages. Also, as the individual spends from her account assets, her 401(k) value falls with age. Nevertheless, the regulatory lower limit on withdrawals due to the RMD is not restrictive for this group at all. That is, these individuals use their assets to generate constant lifetime consumption streams, and the best way to achieve this goal is to withdraw enough to meet the goal. Any remaining assets transferred to the next generation is random, depending on whether the retirees die early or late.

By contrast, for persons having a bequest motive, a significantly different picture emerges. Here, expected optimal withdrawals are consistently larger than the required minimum withdrawals under both the RMD 70.5 and 72 rules. Yet the difference between the optimal withdrawal path and the RMD paths are substantially smaller than without a bequest motive, since the retiree seeks to use her 401(k) account as a tool to pass on an inheritance. At age 100, the amount withdrawn is zero, although she still has assets in her 401(k) plan and must make a minimal withdrawal. This is because, in the last

period of life, the individual bequeaths her remaining assets and need not pay any RMD penalty tax in death. These conclusions are reinforced if the RMD were to be completely abolished. Thus some retirees seeking to use their 40(k) accounts to transfer financial assets to the next generation would find any RMD age restrictive, forcing them to withdraw more from their 401(k) accounts than would be preferred.

We also calculate the probabilities that an individual behaving according to the optimal lifecycle model will pay the 50% penalty tax because of withdrawing less than the RMD amount. Results appear in Table 2 for people at three different educational, and hence earnings, levels. Without a bequest motive (Column A), the probabilities are low for all three groups. For example, the likelihood of paying a penalty tax for retirees with a College education amounts to only 2.7% under the earliest RMD age, and just 2.5% for the age 72 RMD rule. Even for people with less education, the probabilities remain low. In other words, households lacking a bequest motive generally wish to avoid the 50% penalty, so they take at least as much as the RMD rules require. The reason that penalty taxes occur at all is somewhat coincidental. For example, in the event of unusually (randomly) high stock returns, the 401(k) asset value and, therefore, the RMD amount that must be withdrawn can rise sharply. Nevertheless, the retiree may not wish to withdraw her full RMD, to protect her retirement assets from being depleted too fast in the event of a subsequent decline in share prices. For households with a bequest motive (Column B), these probabilities are higher and vary between 6% and 12% depending on the subgroup. Accordingly, there may be situations in which these households consciously accept the penalty tax in order to maintain their bequest in the account. Yet the values are still quite low: in most situations, even households with a bequest motive avoid paying the penalty tax by making withdrawals at least in the amount of the RMD.

Table 2. Probability (%) of paying a penalty tax for withdrawals falling below the RMD

	Column A w/o Bequest			Column B with Bequest		
	RMD 70	RMD 72	RMD 75	RMD 70	RMD 72	RMD 75
<hs	2.8	2.5	2.1	12.5	11.8	10.8
hs	4.2	3.9	3.5	10.8	10.2	9.2
coll+	2.7	2.5	2.1	6.8	6.5	6.1
total	3.2	2.9	2.5	8.6	8.2	7.6


Notes: This table reports the probability (%) that an individual at age 25 will pay a penalty tax because of lower withdrawals than those required by the RMD rules (conditional on survival). Results are based on 100,000 simulated optimal lifecycles for three different education groups. For other parameters and calibrations, see Table 1. Source: Authors' calculations.

Conclusions

The objective of our research project was to examine how the Required Minimum Distribution age affect retirees' patterns of saving, Social Security claiming, and decumulation from their tax-qualified retirement accounts. Until recently, the RMD had to be computed such that the sum of the retiree's annual payouts starting at age 70.5 was expected to exhaust her 401(k) balance by her life expectancy. The SECURE Act, passed in 2019, raised the age for RMDs for tax-qualified plans from 70.5 to 72, and there are proposals to delay the RMD further or even abolish it completely. For instance in October of 2020, House Ways and Means Committee Chairman Richard Neal (D-MA) and Ranking Member Kevin Brady (R-TX) introduced the "Securing a Strong Retirement Act of 2020," boosting the RMD age to 75. The previous year, key members of the Senate Finance Committee, Sens Rob Portman (R-Ohio) and Ben Cardin (D-Md.) offered the Retirement Security and Savings Act of 2019," which would have eliminated the RMD age for retirees having retirement assets worth less than \$100,000 in aggregate.³ This latter approach, dubbed a "progressive RMD approach," would clearly mitigate the revenue impacts estimated by the Joint Committee on Taxation.

We explore the possible impacts of RMD changes using a calibrated lifecycle consumption and portfolio choice framework embodying realistic institutional considerations to model. We show that delaying the RMD age would have little impact during peoples' worklives, including on savings and asset allocation in and outside tax-qualified retirement accounts. Additionally, Social Security claiming behavior is almost unaffected. By contrast, we find larger changes during the retirement period, depending on whether the older person has a bequest motive or not. For those lacking a bequest motive, even abandoning the RMD rules would change little. By contrast, for households having a bequest motive, the former age-70.5 RMD rule was quite restrictive, since such a household would prefer to make fewer withdrawals than required and use the 401(k) plans as a tool to transfer financial wealth to the next generation. Yet even for households with a bequest motive, if the RMD rule were to be abandoned, tax payments would be deferred but not dramatically changed.

³ S.1431 - Retirement Security and Savings Act of 2019, 116th Congress (2019-2020). See <https://www.congress.gov/bill/116th-congress/senate-bill/1431/text#toc-HF93525E46F14165887066E18B94649A>



In sum, we show that peoples' behavior under alternative RMD rules depend heavily on the extent to which they desire to leave money to their heirs. This implies that financial institutions such as insurance companies and mutual funds offering retirement funds and investment advice would benefit from ascertaining their clients' bequest intentions before advising them about RMD strategies. Our conclusions will also interest professional

financial planners guiding clients as they make retirement payout choices. Moreover, our model does not endogenize the impact of changes in RMD rules on the labor, financial, and goods markets. Nevertheless, since individual behaviors transfer to the macroeconomic level, our results *mutatis mutandis* indicate the direction of how changing RMD rules could affect the federal budget.

About the authors

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