Plan design during challenging times:

7 Actionable Insights from Behavioral Finance

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Introduction

These are extremely challenging times for employees and employers. According to Voya surveys of plan participants, the percentage of participants with a positive retirement sentiment fell by 13 points in March, from 74% to 61%.[1] Surveys of companies from the spring reflected a similar trendline, as approximately 20% of plans with a match said they were considering eliminating or suspending their match to cut costs.[2] While the outlook has since improved—75% of participants reported a positive retirement sentiment in August[3] —the crisis may have a lasting impact on retirement outcomes due to increased withdrawals during the Covid-19 crisis.

Given these difficult economic conditions, it's important to provide workers with the flexibility to withdraw savings. (For example, the CARES Act, enacted in the aftermath of the Covid-19 pandemic, eliminated early withdrawal penalties and increased the loan amounts for workers dealing with a Covid-related hardship.[4]) However, this additional flexibility raises a larger issue for plan sponsors: **if we make it easy to draw down savings, how can we make it even easier to accumulate savings once the hardship is over?** It's an especially crucial question given that policy makers also made it easier for workers to pull out savings during the Great Recession of 2008-2009. If workers pull money out of their savings every decade or so, this will make it much harder to accumulate a sufficient amount. Participants might need money now, but withdrawing funds means they'll need to save even more for a successful retirement.

This whitepaper proposes changes to plan design that can boost savings once the economy recovers. It's a subject that's especially important and timely given current economic challenges. But, if these changes cannot be implemented now, in the midst of a recession, they can be re-evaluated as soon as possible.

This whitepaper proposes changes to plan design that can boost savings once the economy recovers.

[1] Voya internal data, March 2020
[2] 2020 PSCA Survey https://www.psca.org/press-room/CARES_snapshot
[3] Voya internal data, August 2020
[4] Benartzi, Shlomo. "How to tap a retirement account in a crisis," *The Wall Street Journal*. May 2, 2020.

Starting to save

In December 2019, right as the Covid-19 pandemic began spreading widely in Wuhan, China, Congress passed the SECURE Act. The legislation was designed to boost retirement savings, and offers plan sponsors additional tools to help participants. In this section, we'll describe how provisions in the SECURE Act can be combined with behavioral insights to improve retirement outcomes. Although the pandemic and ensuing recession have largely led people to neglect the SECURE Act, it does contain important provisions that can be used to help workers save more, at least after the economy returns to full strength.

Let's start with auto-enrollment, a proven idea that can be used to reduce racial and demographic inequalities exacerbated by the pandemic. Research on auto-enrollment finds that it can dramatically increase participation. Brigitte Madrian and Dennis Shea studied the impact of auto-enrollment at a large, Fortune 500 company with a match of 50% on the first 6% of pay. Before the nudge was implemented, the participation rate in the plan was 37.4% for a new cohort of workers. However, auto-enrollment boosted participation rates to 85.9% for a follow-up cohort of eligible workers.[5] Auto-enrollment even led to higher participation rates among new employees than among employees with more than twenty years of tenure.[6]

Research suggests that auto-enrollment seems to be even more beneficial for women and minorities, equalizing participation across demographic groups.

What's more, research suggests that auto-enrollment seems to be even more beneficial for women and minorities, equalizing participation across demographic groups and dramatically reducing longstanding racial and gender gaps in enrollment. While Madrian and Shea found that auto-enrollment doubled the participation rates of men, it increased the participation rates of women by a factor of nearly 2.5, from 35 to 86%. The results were even more dramatic for African Americans and Hispanics, as auto-enrollment nearly quadrupled the participation rates of both groups. (African-American participation increased from 21.7% to 81.3%, while Hispanic participation increased from 19% to 75%.)[7]

[5, 6, 7] Madrian, Brigitte C., and Dennis F. Shea. "The power of suggestion: Inertia in 401 (k) participation and savings behavior." *The Quarterly Journal of Economics* 116.4 (2001): 1149-1187.

Implement a holistic plan to enroll and re-enroll all employees

Automatic Enrollment

	Pre-auto-enrollment	Auto-enrollment
Overall Race/Ethnicity	37.4%	85.9%
White	42.7	88.2
Black	21.7	81.3
Hispanic	19.0	75.1
Other	46.2	85.2

The SECURE Act encourages plan sponsors to broaden the use of auto-enrollment, as it requires employers to give certain part-time employees better access to retirement plans. Given recent shifts in the labor force, including the growth of gig and part-time workers, this provision can ensure that more workers benefit from auto-enrollment, and can participate in their company's retirement plan. It can also increase access to retirement plans among African Americans, as they are significantly more likely to be employed as part-time workers.[8]

But companies shouldn't stop with part-time employees. **Given the effectiveness of auto-enrollment, we should apply the nudge to all employees using re-enrollment, and not just new hires.** In the United Kingdom, for instance, plan providers are required to automatically re-enroll workers every three years, including those who have opted out or stopped saving.[9] While workers can quickly opt-out again if they so desire, it's important to offer people repeated opportunities to make saving as easy as possible. A recurring re-enrollment process can ensure that, after the pandemic is over, many more employees, regardless of race, will begin saving and be on the path to a successful retirement.

[8] https://www.bls.gov/cps/cpsaat08.htm
[9] https://www.nestpensions.org.uk/schemeweb/helpcentre/workers/enrolling-workers/how-can-i-enrol-workers.html

Saving more

While enrolling employees in a plan is a crucial first step, we also have to ensure they are saving enough for a successful retirement. Unfortunately for many plan participants, that's often not the case. For example, when employees are automatically enrolled into a 401(k) plan, nearly forty percent are enrolled with a default savings rate of three percent or less.[10] That's well below the savings rate that most employees will need to achieve financial security in retirement.[11]

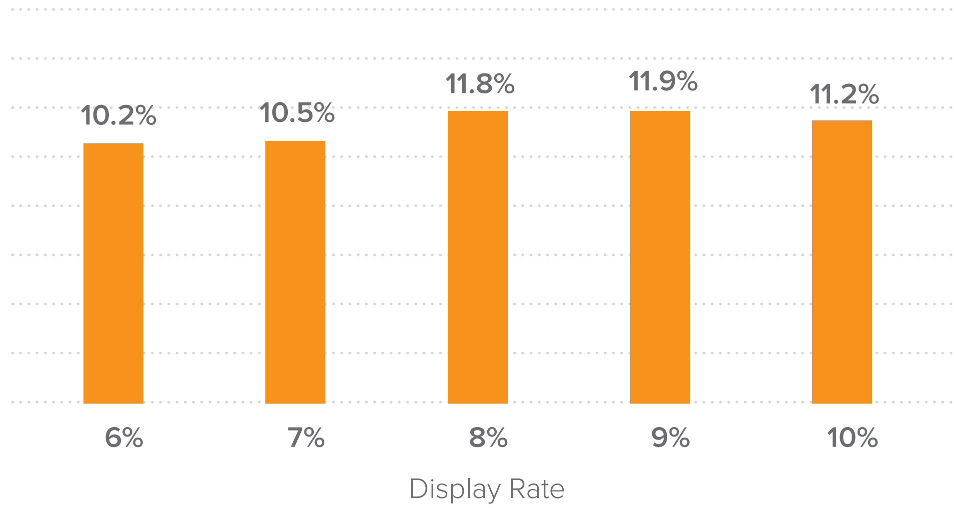
To help employees save more, researchers at Harvard, UCLA, the Wharton School and City, University of London, in collaboration with The Voya Behavioral Finance Institute for Innovation, have studied the impact of suggested savings rates on employee decisions.[12] To explore the potential benefit of these higher suggested rates, the researchers conducted a field experiment looking at enrollment status and savings rate of employees who are assigned different savings rates when enrolling online.

Boost auto-enrollment deferral rate to 7%

According to the data, **it's possible to significantly increase the suggested savings rates *without* increasing the number of participants opting out of the retirement plan.** Specifically, suggesting rates between 7 and 10 percent did not result in lower enrollment when compared to a 6 percent control rate. (We used 6 percent as a control rate, and not the more common 3 percent, because previous research has already shown that 6 percent doesn't increase opt-out rates.)

[10] Plan Sponsor Council of America. 62nd Annual Survey, 2019.
[11] Benartzi, Shlomo. Save More Tomorrow. Penguin, 2012.
[12] Beshears, John, Shlomo Benartzi, Richard T. Mason, and Katherine L. Milkman. "How Do Consumers Respond When Default Options Push the Envelope?" (SSRN #3050562) 2017.

Percentage dropping out and not saving



Most importantly, these higher suggested rates can lead to improved retirement outcomes, boosting the retirement income of the workers in the study by nearly ten percent. **The biggest increase in savings came from raising suggested rates from 6 to 7%, which is why 7% is our recommended display rate.**

In addition to auto-enrolling workers with a higher suggested default rate, plan sponsors should also pay attention to the design of their enrollment websites. According to a recent study, **even relatively small design changes can have a significant impact on the enrollment decisions of workers.[13]**

Researchers from Carnegie Mellon University, City, University of London and UCLA, in collaboration with The Voya Behavioral Finance Institute for Innovation, looked at the enrollment choices of more than 8,500 employees across 500 workplace retirement plans. The employees, who were scheduled to be auto-enrolled into their employer-sponsored 401(k) plan, were visiting their online enrollment website to either confirm, decline or make personal adjustments to their deferral rates.

According to a recent study, even relatively small design changes can have a significant impact on the enrollment decisions of workers.[13]

[13] Bhargava, Saurabh, Lynn Conell-Price, Richard Mason, and Shlomo Benartzi. "Save (d) by Design." (2018).

Rethinking online enrollment architecture

Boost annual auto-escalation rate to 2%

Boost the escalator cap to 15%

The study examined how the following digital design changes affected financial decision-making: 1) Simplifying and standardizing the language describing the enrollment alternatives, 2) Changing from a single color design on all buttons to a three “traffic light” colors intended to encourage higher savings, and 3) Displaying important plan information, such as the plan’s default deferral rate or match, closer to where the enrollment decision is actually made.

These minor design changes shaped the ensuring choices of employees. The most notable changes involved an increase in the fraction of employees who personalized their enrollment by 9 percentage points, from 60 to 69 percent. While those who accepted auto-enrollment had an average contribution rate of 3.4%, these “personalizers” had a savings rate of 7.8%, or more than twice as high. For the overall population, these design changes boosted the average saving rate from 6.00 to 6.62%. That might not seem like a big increase, but it’s equivalent to boosting savings rate by more than 10%.

So far, we’ve focused on plan design changes during the initial enrollment process that can lead to higher savings for workers. However, those initial choices are often just the start of the savings process. **To help employees reach a savings level required for a successful retirement, plan sponsors should also consider putting employees on a path to gradually save more over time.** When implemented as part of Save More Tomorrow, a savings program created by Richard Thaler and I, these so-called savings “escalators” automatically increased the savings rates of workers by a small percentage every year, at least until a recommended cap was reached.[14] They have proven to be extremely successful, and have already helped more than 15 million Americans increase their savings.[15]

The potential of the auto-escalator nudge was enhanced by recent regulatory changes in the Secure Act, which encourages raising the cap on auto-escalated savings rates from 10% to 15%, thus allowing workers to save at a higher level when necessary.

Financial security is the work of a lifetime. It won’t happen all at once, especially when the economy has been held back by a pandemic, which is why gradually raising rates in the future can be so important.

[14] Despite the industry typically using 1% annual increases, we recommend 2% increments. One issue with 1% increments is that, if participants enroll at a 3% default savings rate, it would take them 7 years to reach the recommended savings rate of at least 10%. Since the tenure of an average employee is less than 7 years, if 1% increments are used, then many will never reach the 10% savings rate. Benartzi, Shlomo. *Save More Tomorrow.* Penguin, 2012. P. 116-118

[15] https://hbr.org/2017/12/how-digital-tools-and-behavioral-economics-will-save-retirement

The Smarter Match

We understand that these changes to plan design can be expensive, and thus challenging given our current difficult economic conditions. **To help employers improve the effectiveness and efficiency of their matching dollars, and potentially reduce short-term costs, it's important to consider matching alternatives that reflect the latest behavioral science.**[16]

Consider the stretch match

One relevant option is the stretch match. In a typical stretch match, companies reduce their match rate while increasing their match cap. For example, instead of offering 50 cents on the dollar up to 6% of pay, employers could offer 25 cents up to 10% or 15% of pay. Although the stretch match is not a new idea, it's a timely solution as it enables employers to shift a portion of their matching costs into the future, after the economy recovers. In addition, **the stretch match can encourage higher savings rates among workers,** helping them accumulate additional savings for retirement.

To understand why the stretch match can be effective, it's important to review the research. The first relevant finding is that the level of the match cap influences the savings choices of workers. For example, James Choi and colleagues studied a company that introduced an employer match with a cap of 4%. Nearly a third of new plan participants chose 4% as their savings rate, a nearly six-fold increase from before. Among Voya plans, those offering a 5% cap have an average savings rate of 6.9%, while those plans offering a 6% cap have a 7.8% savings rate. This suggests that raising the match cap can encourage workers to save more for retirement.[17]

However, while workers are sensitive to the match cap, they are generally insensitive to the match rate. One study followed a plan in which the match rate varied widely over several years, oscillating between 25% and 150%. Despite these changes, the different match rates had little effect on worker participation or contribution rates.[18]

[16] https://hbr.org/2020/10/employers-need-to-reinvent-retirement-savings-match.

[17] Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2005). Saving for retirement on the path of least resistance. *Rodney L White Center For Financial Research-Working Papers*.

[18] Kusko, Andrea L., James M. Poterba, and David W. Wilcox. "Employee Decisions with Respect to 401(k) Plans." *Living with Defined Contribution Pensions* (1998): 98.

Why is that? One explanation is that people have few expectations when it comes to the match rate. They don't know if it should be 25% or 150%, which reduces the likelihood that the match rate will be used to inform their savings decisions. Additional research confirms that, when there's no intuitive benchmark to judge numbers, or the numbers require effort to interpret, we tend to ignore them.[19]

The stretch match uses these findings to create a more effective and efficient match. **In addition to raising the saving rates of workers, the stretch match is likely to save companies money in the short term, as not all workers will immediately adjust their savings rate to the new cap**.

One potential issue with the stretch match is that a high match cap could discourage workers for whom putting 10% or 15% of their salary toward retirement seems impossible, especially in the midst of a recession. This is why **it's important for companies to encourage participation by using savings escalators, which automatically increase savings rates by 2 percent each year until workers reach a recommended level.** It's much easier for many workers to start low and save more over time than it is to start right away with a high savings rate.

In addition to considering the stretch match, companies might want to think broadly about other match options. Although the match is typically expressed as a percentage of salary, research suggests that many people struggle to understand percentages. Research by Ellen Peters and others, for instance, suggests that percentages often feel abstract, and thus fail to influence the decision-making process.[20]

Consider the fixed dollar match

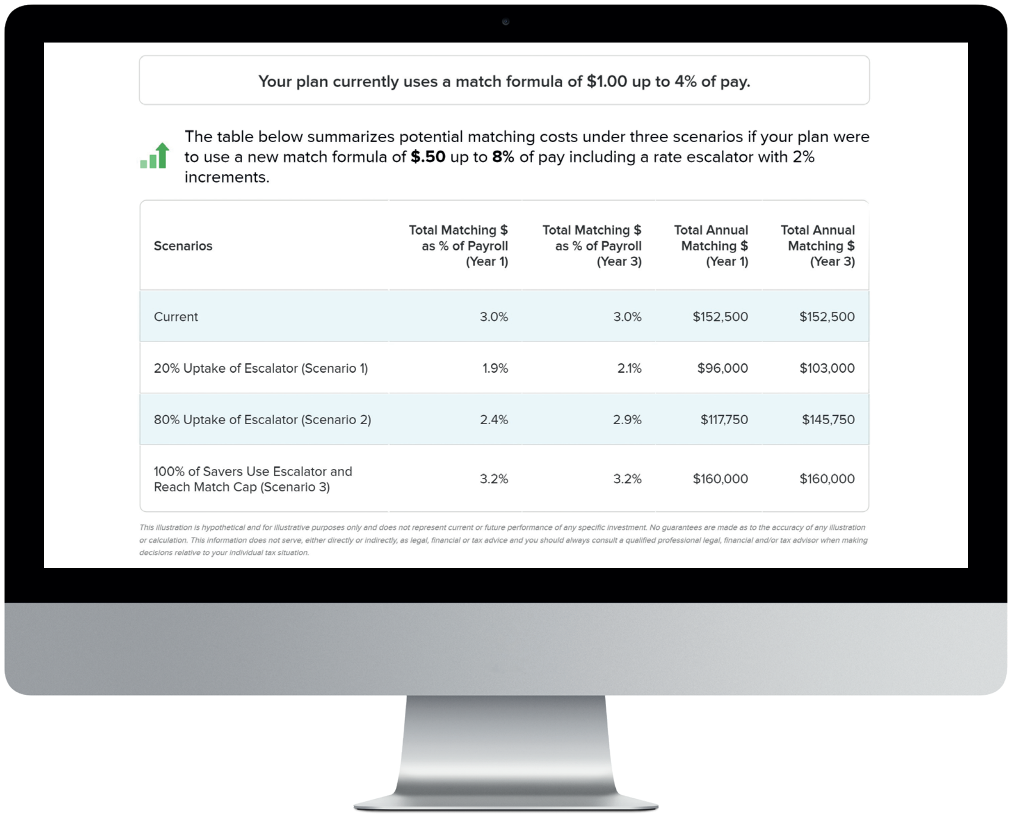
To make the benefits of the match easier to comprehend, companies should also consider the fixed dollar match, which converts the match into a lump sum rather than a percentage of pay. For example, a company could give every worker an annual $1,200 "match" if they keep saving. This is equivalent to a 50 cents on the dollar match up to six percent of pay for a $40,000 income, which is less than the typically match cost, thus helping companies reduce matching costs during the recession. Because a fixed dollar amount can lead people to think about comparable purchases, or what else they could buy with an equivalent amount of money, it might make it harder for employees to leave "money on the table" and stop contributing in the presence of a fixed dollar match. Psychologically, it's easy to give up a six percent match, but it's hard to let go of a $1,200 lump sum.

Of course, changing the match can potentially introduce uncertainty into a plan. In particular, a new match formula creates two practical questions: 1) how plan participants will react to the new match formula and 2) the potential cost of changing the match.

[19] Johnson, Eric J., John W. Payne, and James R. Bettman. "Information displays and preference reversals." *Organizational Behavior and Human Decision Processes* 42.1 (1988): 1-21.

[20] Peters, Ellen, P. Sol Hart, and Liana Fraenkel. "Informing patients: the influence of numeracy, framing, and format of side effect information on risk perceptions." *Medical Decision Making* 31.3 (2011): 432-436.

To help companies evaluate this uncertainty, The Voya Behavioral Finance Institute for Innovation recently introduced **The Smarter Match tool. The tool offers different match formulas and provides assumptions about uptake rates and the resulting cost to the employer.** By implementing a match that reflects the latest behavioral science, it's possible to create a more cost-effective match that will also make it easier for employees to save more.



Your plan currently uses a match formula of $1.00 up to 4% of pay.

The table below summarizes potential matching costs under three scenarios if your plan were to use a new match formula of **$.50** up to **8%** of pay including a rate escalator with 2% increments.

Scenarios	Total Matching $ as % of Payroll (Year 1)	Total Matching $ as % of Payroll (Year 3)	Total Annual Matching $ (Year 1)	Total Annual Matching $ (Year 3)
Current	3.0%	3.0%	$152,500	$152,500
20% Uptake of Escalator (Scenario 1)	1.9%	2.1%	$96,000	$103,000
80% Uptake of Escalator (Scenario 2)	2.4%	2.9%	$117,750	$145,750
100% of Savers Use Escalator and Reach Match Cap (Scenario 3)	3.2%	3.2%	$160,000	$160,000

This illustration is hypothetical and for illustrative purposes only and does not represent current or future performance of any specific investment. No guarantees are made as to the accuracy of any illustration or calculation. This information does not serve, either directly or indirectly, as legal, financial or tax advice and you should always consult a qualified professional legal, financial and/or tax advisor when making decisions relative to your individual tax situation.

Given the importance and cost of the match, we should conduct a wide variety of experiments to ensure that matching dollars are spent as effectively as possible.

In the future, plan sponsors might want to consider additional matching options. For instance, should the match be personalized for different people? While the stretch match can help enrolled workers save more, the fixed dollar match might be ideal for those workers who are at high-risk for not participating in their plan. Are other incentives, such as lotteries, more salient for encouraging participation? Peter Tufano, for instance, has shown that lottery-linked savings programs can significantly increase the use of savings accounts, especially among low-income households.[21] Given the importance and cost of the match, we should conduct a wide variety of experiments to ensure that matching dollars are spent as effectively as possible.

[21] Tufano, Peter. "Saving whilst gambling: An empirical analysis of UK premium bonds." *American Economic Review* 98.2 (2008): 321-26.

Summary

Taken together, these plan design changes have the potential to significantly improve the financial security of American workers. Every worker deserves to benefit from these behavioral insights, which can make it easy to save more for retirement. Plan Sponsors should apply these design changes holistically, and include both full and part-time, and new and existing employees. They should also utilize periodic re-enrollment to ensure that no workers are left behind.

What's more, many of these plan changes anticipate proposed legislative reforms. A new bi-partisan bill, the Secure Act 2.0, was recently introduced in the United States House Ways & Means Committee. This bill also expands auto-enrollment by automatically enrolling employees whenever a new plan is created and encouraging the use of savings escalators. It also allows plan sponsors to broaden their behavioral economics toolkit. For instance, plan sponsors can now experiment with small financial incentives, such as gift cards, to encourage enrollment and higher savings rates, especially among lower income workers. By implementing these plan design changes now, plan sponsors can ensure they are enhancing the financial security of their workers while implementing actions that are consistent with the goals of many legislators.

These insights are especially important during challenging economic times, when the budgets of employees and employers are constrained. We recognize there will be pressure for people to withdraw money to deal with hardships, and that companies may face significant pressure to reduce their matching costs. However, as people cash out their savings, we should also think about how plan design can help support future retirement security while simultaneously increasing the efficiency of employer matching costs. This whitepaper outlines the following recommendations for improving plan design:

1. Boost auto-enrollment deferral rate to 7%
2. Boost annual auto-escalation rate to 2%
3. Boost the escalator cap to 15%
4. Enrolling and re-enrolling all employees holistically
5. Rethinking the online enrollment architecture
6. Consider the stretch match
7. Consider the fixed dollar match

For plan sponsors, the current crisis should serve as an opportunity to improve plan design. By implementing these seven actionable insights, retirement plans can make it as easy as possible for employees to accumulate the assets they need.

Difficult economic times are a reminder that financial security is an essential goal, helping us cope with uncertainty and unforeseen risks.

There is a larger lesson here, which is that difficult economic times are a reminder that financial security is an essential goal, helping us cope with uncertainty and unforeseen risks. While retirement savings is a key component of financial security, we should also encourage workers to boost their emergency savings. Voya and The Voya Behavioral Finance Institute for Innovation are currently launching research projects designed to make it easier for workers to save for emergencies, with the goal of helping people navigate future downturns without needing to withdraw funds from their retirement accounts.