Financial Wellness Meets Behavioral Economics

Helping Participants See the Big Picture and Act on It

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Executive Summary

The financial lives of American workers have become increasingly complicated in the 21st century. Instead of relying on an employer pension, most workers now save on their own, a shift that brings both opportunities and challenges. In addition, workers have to effectively allocate these savings across different financial products and accounts. Should they fund their 401(k) account or emergency savings account? Should they choose a high-deductible health plan and put their savings in an HSA? Should they pay off their student debt, or start saving in a 529 education account? Given the complexity of the alternatives, making the right choice requires workers to see the big picture.

Unfortunately, **many people exhibit a behavioral tendency known as narrow framing, which can lead people to focus on just a narrow slice of the overall picture**. In the context of financial wellness, narrow framing can lead people to allocate their savings to the wrong accounts, choose the wrong health insurance plans and fail to prepare for unexpected financial shocks.

What American workers need in the 21st century is a financial wellness platform that not only makes it easy for them to see the big picture but *to also act upon it*.

This paper outlines a new approach, informed by behavioral economics, that minimizes the problem of narrow framing. For instance, it explains how workers can be nudged to save for emergencies, thus helping them avoid cashing out their retirement savings during a financial shock. It also outlines sample interventions that can be used to help people reduce health care costs.

What American workers need in the 21st century is a financial wellness platform that not only makes it easy for them to see the big picture but to *also act upon it*. They need a holistic view of their financial lives, along with personalized guidance to encourage financial choices that maximize their long-term financial wellness.

Narrow Framing

Before we explore potential nudges and interventions that can help people see the big financial picture, let's review the research on narrow framing. Consider a wager that the Nobel Laureate Paul Samuelson once posed to a colleague at MIT.[1] The question goes like this: Would you accept a bet in which you win $200 if the coin lands on heads and lose $100 if lands on tails?

Samuelson's colleague decline this bet. Like many people, he felt that the potential pain of losing money wasn't worth the pleasure of the bigger gain.

But here's a follow-up question: do you want to play this same bet twice?

When Nobel Laureate Richard Thaler and I tested a similar gamble with undergraduates and coffee shop customers, most people found the offer of multiple gambles even less appealing.[2] (The percentage of people accepting the wager dropped by 23 percentage points.) Since they didn't really like the single bet, why would they want to play it several times?

Now for the last gambling question. You have a 25% chance of winning $400, a 50% chance of winning $100 and a 25% chance of losing $200. Would you accept this bet?

If you're like most of the people, you find this wager very appealing, as the odds are clearly in your favor. But here's the catch: this last gamble is equivalent to playing the coin flip twice. (The odds of both bets have been aggregated: there's a 25% chance of getting two heads, a 50% chance of getting one heads and one tails, and a 25% chance of getting two tails.)

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[1] Samuelson, P. A., "Risk and Uncertainty: A Fallacy of Large Numbers," *Scientia* (1963), 98, 108-113.

[2] Benartzi, Shlomo, and Richard H. Thaler. "Risk aversion or myopia? Choices in repeated gambles and retirement investments." *Management Science* 45.3 (1999): 364-381. Benartzi, Shlomo, and Richard H. Thaler. "Myopic loss aversion and the equity premium puzzle." *The Quarterly Journal of Economics* 110.1 (1995): 73-92.

What explains this preference reversal? The answer returns us to narrow framing. If you initially rejected the sequential bets, it's probably because you are still thinking about each coin flip independently, fixated on the 50 percent chance of losing money. However, when the overall odds are aggregated for you, it's much easier to see that the gamble is actually quite attractive. Seeing the big picture helps you make better choices.

Narrow framing is one of those psychological tendencies that is becoming more relevant and costly in the 21st century. This is largely because our financial lives are increasingly complex and interconnected, and generally require a clearer sense of the big picture. **It's not enough to simply save for retirement anymore—workers must also save for emergencies, health expenses and education for their children.** What's more, people have to effectively allocate their resources across these different savings accounts, making decisions about which product they think will best enhance their financial wellness. Because their financial picture has gotten bigger, it can make things more challenging if relying on a narrow frame when making choices.

Unfortunately, the financial marketplace is typically organized in a way that promotes narrow framing. This is because financial institutions have traditionally been specialists, focused on providing a single type of financial account to consumers. While this allows financial firms to use specialization to deliver best-in-class products, it can also make it harder for people to have a holistic view of their financial lives. The end result is a failure to effectively allocate income, which can leave workers unprepared for various financial scenarios, whether it's a financial shock, unexpected health expense or an extended retirement.

As we'll see, solving this problem is likely to require a financial wellness platform able to offer a full range of financial products from different institutions and fintech startups combined with personalized guidance. In short, what workers most need is a best-in-class integrated experience, capable of making specific recommendations based on a holistic assessment of all their accounts.

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Emergency Savings and the Big Picture

Narrow framing can significantly impact the savings decisions of participants. Given the need for the typical worker to maintain multiple savings accounts, from emergency funds to retirement accounts to HSAs, it's extremely hard for people to know which account is most in need of their next dollar.

Consider the question of saving for emergencies. According to research by the Federal Reserve, nearly 40% of Americans would be unable to afford an unexpected $400 expense.[3] (This is significantly less than the average cost

[3] https://www.federalreserve.gov/publications/2020-economic-well-being-of-us-households-in-2019-dealing-with-unexpected-expenses.htm

[4] https://www.statista.com/statistics/619830/smartphone-average-price-in-the-us/

of a new smartphone[4].) Unfortunately, these unexpected expenses happen all the time: one survey of 7,800 American households found that 60 percent experienced a financial shock—defined as a significant loss of income or a major expense—in the last twelve months. A third of households experienced two or more shocks in the last twelve months.[5]

Take, for instance, just a few of the large and unexpected expenses that a household might encounter in a typical year. These include everything from a new transmission for the family car—which is likely to cost well over $1000—and a visit to the emergency room, which can easily lead to thousands of dollars in out-of-pocket medical expenses. (Medical expenses are one of the leading causes of personal bankruptcy.[6]) These financial shocks often have lasting consequences, as households are forced to take on expensive debt to pay their bills. This debt, in turn, can trigger a perpetual state of financial stress and insecurity—the high cost of interest makes it even harder to save for retirement, or even the next financial shock.

Given the negative impact of emergency expenses, why do so many people fail to save for them? The answer returns us to narrow framing, which causes people to engage in the "one future" fallacy, as they focus on a short list of possible future outcomes. When it comes to household financial planning, the "one future" fallacy often leads people to focus on predictable and recurring expenses, such as rent and the monthly phone bill.

Unfortunately, this means they overlook the full range of possible futures. If they saw the big picture, they would think about all those unexpected financial expenses that could happen. For instance, research by Abigail Sussman and Adam Alter finds that people struggle to budget for any kind of "exceptional expense," whether it's a summer vacation or a new television.[7]

Because these expenses are not recurring, and most household budgets are narrowly framed around regular monthly charges, people fail to consider them as part of their financial plan.

Emergency expenses are even more problematic. Because these emergency expenses cannot be predicted in advance, and because they come from many different categories, many people don't save for them at all. (The one future fallacy makes it hard to consider expenses that we can't anticipate.) **It's hard enough to save for recurring expenses and long-term goals. It's *really* hard to save for future expenses that might not even happen.**

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[5] https://www.pewtrusts.org/~/media/assets/2015/10/emergency-savings-report-1_artfinal.pdf

[6] Himmelstein, D. U., et al. "Medical Bankruptcy: Still Common Despite the Affordable Care Act." *American Journal of Public Health* 109.3 (2019): 431.

[7] Sussman, Abigail B., and Adam L. Alter. "The exception is the rule: Underestimating and overspending on exceptional expenses." *Journal of Consumer Research* 39.4 (2012): 800-814.

However, the Covid-19 pandemic is a stark reminder that we need to think broadly about financial risks. As we've seen in previous economic downturns, shortfalls in emergency savings and health coverage can lead people to cash out their retirement savings, which is often their only reservoir of wealth, or take expensive debt. As a result, a short-term financial emergency (such as an unexpected medical expense) can lead to a long-term loss of financial security, including personal bankruptcy. In many instances, it can take these workers years or decades to recover their retirement savings. The good news is that having an emergency savings account can dramatically reduce this problem: internal Voya data demonstrates that workers with significant emergency funds are approximately thirteen times less likely to take withdrawals from their 401(k) accounts due to financial hardship than are people with insufficient emergency accounts. [*]Voya Internal Data, 2021.

Given the difficulty of saving for emergencies, we need to design interventions that make it easy to consider emergency savings and act upon it. One nudge that Voya has recently begun testing involves using the 401(k) system to help workers build an emergency account. The advantage of this approach is that it allows participants to see the big picture of their savings, as it shows all of their different accounts on a single screen. This makes it far easier for people to effectively allocate their income across accounts. Furthermore, once they select an account(s) to prioritize, a plan provider can set a contribution autopilot to help them achieve their goal. **By deploying nudges that have helped millions of workers save for retirement, we can help millions more save for emergencies**.

Sources	Current Elected Contributions	New
Employee After-Tax (Emergency Fund)	0%	2 %
Employee Pre-Tax (Retirement Savings)	5%	5 %

Health Spending and the Big Picture

Narrow framing doesn't just impact how people save for emergencies—it can also interfere with how they choose health insurance and save for out-of-pocket health expenses. **Given the complexity of healthcare finance, it shouldn't be surprising that many people make costly financial mistakes, which can have a long-term impact on their financial security.**

Let's start with health insurance. It's an extremely difficult product to assess, with different plans offering different deductibles, premiums and benefits. To choose the optimal product, workers must anticipate their future health care needs, while simultaneously calculating the tradeoffs between monthly premiums and annual deductibles.

Consider the following health insurance question, which was developed by Saurabh Bhargava, George Loewenstein and Justin Sydnor.[8] The researchers asked people to select from a small menu of health-insurance plans that differed in terms of premiums and deductibles, but offered the exact same medical network:

Imagine you were asked to select a health plan from the following two options:

Plan A		Plan B
which has an annual premium of $2,134 and a deductible of $350	or	which has a premium of $930 and a deductible of $1,000.

Which plan did you choose? If you're like many Americans, you chose *Plan A*, which has a much lower deductible. Narrow framing often leads people to focus on just one factor, in this case the deductible. Unfortunately, this prevents them from considering the bigger picture, which is the total cost of the health insurance plan.

In the case of these insurance options, narrow framing clearly leads people to choose the less-optimal plan. The math is relatively straightforward. If you never got sick, then Plan B is obviously the better choice, since you wouldn't have to worry about your higher deductible. (You would only pay $930 in premiums a year rather than $2,134.) But even if you did get sick and used up your entire deductible, Plan B is still the better choice. After all, the maximum annual cost of Plan B is $1,930. ($930 in annual premiums, plus a $1,000 deductible.)

[8] Bhargava, Saurabh, George Loewenstein, and Justin Sydnor. "Choose to lose: Health plan choices from a menu with dominated option." *The Quarterly Journal of Economics* 132.3 (2017): 1319-1372.
Bhargava, Saurabh, George Loewenstein, and Shlomo Benartzi. "The costs of poor health (plan choices) & prescriptions for reform." *Behavioral Science & Policy* 3.1 (2017): 1-12.

That's still $554 less than the worst-case scenario of Plan A, which is $2,484. ($2,134 in premiums, plus a $350 deductible.) In this example, the lower premium and higher deductible plan is always the cheaper option.

This example might seem far-fetched but it was an actual health-plan menu offered to employees at a Fortune 100 company. In the same paper, the researchers showed that a majority of employees at that company exhibited this narrow framing tendency, which resulted in them spending 24% more on health insurance than they needed to.

How can we help people see the big picture of their health expenses? Let's start with insurance, as many people choose plans with low deductibles and high premiums despite the additional cost. **To help those workers most vulnerable to narrow framing, we can highlight the total annual cost of various plans.** For instance, in the case of the insurance plans above, this would involve highlighting the difference in total cost of $2,484 for the low deductible plan versus $1,930 for the high-deductible plan. The cost difference is even greater, of course, if you don't get sick and the deductible is not fully used.

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.

In addition to emphasizing the total cost of various insurance options, we can help workers invest their savings from high-deductible health plans in HSA accounts.[9] Using the insurance plans above, if a worker doesn't get sick, they could save $1,204, investing the full difference in premiums in their HSA. However, even if they do get sick, and use the entire deductible, they could still save $554 in a tax-advantaged account for future medical expenses.

[9] We understand that the deductible in these plans are below the $1400 minumum required by the IRS to enroll in an HSA. They are for illustrative purposes only..

However, this strategy does have one important limitation: what happens if an individual requires medical care in their first month with a high-deductible insurance plan, before they have sufficient savings in their HSA to cover any out-of-pocket health expenses?

To deal with this problem, approximately 35 percent of companies frontload HSA contributions at the start of the year, depositing a lump sum into the HSA in January.[10] This provides workers with a cushion in case of any unexpected health expenses. It can also help minimize the concern that workers with high deductibles might avoid medical treatment because they can't afford the out-of-pocket expenses.

Another possibility is to help workers enroll in supplemental health insurance which will pay benefits for specific covered events or illnesses that can then be used on out-of-pocket expenses. This additional insurance can mitigate the risk of a higher deductible, especially before people have amassed a financial reserve in their HSA. For employees switching to a high deductible health plan, we should consider dividing their premium savings between supplemental insurance and HSA. These supplemental insurance typically provides people with benefits to help cover out-of-pocket medical and other costs for a variety of conditions, ranging from a broken bone to a heart attack.[11] This can reduce the long-term impact of unexpected medical emergencies, especially for those choosing high deductible health insurance plans. It's important to note that these are limited benefit policies. These insurance products are not health insurance and do not satisfy the requirement of minimum essential coverage under the Affordable Care Act.

A Financial Wellness Platform

The larger lesson is that, due to narrow framing, most people would benefit from clear guidance on how to allocate their scarce dollars across various financial categories, from savings accounts to health insurance plans. After all, **when it comes to our finances, our choices are all interconnected:** spending too much on the wrong health insurance plan makes it harder to save for emergencies. Not saving for emergencies can expose people to financial shocks and expensive debt, which can lead them to cash out their retirement savings. Not saving for retirement can diminish their quality of life down the road.

When it comes to our finances, our choices are all interconnected.

In this respect, financial wellness is like physical wellness. If you want to be truly healthy, you have to develop a holistic plan involving diet, exercise and sleep. Financial wellness requires the same holistic commitment, as workers better allocate their dollars across a range of categories and accounts. You won't feel healthy if you eat well but never exercise, or if you always exercise but just eat

[10] 2020 PSCA HSA Survey

[11] Brella, for instance, is a supplemental insurance that pays a benefit for more than 13,000 covered illnesses and injuries as defined in the certificate of coverage. It typically pays out within 72 hours of a claim being filed. This coverage can ease the financial burden of unexpected health issues and potentially mitigate the need to take on debt depending on the benefit amount.

junk food. Likewise, it's not enough to save for retirement if you haven't also saved for emergencies and health expenses. If you want to invest in your long-term financial wellness, you have to do it all. And that requires help.

Given the potential negative impact of narrow framing on financial wellbeing, there are immediate improvements that financial institutions, fintech startups, plan sponsors and consultants can achieve by working together to help people more effectively allocate their income. For instance, when it comes to helping people achieve financial wellness, a retirement plan provider can serve as a so-called "anchor tenant," managing retirement accounts and providing long-term guidance for participants. However, we might consider using other institutions on the platform to help, for example, manage the emergency savings account outside the retirement plan. The same strategy can also be used for managing HSA accounts and enrolling users as needed in supplemental insurance policies. Furthermore, the allocations to these various accounts could be guided by a fintech solution that personalizes the next-best-dollar advice based on the needs and preferences of the participant. Sometimes, it takes a team to see the big picture.

That said, what steps can financial firms take immediately to improve financial wellness using the tools and insights of behavioral economics?

1. **Showing the Big Picture**. When offering employees savings options, we should let them save for emergencies at the same time as retirement. When offering employees health insurance options, we should combine the cost of premiums and deductibles, so they can better understand their total potential cost. By showing people the big picture, we can help them avoid the common problem of narrow framing, especially given the increasing complexity of our financial choices.

2. **Making It Easy to Act on the Big Picture.** Once we show people the big picture, we have to make it easy for them to act on it. For emergency savings, this means utilizing the same autopilot tools that help workers save for retirement, including an escalator feature. For high deductible health insurance plans, this means helping them redirect their savings from lower premiums into an HSA or supplemental insurance plan.

3. **Personalize the Big Picture.** Whenever possible, we should offer people personalized guidance on their finances. The best health insurance option, for instance, will often depend on a worker's expected medical usage, while the optimal allocation of savings will depend on how much workers saved so far and their retirement income goal.

The ultimate goal is to develop a data-driven financial wellness platform that helps people better allocate their scarce dollars. In the future, this financial wellness platform can offer participants the biggest possible picture, looking beyond savings and health. For example, by using participant data on liquidity and debts the platform could also make personalized recommendations involving debt repayment schedules.[12] It could also recommend suitable group life and disability insurance plans, based on a participant's overall situation.

Of course, this will require financial firms to expand their portfolio of products and nudges. While financial firms have traditionally been specialists, focused on offering best-in-class financial products for specific needs, the complexity of modern household finance requires that companies think more broadly about how they can help their participants and users. Amazon began as a bookstore. However, it gradually became an "everything store," leveraging the power of personalized recommendations and "easy" action, such as one-click purchases to help consumers navigate choice overload.

There is a parallel opportunity in the financial space. By helping people see the big picture of their finances, and personalizing the recommendations, plan providers, recordkeepers and financial institutions can make it easy for them to make choices that enhance their financial wellness. They can choose from a range of best-in-class products, and allocate their income to those products that best serve their needs, whether it's an emergency savings account or an HSA.

In the 21st century, household finance has become increasingly complicated. As a result, narrow framing has become an increasingly costly mental tendency. However, by designing financial wellness platforms that offer holistic advice, we can minimize the impact of narrow framing on participants.

The ultimate goal is to develop a data-driven financial wellness platform that helps people better allocate their scarce dollars.

[12] For example, people with expensive debt might want to enroll in "Pay More Tomorrow" program. Given the high cost of interest, paying down debt first with a "Pay More Tomorrow" plan featuring automated payments and auto-escalators might allow them to save even more for emergencies, health and retirement in the near future.

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