BANK OF AMERICA

CHIEF INVESTMENT OFFICE

Financial Wellness: Helping improve the financial lives of your employees

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AUTHORED BY:

Chief Investment Office:
Anil Suri, Managing Director
Stefano D'Amiano, Managing Director
Nevenka Vrdoljak, Director

Retirement & Personal Wealth Solutions:
Ellen Lurier, Director
Gao-Wen Shao, Director

EXECUTIVE SUMMARY

The state of employees' finances can have a significant impact on their lives. Financial stress can affect their performance as well as their mental and even physical health. An inability to manage their finances, such as paying bills and saving for the future, creates stress and has a negative impact on achieving their financial goals. The coronavirus pandemic is also creating new challenges for employees in maintaining their financial health.

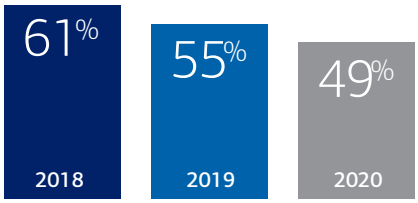
At Bank of America, we have seen a sustained increase in the offering of Financial Wellness programs, while employee feelings of financial wellness have declined over the last two years. Employees are struggling to meet their short-term financial obligations which impacts their ability to make progress towards long-term goals like saving for retirement. They need and want help with their broad financial needs beyond retirement, like budgeting, debt management and paying for unexpected expenses, but are unsure how to prioritize their finances or what their first step should be.

At the same time, employers are seeing how important Financial Wellness programs are to the company's overall success in attracting and retaining talent, improving productivity and engagement as well as increasing employee satisfaction. They are expanding these programs beyond retirement, and offering tools and guidance to address a broad range of an employee's financial needs.

To be effective, Financial Wellness programs need to look at an individual's holistic financial life and provide clear, personalized actionable steps to help them address their short-term challenges and long-term goals. Recent research has shown that when employees receive this kind of personalized guidance, they are able to make more progress towards their goals. Bank of America's approach to Financial Wellness, informed by this research and presented in this paper, is:

- **Actionable:** Helps nurture good financial habits by identifying practical, effective, and prioritized actions an individual can consider, and measures progress while recognizing and reinforcing positive behaviors.
- **Personalized:** Identifies actions based on results of an individual assessment, then personalizes them using key attributes such as age, income, or family status.
- **Expert-driven:** Uses input from experts* and experienced financial advisors to define the elements of our framework and distinct scoring system.
- **Quantitative:** Employs innovative and proprietary analytics, in addition to expert-driven qualitative inputs, to generate a score that provides a holistic snapshot of a person's financial health and behaviors.

The number of employees who rate their financial wellness as good or excellent is declining



Bank of America Workplace Benefits Report, 2020.

Bank of America Workplace Benefits Report, 2020.

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INTRODUCTION

The pandemic of 2020 brought significant change in our lives, affecting our workplaces, employees, families and communities as a whole. People are feeling the impact of the coronavirus, and some have discovered their financial situation was not able to adequately withstand the economic effect of the virus. Even prior to the coronavirus, we know 37% of American adults were unable to cover a $400 emergency expense.[1] The need to make ends meet often consumes a lot of time and energy, making it difficult to envision and achieve a more financially stable future. The state of employees' finances can have a significant effect on their lives and workplace productivity. Fifty-six percent of employees are stressed when it comes to their financial situation and 53% of these employees say this stress interferes with their ability to focus and be productive at work.[2]

However, it doesn't have to be this way. Financial Wellness includes making sound financial decisions that enable living well today while planning and preparing for the future – this includes the ability to effectively manage day-to-day expenses and debt, and to meet future financial obligations and goals. It involves encouraging positive financial behaviors in ways that address an employee's unique needs and situation while ensuring that all components of their finances, including workplace benefits, are helping them live a better life.

This whitepaper presents Bank of America's Financial Wellness framework that identifies the components of a financially well individual and the key behaviors we believe serve as a roadmap to good financial habits. It highlights how we applied the framework to create our Financial Wellness Tracker, which provides a holistic snapshot of someone's financial situation, including a score and suggested actionable steps to help individuals improve their financial health.

EMPLOYEES NEED HELP MANAGING THEIR FINANCIAL LIVES

Many are lost...

...and struggling

37% of American adults wouldn't be able to cover a $400 emergency that they could quickly pay off[3]

59% of employees say they do not have a high level of control over their debt[4]

74% of U.S. workers live paycheck to paycheck[5]

45% of employees rate their own financial wellness as poor, fair or average[6]

[1] Federal Reserve, "Report on the Economic Well-Being of U.S. Households in 2019," May 2020
[2] Bank of America, 2017 *Workplace Benefits Report*
[3] Federal Reserve, "Report on the Economic Well-Being of U.S. Households in 2019," May 2020
[4] 2020 Bank of America Workplace Benefits Report.
[5] American Payroll Association "Getting Paid in America," September 2019
[6] Bank of America, 2019 Workplace benefits Report

WHAT IS BANK OF AMERICA'S FINANCIAL WELLNESS FRAMEWORK?

Our approach

Telling people all the ways they may be missing the mark financially can be demoralizing. We employ techniques designed to encourage meaningful change based on taking incremental steps, reinforced by positive feedback. As with losing weight and getting in shape, signs of progress are motivation to keep going. Our approach **nurtures good financial habits** by identifying specific actions that individuals can take, measuring progress, and recognizing and reinforcing positive behaviors. The approach:

- Targets the employee's specific needs and situation
- Helps employees understand where they stand and measure progress
- Suggests actionable steps that can be considered and encourages actions and behaviors to help strengthen the employee's financial picture

Our approach nurtures good financial habits by identifying specific actions that individuals can take, measuring progress, and recognizing and reinforcing positive behaviors.

By understanding employees' unique situations and personalizing the suggestions we offer, we can help them gain the skills necessary to make better financial decisions in all aspects of their life. The foundation is our **multidimensional proprietary framework** and belief that a financially well person needs to make sound financial decisions and live financially well today, while planning and preparing for the future.

Overview of the framework

Our approach blends our experience with innovative and proprietary analytics, as well as behavioral finance, to create an engaging, effective and ongoing experience.

In order to help individuals manage their financial health, we set out to understand the components of a financially well individual. This work guided the development of our **Financial Wellness Framework,** which reflects Bank of America's point of view on what constitutes a financially well individual. Next we created a mechanism to evaluate an individual's current financial situation and defined steps they can take to become more financially well.

Components of a financially well individual

The Framework enables us to provide a structure for individuals' financial lives in order to help them understand their financial priorities. We drew upon our extensive experience working with participants, consulted experts from across our company—from Bank of America's Chief Investment Office to our behavioral finance group—and examined industry research and data to define a financially well individual as someone who:

- Effectively manages day-to-day expenses
- Has a handle on debt
- Saves for future goals while protecting against unexpected events

Financial wellness is the ability to effectively manage day-to-day expenses and debt, and to meet future financial obligations and goals

Pillars of Financial Wellness

Based on that definition, we defined three key "pillars" that address each of these components:

- Plan and invest
- Manage debt
- Preserve and protect[7]

Within each pillar, we recognize there are different levels of achievement. First, a person establishes a solid financial foundation to live today. Next, he or she builds and improves upon that foundation to prepare for the future.

[7] Employee has the basic documents in place to protect assets (Will, Healthcare Proxy/Living Will, Power of Attorney). This is not meant to imply safety of investments.

Dimensions and attributes of Financial Wellness

We organized the pillars into six dimensions and ordered them by importance, creating a financial hierarchy. We then defined the key attributes, for each dimension.

Figure 1: Six Dimensions and 14 Attributes of Financial Wellness

Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Individuals can improve their financial health by adopting behaviors in each dimension, and progress in one dimension can lead to improvement in others. For instance, having a handle on dimensions 1 and 2 is a springboard to strengthen dimensions 3 and 4, and so on.

FINANCIAL WELLNESS TRACKER

Based on our approach, we developed the Financial Wellness Tracker that provides a holistic snapshot of someone's financial situation against each of the above behaviors and attributes, then calculates a score, and offers actionable steps to help individuals improve their financial health.

The Financial Wellness Tracker includes these elements:

- Individual assessment
- Score and identification of strengths and areas for improvement
- Personalized Suggested Action Plan
- Ongoing engagement and periodic reassessment

Our Financial Wellness Tracker provides a holistic financial snapshot of someone's financial situation against each of the above behaviors and attributes, calculates a score, and then offers prioritized actionable steps.

Figure 2: Elements of the Financial Wellness Tracker

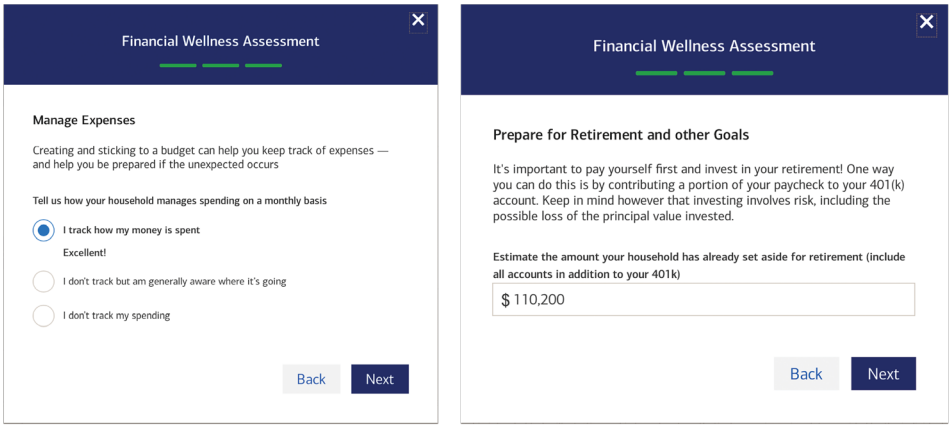
Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Financial Wellness Assessment

The foundation of the tracker is an individual's Financial Wellness Assessment, which consists of 12 questions designed to assess strengths and areas for improvement and provides a Financial Wellness score. The score is calculated through weightings assigned to the key behaviors of financial wellness described above.

Personal data such as dependents, age and household income range is also captured. This data helps address an individual's specific situation in order to better personalize the suggestions offered.

Figure 3: Question Examples



Source: Chief Investment Office and Retirement & Personal Wealth Solutions

The score and identification of strengths and areas for improvement

The score is based on information the individual provided about personal habits and behaviors when it comes to budgeting, spending, savings, debt and protecting their finances. Each of the attributes is assigned a weighting based on research, analysis, and the expertise of our Chief Investment Office, using our proprietary analytics and methodology. Responses to the questions, as well as some underlying calculations, are evaluated against the attributes described earlier. For each attribute, the weights lead to scores and identify a person's strengths and areas in need of improvement, both qualitatively and quantitatively. A total score is then generated and presented (see the next section for additional details).

The total score is an overall measurement of where someone stands with their overall financial health and behaviors. It is not a "grade" but a benchmark to indicate what degree of change or improvement would support becoming financially well. Individuals can measure their own progress as they take certain steps. Depending on the score, individuals may need to make significant changes to behaviors, make more modest adjustments, or optimize behaviors. Figure 4 provides further details on how the score can be interpreted qualitatively.

The score is an overall measurement of where someone stands with their overall financial health and behaviors.

Figure 4: Interpreting the Financial Wellness score

Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Suggested actions are personalized

Our experience indicates that people seek specific and concrete steps to follow. Accordingly, our approach to delivering actions are prescriptive and distinctive, going deeper than just offering general or high-level suggestions along with an article. Employees are immediately shown the top three actions that could help improve their financial wellness. These actions are drawn from an "inventory" of actions, which in total address all of the attributes of what we believe to be a financially well person. Every attribute has at least one associated action.

Research indicates that people seek specific and concrete steps to follow rather than general or high-level suggestions along with an article.

Specific actions are then identified based on an individual's assessment results. They are personalized to be relevant for that person – and prioritized to be the most impactful. Figure 5 shows an example of a personalized suggested action plan.

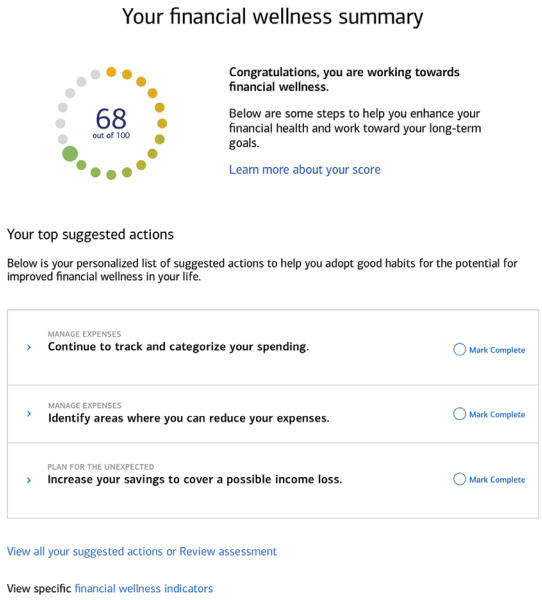
Individuals may have just a few, or many, suggested actions identified as relevant. All their actions address areas of weakness or gaps in their financial wellness. However, we initially present only the top three actions in order to avoid overwhelming them with a long list that could feel impossible to complete. We believe that starting with three actions feels achievable and manageable.

Individuals can view the full list of all their relevant actions (the full "suggested action plan") if they wish.

Successful completion of actions, when documented by the employee in the tracker, will improve their financial wellness score and prompt new action items that are the most impactful and relevant for their updated situation.

Employees can work on and complete actions in any order. After all, real life factors outside of someone's control can affect timing. But completing steps in the proposed order will have the greatest impact on improving their financial health and score.

Figure 5: Financial Wellness personalized action plan



Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Actions are identified based on an individual's assessment results and are personalized.

Step by step help is provided to break actions into manageable, bite-sized pieces. For example, an action such as "Reduce your expenses" is broken down into several components:

- Learn about spending and savings guidelines
- Use a worksheet tool to identify spending categories
- Identify essential and non-essential expenses
- Review spending against suggested guidelines
- Target areas to reduce non-essential spending
- Monitor progress and adjust going forward

Employees are provided further details for each step. We supplement the experience with education on the action topics to provide additional support including articles, videos and tools like calculators, etc.

We also provide targets or benchmarks to strive for – such as spending percentages, or target dollar amounts for emergency funds, retirement funds, or contribution rates.

For people seeking detailed direction, this level of guidance is critical to supporting incremental behavior change. People can feel a sense of accomplishment with each small step taken, or each percentage or dollar improvement – which all reinforce a cycle of positive behaviors.

Personalization also comes into play at this more detailed level and is reflected in several ways based on responses to questions (qualitative and quantitative) and personal data inputs (age, income, family status).

For instance, someone who is a higher-income earner and should reduce spending would take a different approach than a lower-income earner. Or if a person needs to obtain life insurance, the urgency and tone of the message needs to differ for someone with dependents compared with someone with no dependents.

If individuals are nearing retirement, it would be suggested they start to plan for their desired retirement lifestyle and consider the impact of healthcare on retirement finances, whereas an individual just starting out would not receive this guidance. Or we might suggest to those that have children to consider saving for education expenses.

Recommended targets and calculations are also suggested throughout action plans for budgeting, retirement, debt-to-income ratios, and emergency savings which may differ based on income and age.

Importance of ongoing engagement and periodic reassessment

Working towards financial wellness is not a "one-and-done" proposition. Like physical health, striving for and maintaining financial health is an ongoing process. People's lives and situations evolve – they go to school, change jobs, marry, have families, change residences, and experience other life events.

Accordingly, people should re-assess their situations periodically to account for these changes.

As people take actions and re-engage they can see the benefits of their actions through an increase in their score. As they document completion of actions suggested by the Financial Wellness Tracker, it will be reflected in their score. This type of positive feedback loop can serve as motivation.

Employers can take an active role in encouraging employees to return to the Financial Wellness Tracker to document actions. The employer is in a position to actively communicate with employees and offer access to resources including education, workshops, webinars, or even one-on-one financial consultations.

CASE STUDY 1

Cindy – age 42, single with one child, income of $85,000

Cindy is a single mother focused on better managing her finances to support her daughter today and in the future.

Financial Situation and Behaviors:

- Budgets but sometimes spends more than she earns
- Usually pays off credit cards in full
- Doesn't have enough emergency savings
- Retirement savings underfunded but contributes enough to get full employer match
- Hasn't thought about planning for daughter's college
- Saving for new home and a vacation
- Has mortgage and car loan

Top Priority Actions

1. Continue budgeting
2. Identify areas to reduce expenses
3. Further build emergency savings

Other Important Actions:

4. Contribute more to retirement
5. Save for a new home
6. Save for daughter's college education
7. Save for the vacation
8. Consider refinancing auto loan

CASE STUDY 2

Jeff-age 34, single, income of $38,000

Jeff wants to get a handle on his short-term finances to get on solid footing so he can be comfortable planning for his financial future

Financial Situation and Behaviors:

- Does not budget and sometimes spends more than he earns
- Sometimes pays off credit cards in full
- Doesn't have enough emergency savings or disability insurance
- Retirement savings underfunded and doesn't contribute enough to get full employer match
- Wants to save for a vacation
- Has student loans
- Doesn't have a will or healthcare proxy

Top Priority Actions

1. Create a budget
2. Identify areas to reduce expenses
3. Pay off full credit card balance every month

Other Important Actions:

4. Create an emergency fund
5. Obtain disability insurance
6. Contribute more to retirement
7. Review investments at least annually
8. Save for major purchase (vacation)
9. Create a will and healthcare proxy

We applied the Financial Wellness Tracker to two case studies to arrive at a Financial Wellness Score and Personalized Action Plan

Source: Chief Investment Office and Retirement & Personal Wealth Solutions

The case studies presented are hypothetical and for illustrative purposes only and do not reflect specific strategies we may have developed for actual clients. They are not intended to serve as investment advice since the availability and effectiveness of any strategy is dependent upon your individual circumstances. Results and experiences will vary.

HOW BANK OF AMERICA DEVELOPED ITS FINANCIAL WELLNESS FRAMEWORK AND SCORE

In this section, we will review key elements of how the Financial Wellness Framework and score are derived. First, we examine how the dimension weighting system was determined. Second, we look more closely at how a personalized Financial Wellness score and guidance are provided based on a participant's age and income. Finally, we discuss how the recommended retirement savings multiples and contribution rates are calculated.

We used a quantitative objective-driven approach known as the Analytical Hierarchy Process to derive the weightings with inputs from experienced financial advisors.

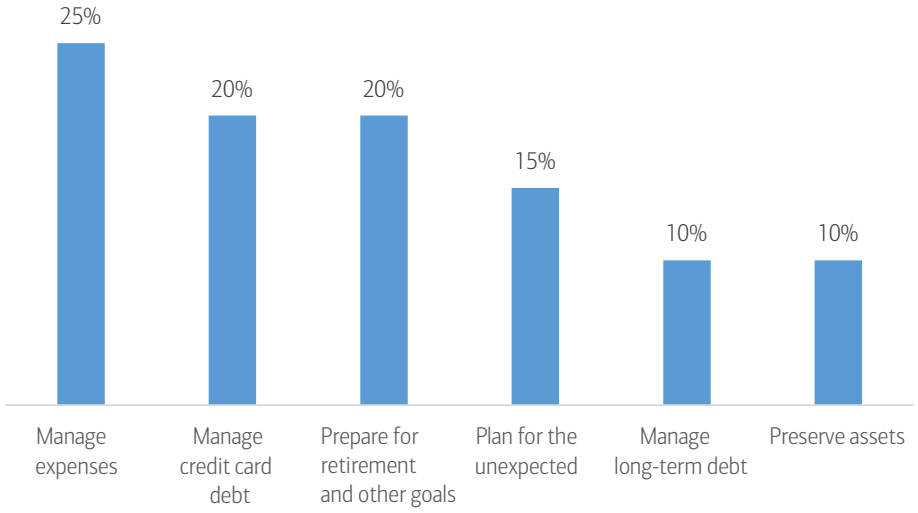
Financial Wellness dimension weighting system

A quantitative objective-driven approach known as the Analytical Hierarchy Process (AHP) was used to derive the weightings for the Financial Wellness dimensions. AHP is a decision-making methodology to assess priorities among different criteria and alternatives.[8]

We selected and administered the AHP with financial advisors who hold the Certified Financial Planner (CFP) designation, or who have at least 10 years of experience and have completed at least 100 client financial plans. There was a cross-section of advisors selected from Merrill Lynch Wealth Management, Bank of America Private Bank, and Merrill Edge serving clients of various wealth levels and demographics. The selected advisors assessed the six dimensions of the Financial Wellness score by ranking and weighting the various dimensions.

Based on the AHP results and analysis, weights were assigned to each of the six Financial Wellness dimensions (Figure 6). The highest weighting, 25%, was assigned to the dimension Managing Expenses, followed by 20% weightings for both Managing Credit Card Debt and Saving and Investing for Personal Goals. Managing Long-Term Debt and Protecting Assets were assigned the lowest weightings, 10%.

Figure 6: Financial Wellness dimension weightings



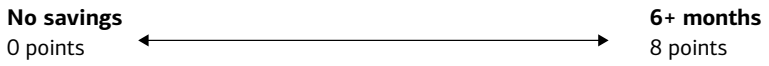
Source: Chief Investment Office and Retirement & Personal Wealth Solutions

[8] Saaty, T.L. (1980). The Analytic Hierarchy Process. McGraw-Hill, New York. For explanation of how the Analytical Hierarchy Process (AHP) was applied, see Methodology Appendix

Personalized Financial Wellness score and guidance

Elements of the Financial Wellness score, guidance and calls to action are personalized based on an individual's age and income range. An example of how an individual's Financial Wellness score varies based on how much emergency savings they have and their income level is shown in Figures 7 and 8.

Figure 7: Financial Wellness score: Emergency Savings Weighting



Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Individuals score between 0 and 8 points depending on how much they have in emergency savings. Adjustments are then made to differentiate scoring based on income. A medium income earner with between one and three months of emergency savings will score 3 points out of a possible 8. In contrast, a low income earner with the same amount of emergency savings will score more points, 4.

Figure 8: Weighting differentiation by income

	1-3 months
Lower Income	4 points
Medium Income	3 points
Higher Income	2 points

Source: Chief Investment Office and Retirement & Personal Wealth Solutions
Household Income: Low: $0-$39,999, Medium: $40,000-$99,999, High: >= $100,000

Elements of the score, guidance and calls to action are based on an individual's age and income

Such personalization acknowledges that it is harder for lower earners to amass the same amount of emergency savings as it is for high earners. Likewise, associated actions and guidance provided (i.e., building emergency savings) are also personalized to account for different challenges people face.

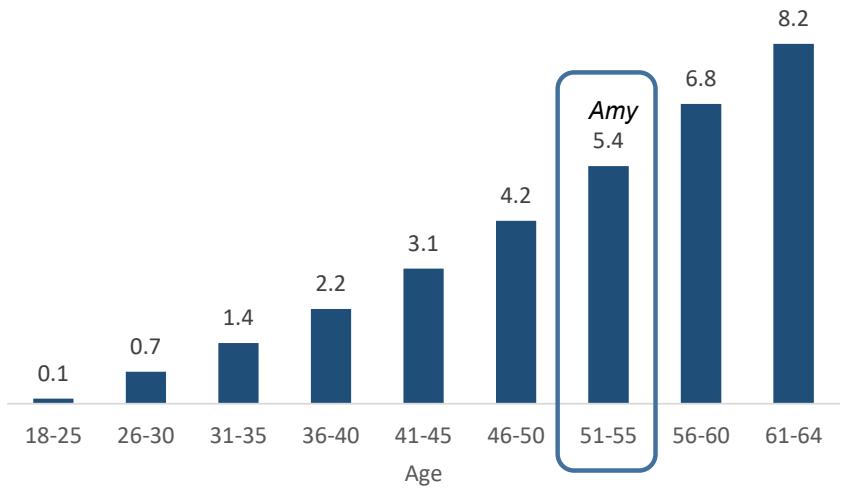
Retirement savings multiples

The Financial Wellness Assessment provides retirement saving multiples and contribution rate suggestions based on various age and income groups. The retirement multiples lead to an estimate of current dollars a person should have saved to be on track for retirement, given their current age and income. The recommendations are derived by leveraging the Chief Investment Office's proprietary Goals-Based Asset Allocation (GBAA) Analytics. GBAA is an analytical model that takes into account an individual's time horizon, target goal amount and desired confidence level to provide allocation and funding status guidance.[9]

Suggested retirement savings multiples for various age groups are in Figure 9. As an individual ages, the retirement saving multiples increase. For example, if Amy is a 52-year-old with gross income of $75,000 (middle income range) she needs to have saved 5.4 times her gross income, or $405,000.

[9] Figure 6 is the Financial Wellness Score assigned based on the following Financial Wellness Assessment question: "Other than retirement savings, how much money does your household have immediately available if there was a financial emergency (loss of income, unplanned expense)"

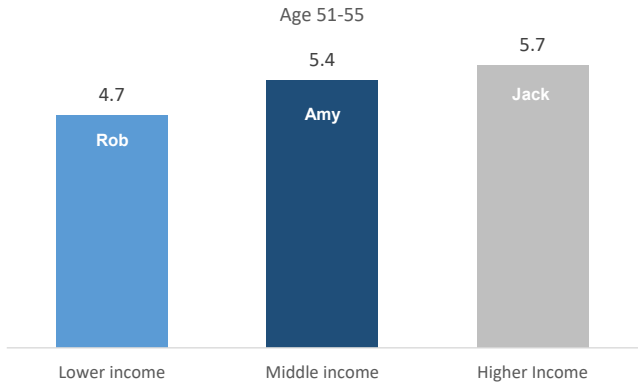
Figure 9: Recommended retirement saving multiples by age (for middle income range)



Note: See Appendix 4 for additional information on underlying assumptions
Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Again, we personalize for income. If Rob is also 52 but has a gross income of $35,000 (lower income range) then he needs to have saved only 4.7 times his gross income, or $164,500. And Jack, also 52, earning $125,000 (highest income bracket) would need 5.7 times his gross income.[10]

Figure 10: Recommended retirement saving multiples differentiated by income



Note: See Appendix 4 for additional information on underlying assumptions
Source: Chief Investment Office and Retirement & Personal Wealth Solutions

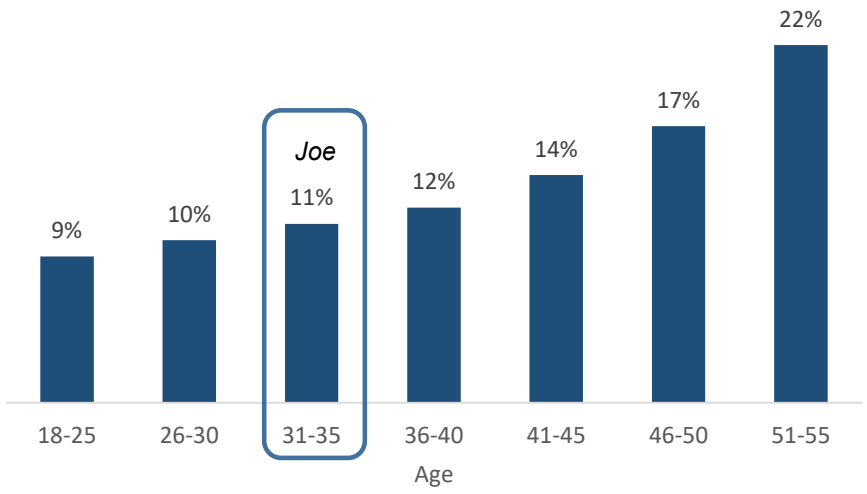
Retirement contribution rates

Suggested retirement contribution rates work in similar fashion. As an individual ages and for higher levels of income, contribution rates increase.

Recommended contribution rates at various ages and income groups are shown in Figure 11. For example, Joe, a 35-year-old earning $75,000 (middle income range), needs to save 11% of his gross income (including employer contributions) to be on track to fund his retirement income needs. This factors in the amount already saved for retirement.

[10] For further details refer too: Wang, H., Suri, A., Laster, D., & Almadi, H. (2011). "Portfolio Selection in Goals-Based Wealth Management." The Journal of Wealth Management, 55-65

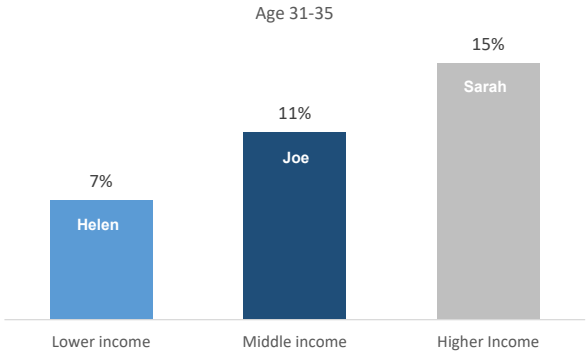
Figure 11: Recommended Retirement Contribution Rates By Age (middle income range)



Note: See Appendix 4 for additional information on underlying assumptions
Source: Chief Investment Office and Retirement & Personal Wealth Solutions

Our income-level personalization shows that if Helen, also age 35, has gross income of $35,000 (lower income range), then she would need to contribute only 7% to stay on track. Sarah, also 35, earns $125,000 (higher income range), so she needs to contribute 15% of gross income to stay on track.

Figure 12: Recommended Retirement Contribution Rates Differentiated By Income



Note: See Appendix 4 for additional information on underlying assumptions
Source: Chief Investment Office and Retirement & Personal Wealth Solutions

CONCLUSION

Many of your employees are worried about their financial future. To navigate these uncertain times, tools and resources are required now more than ever.

We have presented our Financial Wellness Framework that combines sound principles of financial wellness, realistic assumptions, and expert guidance personalized to an individual's situation in order to suggest practical and effective actions.

Our distinctive point of view defines characteristics of a financially well individual, and forms the foundation of our guidance to help improve people's financial lives. The approach we present in this paper is:

- **Actionable:** Helps nurture good financial habits by identifying practical, effective, and prioritized actions an individual can consider, and measures progress while recognizing and reinforcing positive behaviors.
- **Personalized:** Identifies actions based on results of an individual assessment, then personalizes them using key attributes such as age, income, or family status.
- **Expert-driven:** Uses input from experts* and experienced financial advisors to define the elements of our framework and distinct scoring system.
- **Quantitative:** Employs innovative and proprietary analytics, in addition to expert-driven qualitative inputs, to generate a score that provides a holistic snapshot of a person's financial health and behaviors.

We encourage your employees to take the assessment, review the suggested action items and focus on implementing them. The assessment can and should be retaken periodically or when circumstances change to help guide each one of your employees on a journey of improving financial health.

***Please see back page for important disclosure information.**

APPENDIX: METHODOLOGY

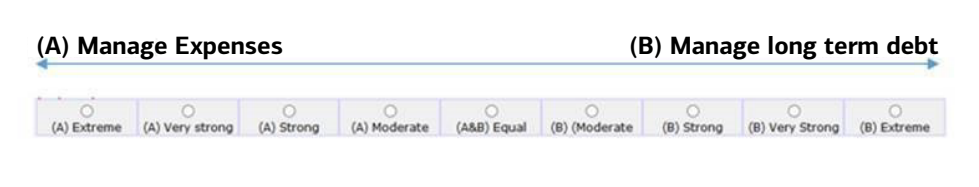
1. Analytical Hierarchy Process (AHP)

AHP is a multiple-criteria decision-making method that:

- derives priorities among criteria and alternatives
- simplifies preference ratings among decision criteria using pair-wise comparisons
- provides measures of judgment consistency

Financial advisors were presented with two dimensions at a time, with a scale comparing the relative importance of them (see Figure 13).

Figure 13: Ranking Financial Wellness dimensions using AHP

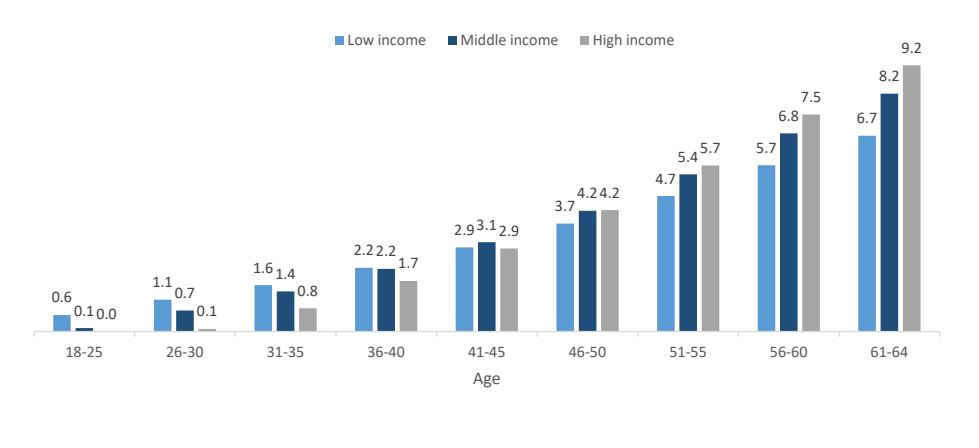


Source: CIO and RPWS

2. Calculating retirement multiples

The retirement saving multiples are calculated with an assumption of 90% confidence of replacing income in retirement. Note, our analysis assumes higher contribution rates for high income earners (14%) versus middle income earners (9%) and low income earners (5%). This results in middle and lower income earners needing to save higher multiples of income for younger ages.

Figure 14: Recommended retirement saving multiples by age and income ranges



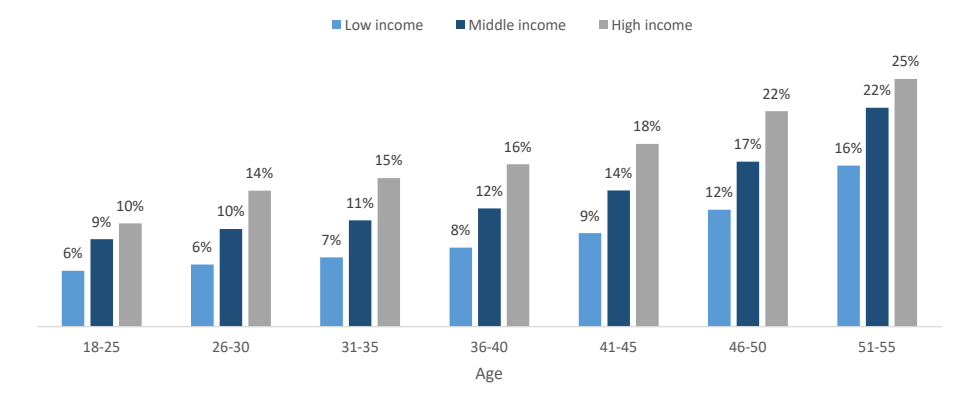
Note: See Appendix 4 for additional information on underlying assumptions

Source: Chief Investment Office and Retirement & Personal Wealth Solutions

3. Calculating retirement contribution rates

Contribution rates are calculated with an assumption of 90% confidence of replacing income in retirement and that the participant is on track to save 75% of retirement income needs (see Appendix 4 for additional assumptions).

Figure 15: Recommended retirement contribution rates by age and income (somewhat underfunded)



Source: Chief Investment Office and Retirement & Personal Wealth Solutions

4. Modeling assumptions

Parameter	Values	Source
Current age	18-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 61-64; 65-69	**RPWS & CIO, Industry review**
Retirement age	65 70	**CIO** **(70 is used when current age > 64)**
Life expectancy	Female: 92 Male: 90	**IRS single life expectancy table + 5 years** (Table I in Appendix B in Publication 590-B at irs.gov/pub/irs-pdf/p590b.pdf (page 46)
CIO Confidence level	90%	**CIO –** applied to the portion of income replaced by retirement savings above Social Security
Income replacement from retirement savings (pre-tax)	Low income 31% Middle income 38% High income 43%	**Total retirement income replacement:** **Low (80%); Middle (71%); High (67%)** Munnell, A, Webb, A and Hou W (2014) "How Much Should People Save? **From Social Security**: **Low (49%); Middle (33%); High (24%)** Social Security Administration: ssa.gov/oact/NOTES/ran9/an2019-9.pdf
Total contribution rate (pre-tax)	Low income 5% Middle income 9% High income 14%	**Personal saving rates (pre-tax):** **Low (3.5%); Middle (6%); High (11%)** federalreserve.gov/econresdata/2016-economic-well-being-of-us-households-in-2015-Income-and-Savings.htm **Employer's Match:** **Low (1.5%); Middle (3%); High (3%)** Most common formula, according to Vanguard's 2018 How America Saves report, is 50% of every dollar an employee contributes, up to 6% of salary.
Appropriately funded/ Somewhat underfunded/ Significantly underfunded	100% /75% / 50%	**CIO –** funding ratio levels applied to the portion of income replaced by retirement savings above Social Security
Strategic Asset Allocation and Capital Market Assumptions	Moderate asset allocation*	**CIO**

* Moderate asset allocation: For investors who are willing to take a moderate level of risk. Primary emphasis is to strike a balance between portfolio stability and portfolio appreciation. Investors using this model should be willing to assume a moderate level of volatility and risk of principal loss. A typical portfolio will primarily include a balance of fixed income and equities

Important Disclosures

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Investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.

All recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be suitable for all investors.

Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets.

Investments have varying degrees of risk. Some of the risks involved with equity securities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Small cap and mid cap companies pose special risks, including possible illiquidity and greater price volatility than funds consisting of larger, more established companies. Bonds are subject to interest rate, inflation and credit risks. Municipal securities can be significantly affected by political changes as well as uncertainties in the municipal market related to taxation, legislative changes, or the rights of municipal security holders. Income from investing in municipal bonds is generally exempt from Federal and state taxes for residents of the issuing state. While the interest income is tax-exempt, any capital gains distributed are taxable to the investor. Income for some investors may be subject to the Federal Alternative Minimum Tax. Investing in lower-grade debt securities ("junk" bonds) may be subject to greater market fluctuations and risk of loss of income and principal than securities in higher rated categories. Treasury bills are less volatile than longer-term fixed income securities and are guaranteed as to timely payment of principal and interest by the U.S. government. Mortgage-backed securities are subject to credit risk and the risk that the mortgages will be prepaid, so that portfolio management may be faced with replenishing the portfolio in a possibly disadvantageous interest rate environment. Investments in foreign securities (including ADRs) involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration. Investments in real estate securities can be subject to fluctuations in the value of the underlying properties, the effect of economic conditions on real estate values, changes in interest rates, and risk related to renting properties, such as rental defaults. There are special risks associated with an investment in commodities, including market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes and the impact of adverse political or financial factors.

Companies may reduce or eliminate dividend payment to shareholders. Historically, dividends make up a large percentage of stocks' total return.

Nonfinancial assets, such as closely-held businesses, real estate, oil, gas and mineral properties, and timber, farm and ranch land, are complex in nature and involve risks including total loss of value. Special risk considerations include natural events (for example, earthquakes or fires), complex tax considerations, and lack of liquidity. Nonfinancial assets are not suitable for all investors. Investments in tangible assets are highly volatile and are speculative. There are special risks associated with an investment in commodities, including market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes, and the impact of adverse political or financial factors.

Alternative investments such as derivatives, hedge funds, private equity funds, and funds of funds can result in higher return potential but also higher loss potential. Changes in economic conditions or other circumstances may adversely affect your investments. Before you invest in alternative investments, you should consider your overall financial situation, how much money you have to invest, your need for liquidity, and your tolerance for risk. Alternative investments are speculative and involve a high degree of risk. An investor could lose all or a substantial amount of his or her investment. There is no secondary market nor is one expected to develop and there may be restrictions on transferring fund investments. Alternative investments may be leveraged and performance may be volatile. Alternative investments have high fees and expenses that reduce returns and are generally subject to less regulation than the public markets. The information provided does not constitute an offer to purchase any security or investment or any other advice.