

New Economics of Retirement

New Solutions Provide a Ray of Hope

Retirement
Survey
& Insights
Report 2025



In our annual [Retirement Survey & Insights Report](#), we are pleased to present findings that may challenge conventional wisdom about retirement preparedness in America. While many acknowledge the looming retirement crisis, the traditional advice to simply save more fails to account for the complex and evolving realities faced by millions of Americans.

This year's report introduces the “new economics of retirement,” as we grapple with the question “does the retirement math still work?” The report illustrates how rising costs and competing financial priorities are fundamentally reshaping the retirement planning landscape and making affordability a central concern for savers nationwide. As these trends persist, we examine the true feasibility of achieving retirement readiness and explore actionable solutions to help individuals and families navigate these shifting dynamics.

At Goldman Sachs Asset Management, our mission remains focused on supporting the next generation of savers—not just with innovative solutions, but with a deeper understanding of the barriers they face and the strategies that can help them realize their retirement goals in this new economic environment.

Sincerely,

Chris Ceder

Senior Retirement Strategist,
Goldman Sachs Asset Management



Methodology and Respondents

We evaluated survey responses from both working and retired Americans to understand the realities of preparing for and living in retirement. Our goal is to learn about the financial obstacles individuals need to overcome and the lessons they can apply. Our Retirement Survey & Insights Report includes key findings that we hope will help plan advisors and plan sponsors better prepare their employees for retirement.

Our findings are from 5,102 individuals surveyed in July 2025 and provide insights from a diverse set of perspectives, including (i) working individuals (3,588 working individuals across generations), and (ii) retired individuals (1,514 retired individuals ages 45-75).

To better understand how people make retirement savings and advice decisions in the face of many competing priorities, we engaged behavioral economics firm, Escalent. Escalent helped develop key questions in our survey to analyze Financial Grit among other behavioral characteristics discussed in this report.

We also partnered with Escalent to survey 250 plan sponsors who work for an organization that offers a 401(k) or 403(b) plan to employees and have at least \$300M in plan assets (44% of our plan sponsor sample had above \$1B in plan assets). The plan sponsors were senior level decision-makers that were responsible for plan design and/or administration or for selecting and/or evaluating plan providers.

Respondents

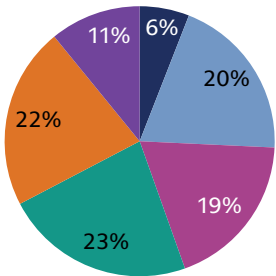
5,102
total respondents

3,588
working individuals

1,514
retired individuals

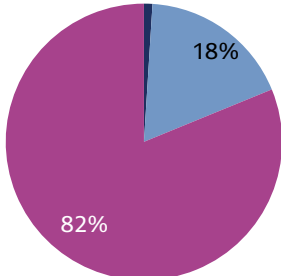
Working Individuals

21-24 25-34 35-44
45-54 55-64 65+



Retired Individuals

45-54 55-64 65+



Source: Goldman Sachs Asset Management. As of July 2025. Views represent those of survey respondents. Results compiled in July 2025. Percentages may not add up to 100% due to rounding.

Introduction

Structural shifts in household finances have reshaped how savers must prepare for retirement. Competing priorities—housing, healthcare, debt service, and care giving—are among the needs consuming a larger share of income, creating a Financial Vortex.

As this year marks our 5th survey edition, we can see how despite these headwinds, market and economic gains are driving optimism of retirement savers. Importantly, confidence is uneven and may be fragile for those who have not yet fully encountered rising and volatile expenses, indicating planning and resilience remain essential in this new world.

Against these headwinds, the report quantifies both the drag from competing priorities and the measurable lift from targeted solutions: earlier and steadier saving, personalized advice, integration of protected lifetime income options, and strengthening individual resilience through Financial Grit.

With illustrative models, we show how these interventions can raise projected replacement rates and improve retirement readiness, especially for paycheck-to-paycheck households, by aligning plan design and policy levers with the new reality of competing financial demands.

Structural Shift Reshaping How We Must Save For Retirement

In the first section, we delve into a significant structural shift reshaping how individuals must approach saving for retirement. This shift is largely driven by competing priorities that now consume a larger percentage of income, leading to profound lifestyle changes and creating substantial headwinds for meeting traditional retirement saving goals.

The “Optimism Gap”

In the second section, we discuss how optimism is growing about retirement preparedness, buoyed by financial market growth and a strong economy. This optimism may, however, be tempered by the reality that many have not yet encountered the full spectrum of competing financial pressures. While confidence is improving, planning and resilience remain essential to overcome the challenges ahead.

Declining Retirement Affordability

In the third section, we raise a key question of whether retirement is becoming unaffordable for Americans living paycheck to paycheck, who often make limited saving progress.

New Solutions Provide a Ray of Hope

Amid mounting retirement headwinds, there's a clear ray of hope: thoughtful plan design and policy innovations can measurably improve outcomes. In this section, we quantify both the drag from competing priorities and the lift from targeted solutions—earlier and more consistent saving, personalized advice and defaults, integration of protected lifetime income/insurance, and strengthening individual resilience through Financial Grit—that together drive materially better retirement readiness.

SECTION 01

Structural Shift Reshaping How We Must Save For Retirement

The retirement savings landscape is being reshaped by the growing savings gap driven by rising costs and the increasing number of competing financial priorities facing individuals and families. Increases in expenses such as healthcare, housing, education, and caregiving have outpaced wage gains since 2000 (the starting period of our analysis), making it more difficult for individuals to allocate sufficient resources toward their retirement savings. As we evaluate the implications, the key question we face is “does the retirement math still work?” Is it possible to save for retirement along with other financial responsibilities?

Additionally, as this trend is ongoing, it will continue to force workers to strike a finely tuned balance between their immediate financial needs and long-term planning.

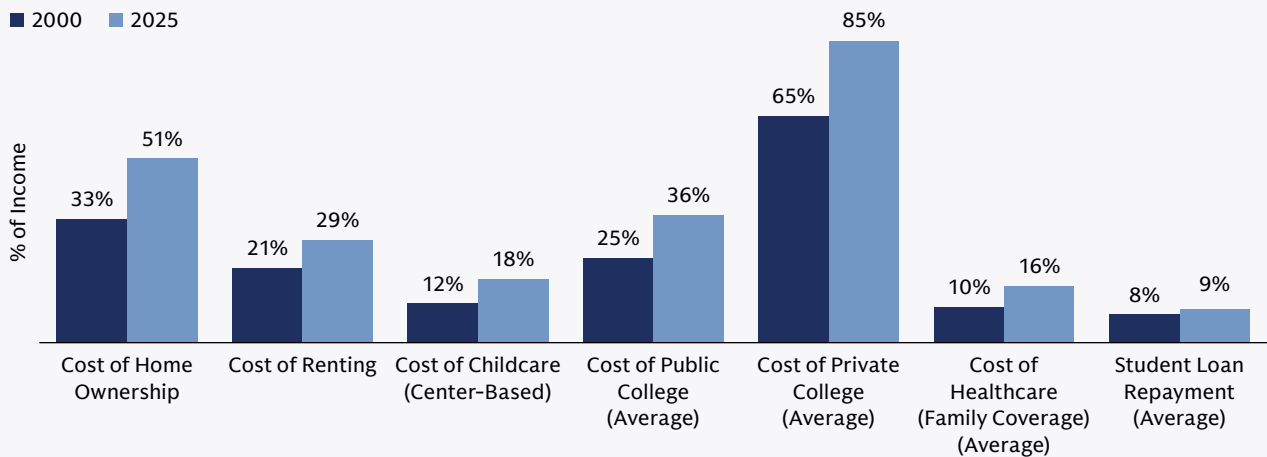
These **New Economics of Retirement** are driving the demand for solutions beyond the conventional advice of simply “save more.” As the data illustrates, saving more may not be an option for many.

Structural Shift in the Costs of Financial Priorities Squeezing Retirement Saving

The cost of basic needs has increased dramatically since 2000, outpacing by far the median wage growth. As the cost of expenses such as housing, childcare, education and healthcare has grown, it has narrowed the gap between income and expenses, leaving little to save for retirement.

As this gap closes, and discretionary income decreases, many wonder how they will be able to save for and afford life in retirement. For those workers who responded to our survey, a significant portion said that these priorities affect their ability to save for retirement.

As a Percentage of Income, Cost of Basic Needs Increased Between 2000 and 2025

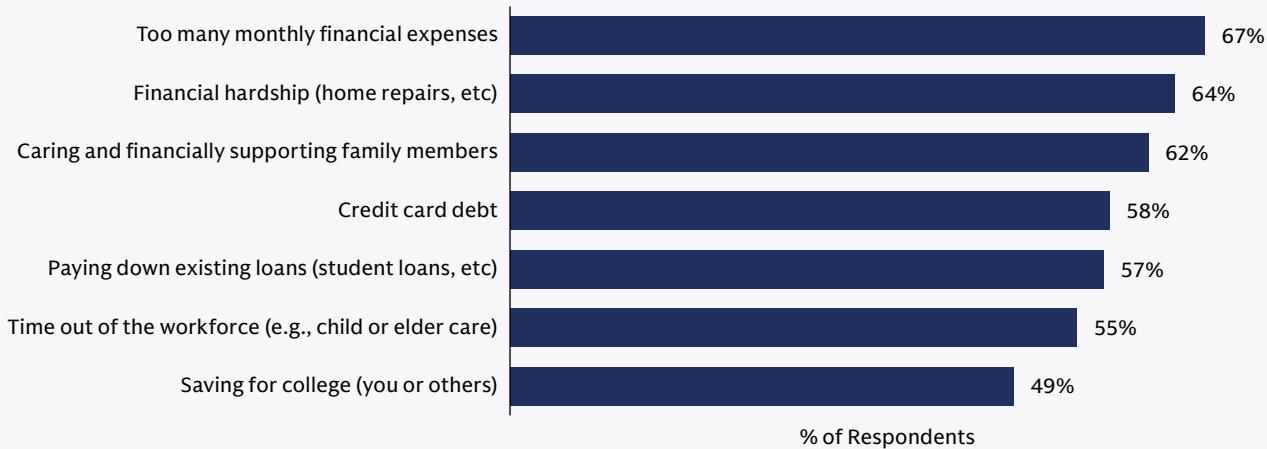


Source: See the disclosures section.

WORKING

How strongly do these affect your ability to save for retirement?

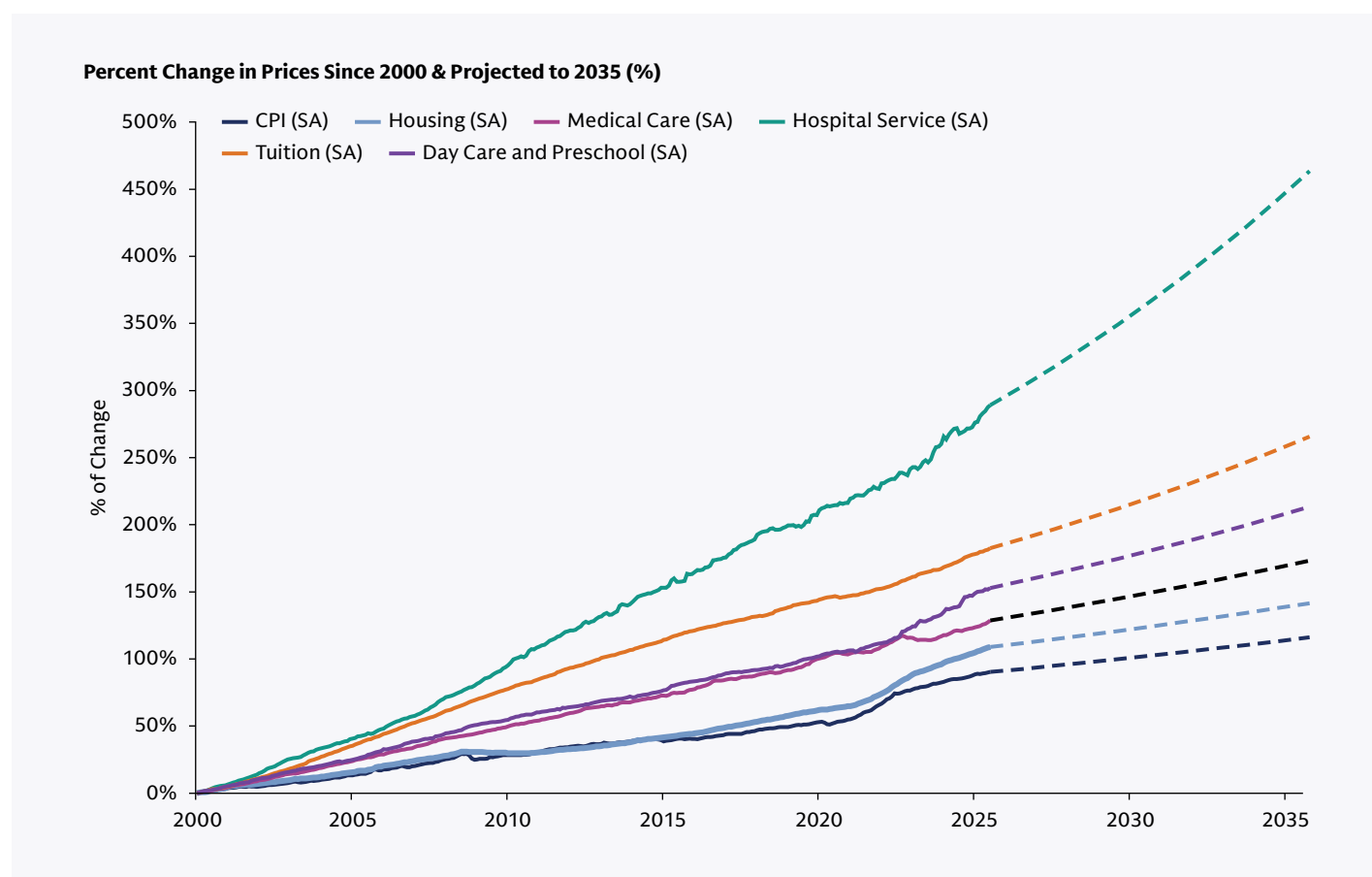
(Includes those who responded extremely, very or moderately.)



As These Trends Persist, the Question is “How Significantly Will They Impact Retirement Savers?”

The chart below shows category-specific inflation for key household priorities—such as college tuition, childcare, and healthcare—demonstrating that these expenses have been rising faster than headline CPI, a commonly used proxy for wage growth. Projecting these trends forward by an additional 10 years underscores that these cost increases are not static; they may, and in fact are likely to, continue outpacing wages, potentially making them even more challenging to manage in the future.

It is important to view this as a persistent, structural trend rather than a temporary flare-up in inflation. How households, employers, and policymakers respond to this trajectory will materially influence the ability of savers to meet long-term goals, including retirement readiness.



Source: U.S. Bureau of Labor Statistics. Data represents seasonally adjusted inflation statistics as of September 2025, latest available. For illustrative purposes only. (SA) means seasonally adjusted.

The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

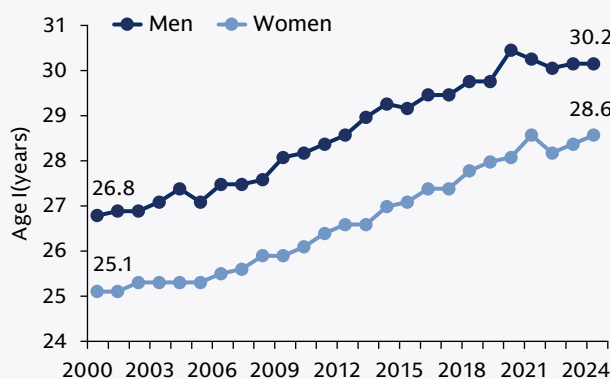
Until Now, the Impact Has Been Wide Ranging

Rising costs across essential areas such as housing, healthcare, and education have contributed to significant shifts in major life milestones for many Americans. The median age of first marriage has increased as young adults delay commitment to focus on financial stability and career advancement. Similarly, the average age of first-time home buyers has risen, with affordability challenges and higher down payment requirements making it harder for younger individuals to enter the housing market.

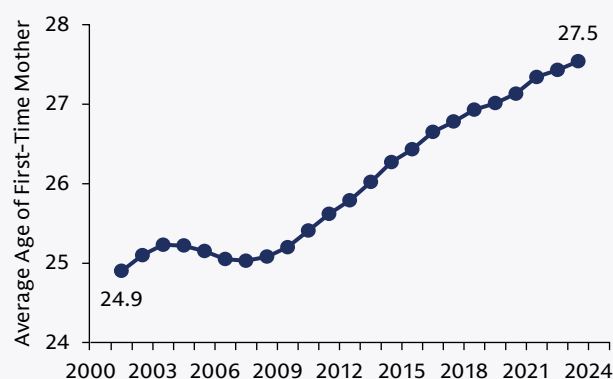
Additionally, the average age for first-time mothers has climbed, as women often postpone starting families due to economic pressures and the desire to establish secure financial foundations before entering motherhood. These trends reflect how escalating expenses are reshaping the timing of key life events and influencing long-term financial planning.

Life Goals are Being Delayed

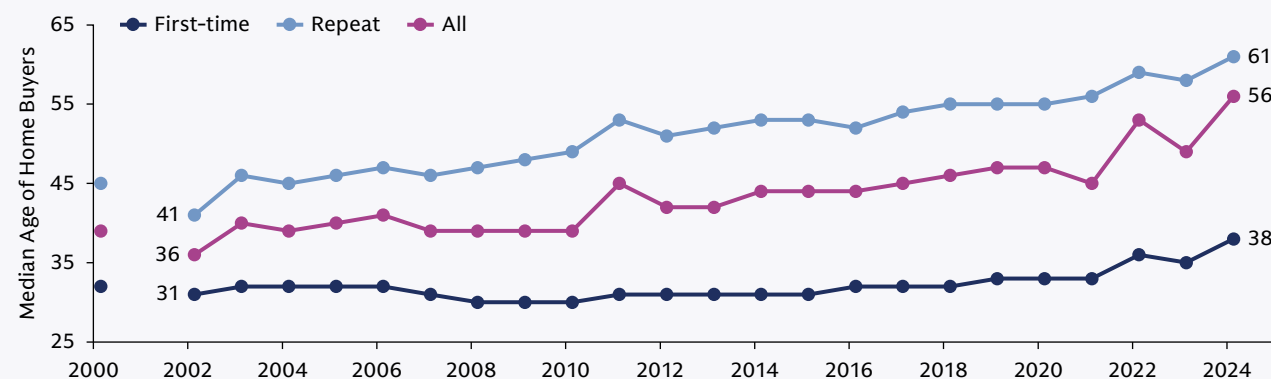
Median Age at First Marriage (2000 to Present)¹



Average Age of First-Time Mother (2001 to 2023)²



Average Age of Home Buyers (2000 to 2024)³



Source:

1. US Census Data: <https://www.census.gov/data/tables/time-series/demo/families/marital.html>, November 2024.

2. Center for Disease Control and Prevention. As of 2023, latest finalized available.

3. National Association of Realtors

Beyond the Saver Phase, Total Cost of Retirement Outpacing Inflation

As savers prepare for retirement, it is important to understand that the target saving level for future generations will be higher than past generations.

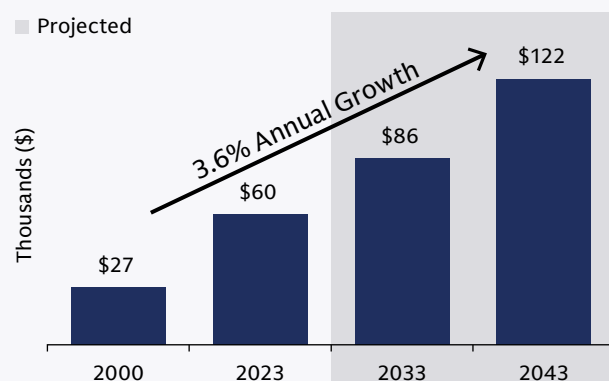
The Bureau of Labor Statistics Consumer Expenditure Survey reports the average expenditures for consumer units across age cohorts. We evaluated the expenditures for those age 65+ over time (from 2000 to 2023) to determine how retirement spending has changed. Notably, the observed expenditure growth over this period implies an annual rate of 3.6% for retirees.

Additionally, people sometimes plan for how long their retirement will be based on the age of older family members (e.g., a parent)

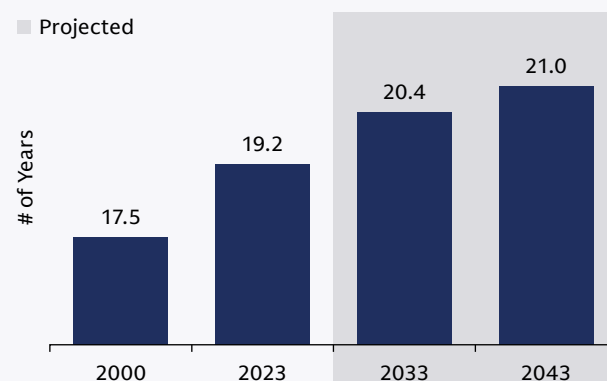
or based on average life expectancy. However, we need to acknowledge that the average life expectancy has changed over time. In 2000, the average unisex life length of retirement was 17.5 years. In 2023, the average is 19.2 and if we project forward, 2033 and 2043, it may be 20.4 and 21, respectively.

It is important to recognize that past retirement benchmarks may not be appropriate for future generations. This forward-looking approach helps savers systematically plan, save, and invest toward their future realities.

**Increase in Average Expenditures¹
(Age 65+ Household/Consumer Unit)**

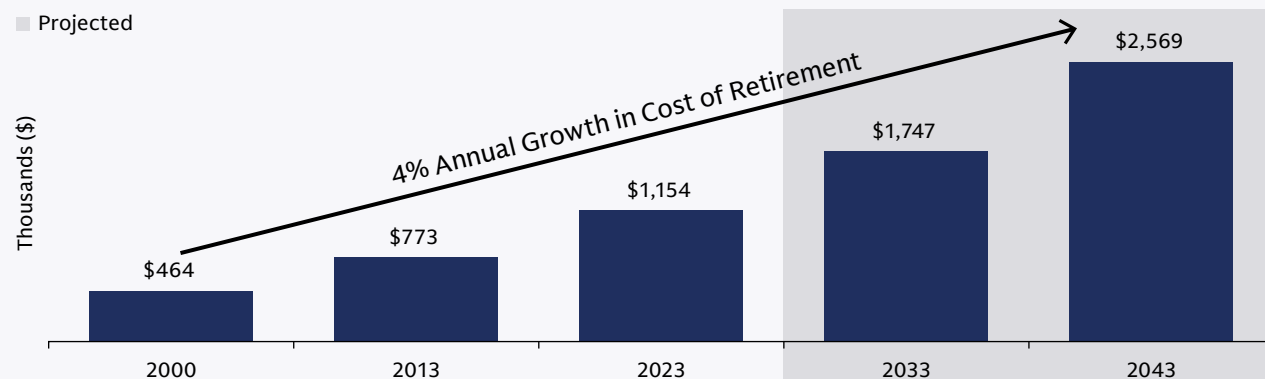


Average Length of Retirement (Unisex)²



Estimated Total Cost of Retirement (Unisex)

Calculated as the average annual expenditures of age 65+ multiplied by the average length of retirement starting at age 65.



1. BLS, Consumer Expenditure Survey, 2000 and 2023.

2. <https://www.ssa.gov/oact/NOTES/ran2/an2024-2.pdf>

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SECTION 02

The “Optimism Gap”

Our survey respondents revealed a generally positive sentiment among current retirement savers regarding their financial preparedness. Over the past five years, we have observed a trend of declining stress levels and increasing confidence in their ability to save for retirement. While the impact of competing financial priorities on saving has generally lessened since 2021, the height of the COVID era, our 2025 survey data indicates a recent uptick in these concerns, likely driven by inflation concerns, impact from tariffs, and market volatility. Despite some market swings in early 2025 that led to slight dips in 401(k) balances, overall account balances have increased year-over-year suggesting that favorable market conditions have contributed to higher account balances and saver optimism.

Similarly, retirees express high satisfaction, with the majority reporting that their retirement income is on track and that they are content with their lifestyle. Importantly, more than 80% of retirees feel they will have enough retirement savings to last their lifetime.

Unfortunately, despite the optimism, the reality of retirement saving is not as strong as the sentiment. While savers report they are on track for retirement, a large portion also believe that they will run out of money during their lifetime. And projected benchmarks of savings-to-income ratios vs. what people have actually saved are falling further behind as savers get older.

Almost 70% of Savers Are Feeling Optimistic, Yet Approximately 60% Expect to Outlive Their Savings

Optimism prevails in this year's survey with a significant portion of workers expressing confidence in their ability to reach their retirement goals, many believing their retirement savings to be on track and feeling fairly comfortable managing their savings.

Despite this prevailing optimism, a notable underlying concern persists regarding the longevity of their savings. A significant challenge in retirement planning is the uncertainty of how long one will live and whether accumulated savings will last.

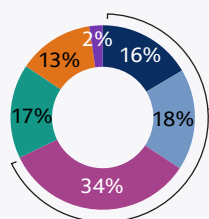
This is reflected in our survey findings where a considerable percentage of respondents, around 58%, express a belief that they will outlive their savings. This fear of outliving assets, often termed longevity risk, is a primary concern for many, highlighting a potential disconnect between current confidence and the long-term sustainability of retirement funds. Even with positive market conditions and increased account balances, the prospect of a shortfall remains a significant worry for a large segment of the working population.

WORKING

Where would you say your retirement savings are at this moment?

Please select one.

- Very ahead of schedule
- Somewhat ahead of schedule
- On track
- Somewhat behind schedule
- Very behind schedule
- Don't know



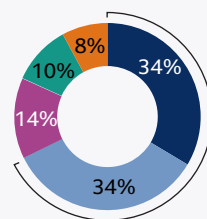
68%

of respondents say they are very ahead, somewhat ahead or on track with retirement savings.

How confident are you that you will be able to meet your retirement goals/needs?

Please select one.

- Very confident
- Somewhat confident
- Neither confident or concerned
- Somewhat concerned
- Very concerned



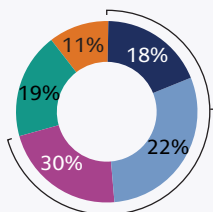
68%

of respondents say they are very confident or somewhat confident they will be able to meet goals.

How much financial anxiety/stress do you feel managing your retirement savings?

Please select one.

- Very stressful
- Somewhat stressful
- Neither comfortable or stressful
- Somewhat comfortable
- Very comfortable, no stress at all

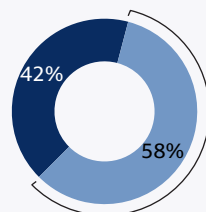


70%

of respondents say they find managing retirement savings very stressful, somewhat stressful or neither comfortable or stressful.

Please assess the likelihood you will either (i) outlive your savings or (ii) your savings will outlive you.

- My savings will outlive me
- I will outlive my savings



58%

of respondents believe they will outlive their savings.

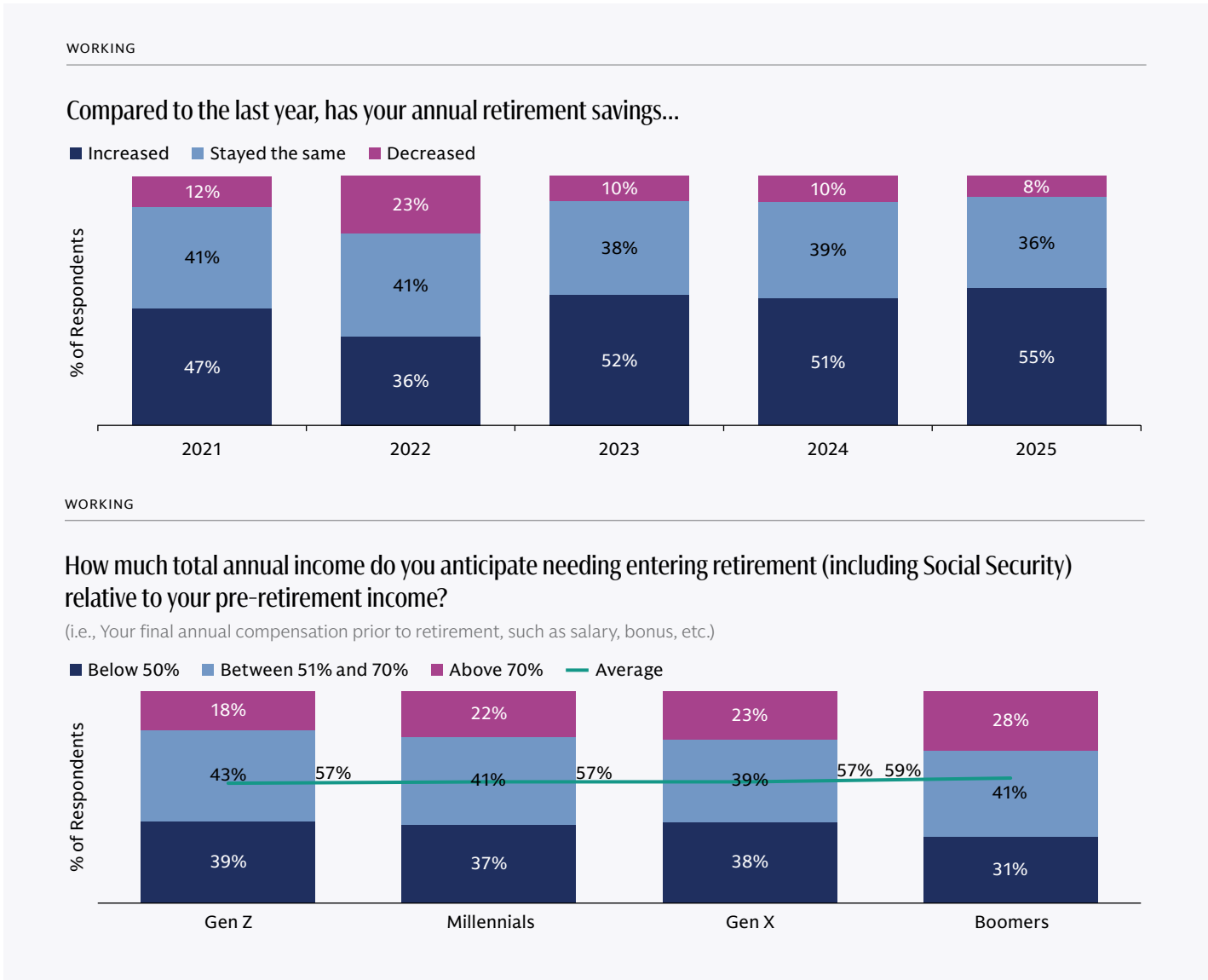
Savings Is Increasing But Income Expectations May Be Too Low

Our five-year trend data shows retirement savers are strengthening contributions despite economic headwinds: 55% increased their retirement savings over the past year while only 8% reduced them, underscoring resilient savings discipline.

However, intended retirement income replacement targets may be too low to sustain current lifestyles. A large share of respondents aim for less than 50% of working income in retirement, and only a minority target more than 70%—a benchmark many financial professionals cite as necessary to maintain one’s standard of living.

Across generational cohorts, the average target hovers near 57%, signaling a potential shortfall risk. Are savers planning for a desired level of income in retirement or rather are they lowering expectations based on various financial challenges?

Together, these findings suggest savers are making progress, but may need to recalibrate income goals, stress-test plans under adverse scenarios, and consider strategies to better align retirement income with desired living standards. These issues illustrate the need for personalized retirement planning, which can help individuals plan with more realistic assumptions.



Percentages may not add up to 100% due to rounding.

Retirees Receive 60% of Pre-Retirement Income; More than 70% are Satisfied with Income

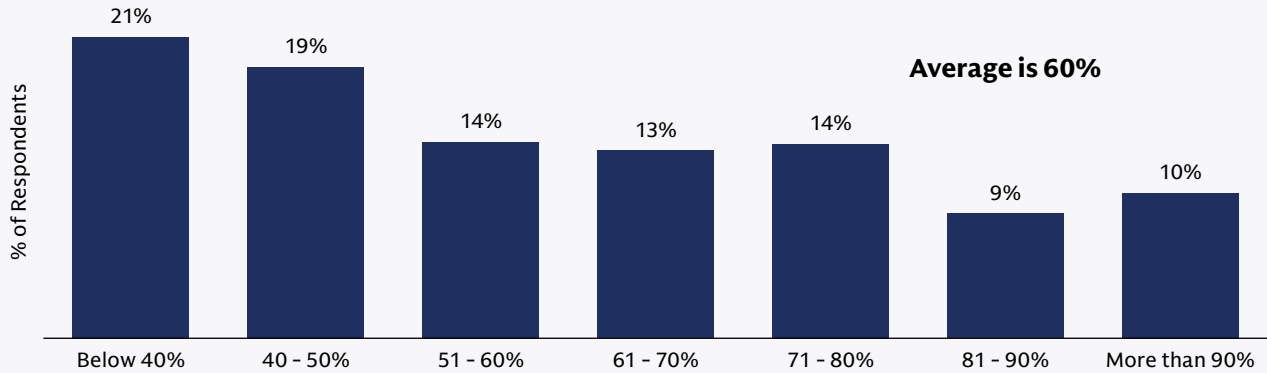
Retired survey respondents report strong financial well-being despite common headwinds. 71% are satisfied with their income levels; on average, retirement income is approximately 60% of pre-retirement wages. Moreover, 82% indicate their retirement lifestyle is the same as or better than before retiring. These retiree-reported outcomes raise an important planning question: What is the appropriate income replacement target?

On one hand, late-career savers often appear behind conventional benchmarks. On the other, retirees themselves express optimism and satisfaction with both income and lifestyle, suggesting that lived experience may diverge from industry expectations and may warrant a more nuanced, personalized replacement-rate framework that reflects spending patterns, taxes, debt, health costs, and housing decisions.

RETIRED

How much total annual income do you receive in retirement (including Social Security) relative to your pre-retirement income?

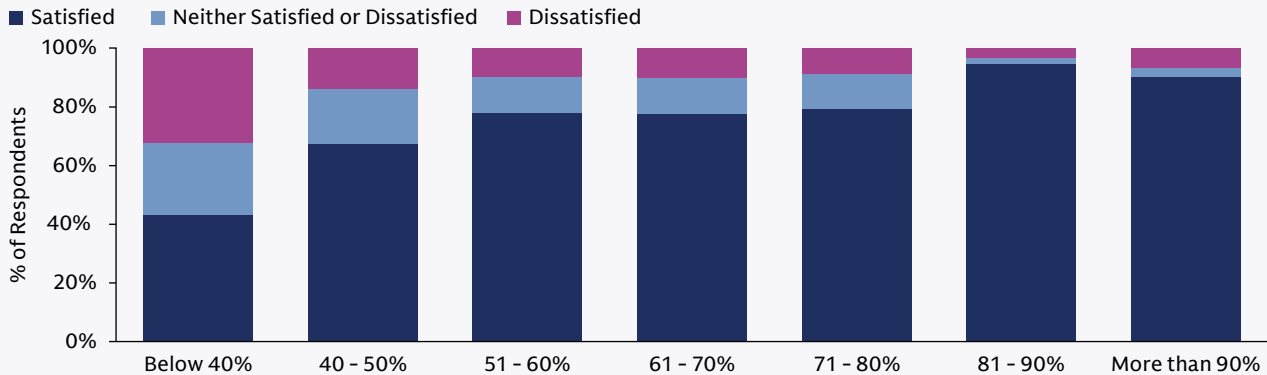
(i.e., Your final annual compensation prior to retirement, such as salary, bonus, etc.)



RETIRED

How satisfied are you with this level of retirement income?

Please select one.



Financial Vortex Remains Top of Mind Despite Modest Decline

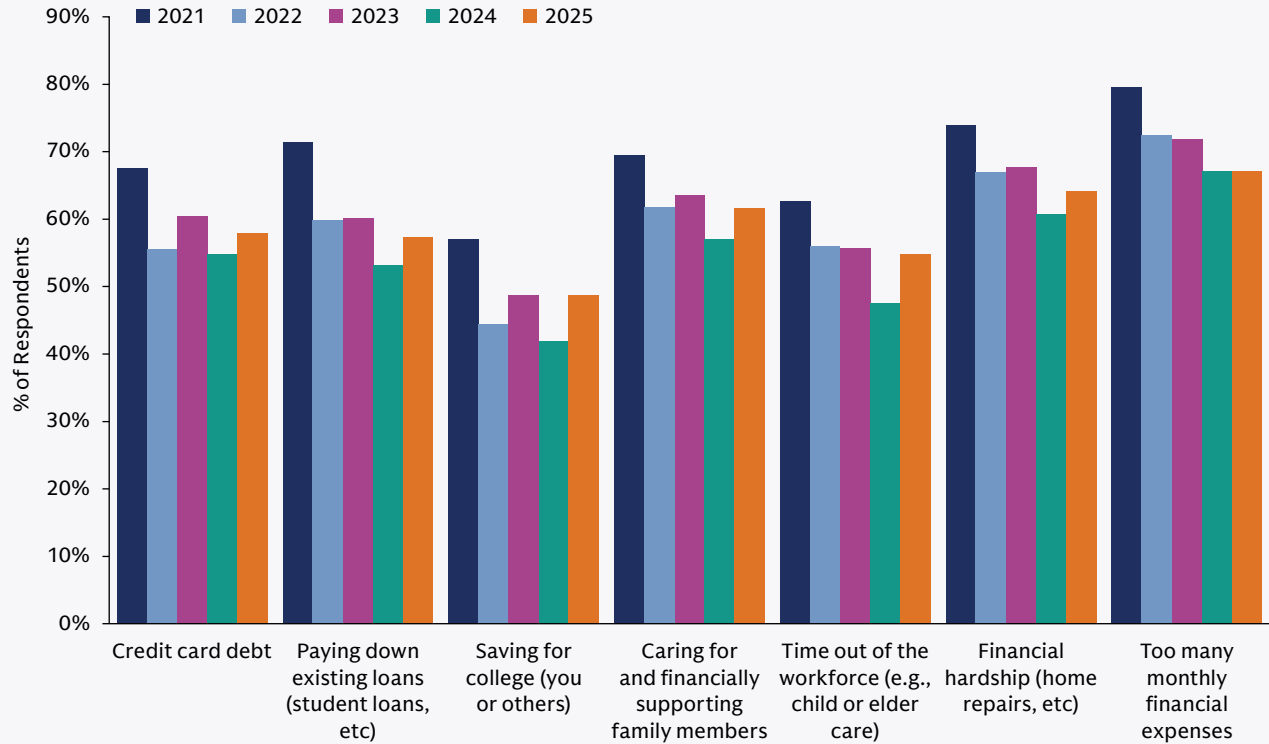
Our analysis of the impact of competing financial priorities on retirement savers over the past five years reveals nuanced trends. Since our initial reporting, commencing from 2021 and the post-COVID era, there has been a marginal decline in the proportion of working respondents indicating that competing priorities had a moderate to extreme impact on their ability to save for retirement. While the 2024 respondents reported the lowest level of impact, the most recent 2025 survey data indicates an uptick in these concerns across all categories illustrating the persistent nature of these financial pressures. Notably, this five-year period has been characterized by significant market volatility, geopolitical uncertainties, fluctuating inflation rates, and overall market growth, all of which contribute to the complex financial landscape individuals navigate.

Furthermore, a distinct generational divide persists in how these competing priorities affect retirement savings. Younger generations, specifically Generation X, Millennials, and Generation Z, consistently report a significantly higher impact from these challenges compared to Baby Boomers. Millennials, for instance, are noted as being the most impacted. This highlights that while economic conditions ebb and flow, the long-term reality of managing competing financial priorities remains a persistent challenge for a substantial segment of the working population, particularly for those earlier in their careers.

WORKING

How strongly do the below affect your ability to save for retirement at the moment?

(Includes those who responded extremely, very, or moderately)



Growth of Competing Priorities and Structural Changes Show Strong Alignment Across Generations

When we segment participant responses by generation, the results closely mirror the escalation in costs and the growing prevalence of financial obligations that now absorb a larger share of household income than in prior periods.

Notably, on average, approximately 30% of working Baby Boomers report that competing priorities materially constrain retirement saving; this share rises to more than 50% for Gen X, exceeds 75% for Millennials, and remains above 70% for Gen Z.

These generational differences underscore the growing headwinds to sustained retirement saving and reinforce the need for plan design innovations outlined later in this report.

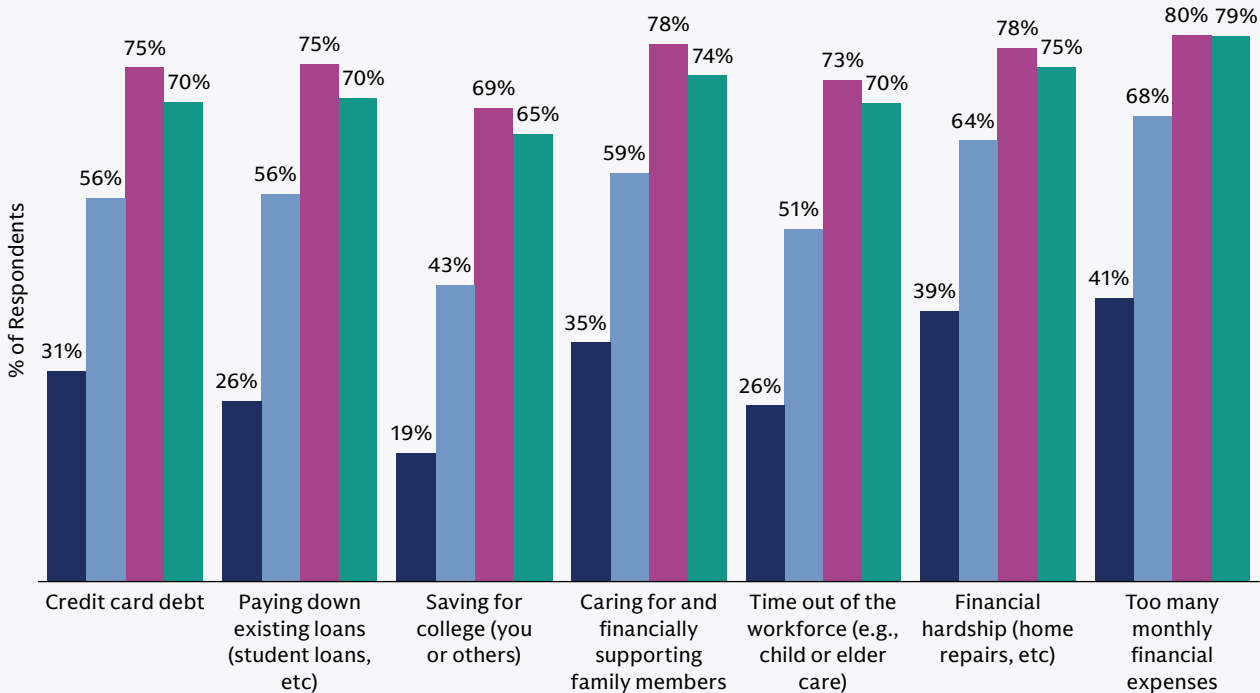
Importantly, plan sponsors are similarly concerned about their employees’ ability to save for retirement despite competing financial priorities. From our inaugural plan sponsor survey in 2025, almost 60% of plan sponsor respondents stated that these competing financial priorities were the top barriers they believe prevent their employees from saving sufficiently for retirement.

WORKING

How strongly do the below affect your ability to save for retirement?

The chart illustrates those who responded extremely, very, or moderately.

■ Baby Boomers ■ Gen X ■ Millennials ■ Gen Z

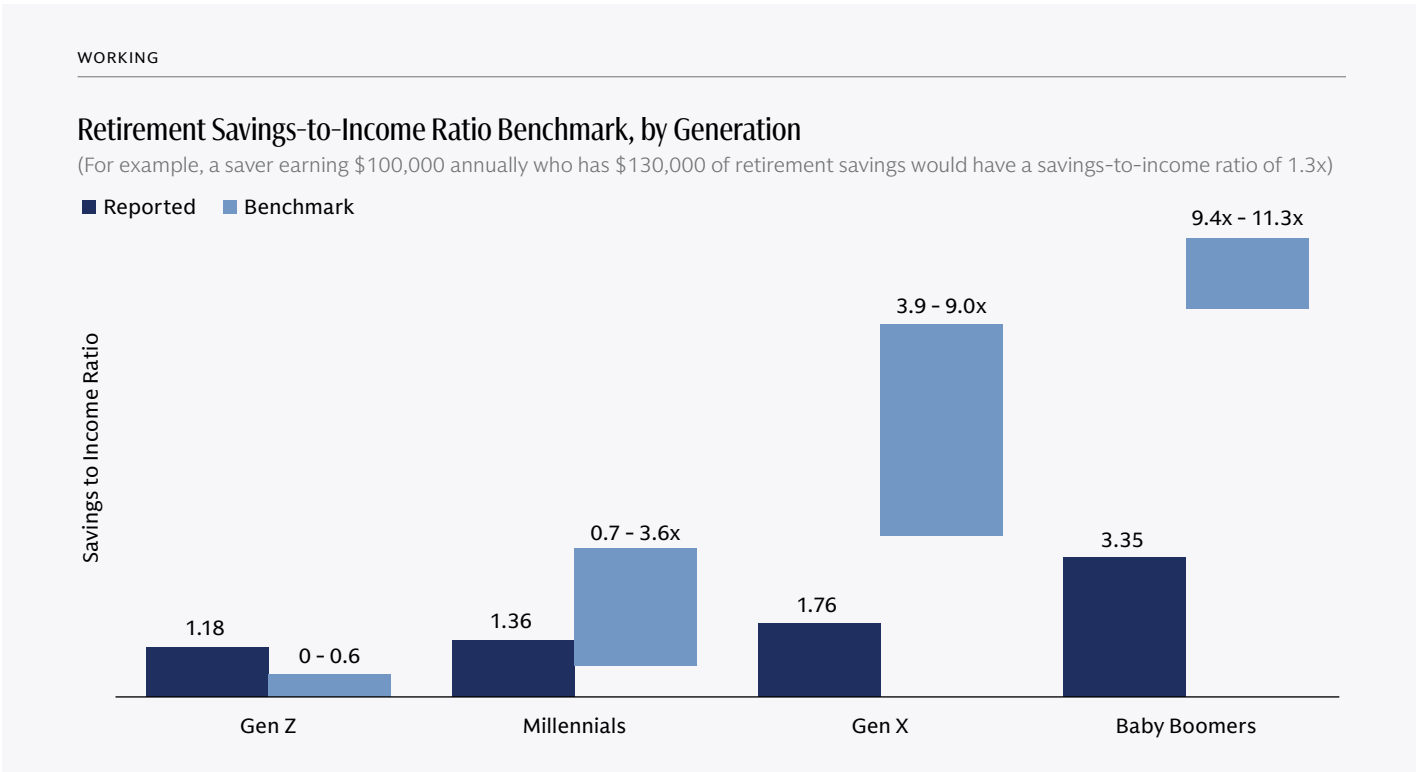


Savings-to-Income Ratio Shows Shortcomings for Gen X and Baby Boomers and Good Progress for Millennials and Gen Z

The retirement savings-to-income ratio serves as an important metric to assess and compare the retirement savings progress across various demographic and financial groups. This ratio is derived from data points collected directly in our survey. Specifically, respondents reported current income and their level of retirement savings. By aggregating these amounts, we can analyze different segments of the population.

For instance, this allows us to observe the distinct levels of savings among individuals relative to their financial status, generation, behavioral profile, or willingness to plan for retirement.

A generational analysis reveals significant disparities in progress toward retirement goals. Gen X and working Baby Boomers are notably behind their respective benchmarks. For Gen X, this often stems from being among the first generation to navigate a retirement system largely without traditional pensions, and many also missed out on early savings opportunities. In contrast, younger generations, including Millennials and Gen Z, are demonstrating solid progress relative to their benchmarks. However, these younger cohorts are still early in their careers and may yet face unique challenges with the Financial Vortex, which could impact their long-term savings trajectory.



Retirement Savings-to-Income Ratio Benchmark: This benchmark is designed to provide an illustrative guide for individuals aiming to achieve sufficient retirement savings, in a ratio of current income to retirement assets saved. It projects the necessary retirement savings amount relative to annual income each year, based on the following key assumptions:

\$50,000 Starting Salary	2.5% Annual Salary Growth	Combined Savings Rate: A total of 13% of salary, comprising both employee and employer contributions.	6% Annual Rate of Return
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This calculation serves as a general benchmark to help individuals assess their progress toward a targeted retirement savings goal.

SECTION 03

Is Retirement Affordability Declining?

To understand the impact of competing priorities on today's retirement savers, our survey asks both working and retired respondents a series of questions to understand their financial situation, the impact of major life events on retirement and how these dynamics have shifted over the generations.

This section raises an important question on whether affordability in retirement is changing as more and more Americans report living paycheck to paycheck. When we look at the impact of competing priorities, not surprisingly, it is the most acute for this population of savers.

We believe this may be an important issue to recognize because as these structural costs continue to evolve, future savings may be even more challenged.

Paycheck to Paycheck Savers Impacted Most by Competing Priorities

We asked survey participants how they would describe their financial situation: 1) Primarily live paycheck to paycheck: I find it tough to make progress on any long-term financial goals, 2) Moderately improve each year: I am able to make some saving progress each year, or 3) Considerably better: I am able to make progress on both short-term and long-term financial goals. Among our working survey respondents, approximately 40% reported that they are currently living paycheck to paycheck, with little wiggle room for savings. These individuals tend to also be lower wage earners with significantly less household investable assets to spare.

While an additional ~40% report that they are able to moderately improve their financial situation each year, they are still not responding that they are able to make meaningful progress on both short-term and long-term financial goals.

With such a large portion of the population struggling to make ends meet, or just to make moderate progress, the impact of competing priorities is more apparent. Approximately 74% of those who report living paycheck to paycheck also say that the competing priorities affect their ability to save for retirement.

WORKING

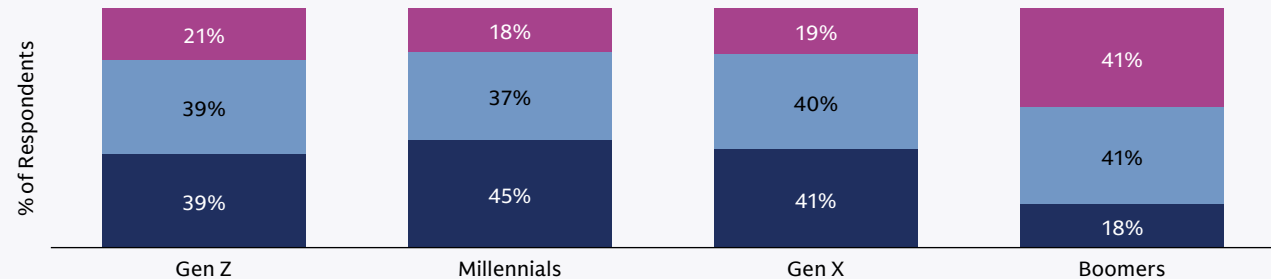
How would you describe your financial situation?

Primarily live paycheck to paycheck: I find it tough to make progress on any long-term financial goals

Moderately improve each year: I am able to make some saving progress each year

Considerably better: I am able to make progress on both short-term and long-term financial goals

■ Primarily live paycheck to paycheck ■ Moderately improve each year ■ Considerably better

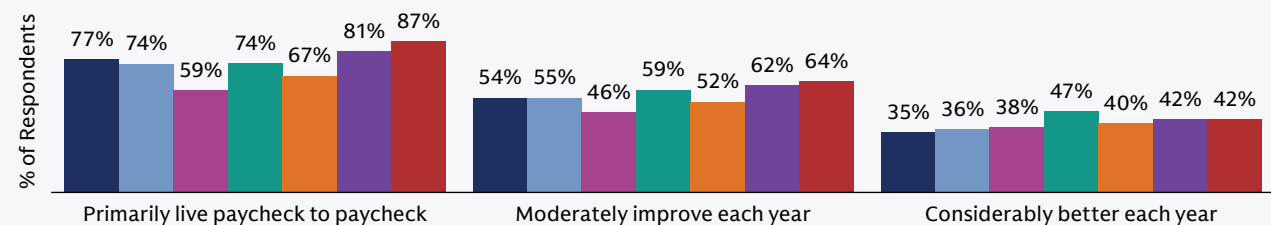


WORKING

How strongly do the below affect your ability to save for retirement?

The chart illustrates those who responded extremely, very or moderately.

■ Credit card debt ■ Paying down existing loans (student loans, etc) ■ Saving for college (you or others)
 ■ Caring and financially supporting family members ■ Time out of the workforce (e.g., child or elder care)
 ■ Financial hardship (home repairs, etc) ■ Too many monthly financial expenses



Percentages may not add up to 100% due to rounding.

Major Life Events Impact Retirement Saving

Major life events—such as having a child, buying a home, funding college, or managing a significant financial hardship—can materially affect retirement saving. These events are especially common among younger cohorts and often overlap. We asked survey participants whether they had experienced any major life events in the past 24 months. Of working respondents, 66% of Gen Z and 59% of Millennials experienced at least one major life event in the past 24 months.

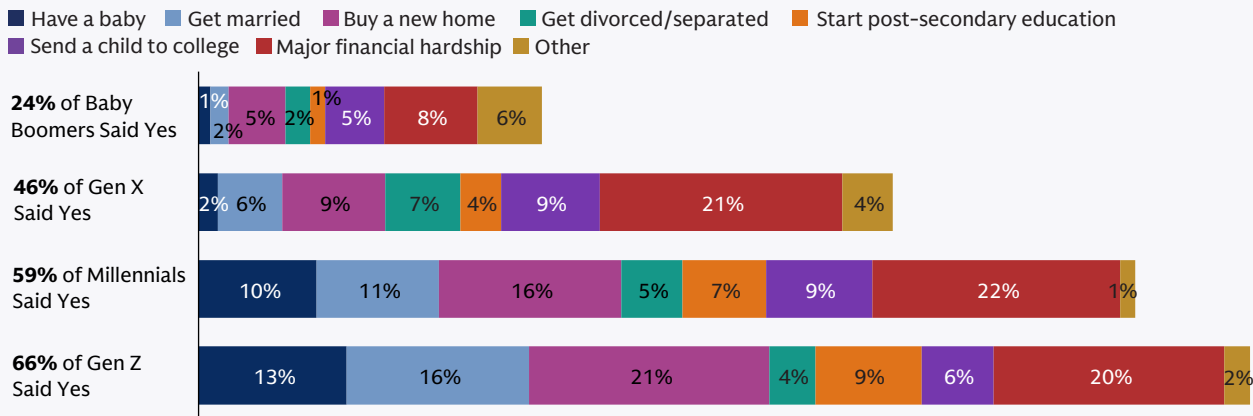
Such events frequently disrupt retirement plans. Among the younger generations, roughly 70% reported pausing their contributions, taking a retirement-plan loan, or delaying retirement as a result. These disruptions can compound over

time and reduce total retirement savings if not managed proactively.

To that end, we used to say that life gets in the way of retirement saving; a better framing is that “life is the way.” Major life events often represent the most meaningful milestones—and, at times, the most challenging trials—of one’s journey. Retirement strategies should account for these disruptions, recognize them as integral to the path, and provide tools and guidance to help individuals navigate toward a well-prepared retirement. This underscores the need to personalize and humanize the retirement experience—an essential evolution in plan design, participant support, and advice.

WORKING

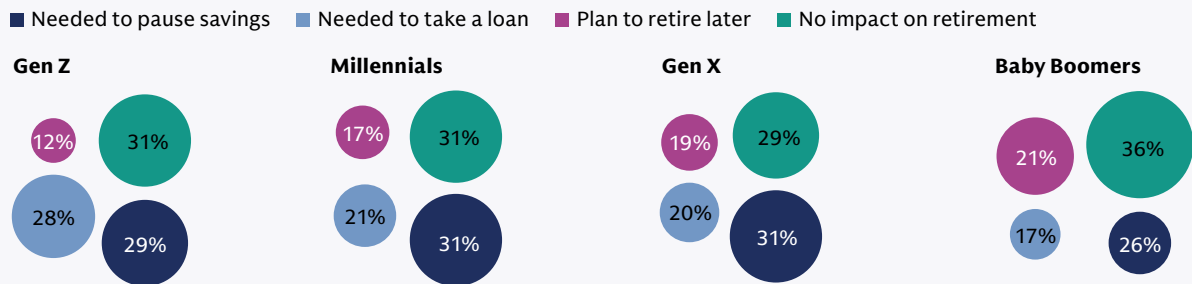
Have you had any major life events in the last 24 months?



WORKING

What impact did this/these events have on your retirement saving?

Only if responded yes to above.



Percentages may not add up to 100% due to rounding.

Strained Financial Situation Not Limited to Lower Earners

According to our working respondents, financial strain is not confined to low-income workers. A meaningful share of higher earners also report living paycheck to paycheck or making only limited progress toward long-term financial goals, underscoring that elevated expenses, debt burdens, and lifestyle inflation can erode savings capacity across the income spectrum.

While the portion of those living paycheck to paycheck declines and is only 16% of respondents within the \$200,000 to \$300,000 income group, above \$300,000, this paycheck to paycheck group jumps to ~40% potentially illustrating the impact of lifestyle creep, the phenomenon of luxuries becoming necessities to certain income cohorts.

Consequently, the impact on retirement saving may be lower contribution rates, increased likelihood of pauses or loans, and delayed retirement timelines. Importantly, these effects may be broadly felt, regardless of income level. These results reinforce the need for plan features and guidance that address both liquidity and long-term accumulation for households at varied earnings levels, including emergency savings integration, automatic features with prudent defaults, and personalized advice that adapts to episodic financial pressures.

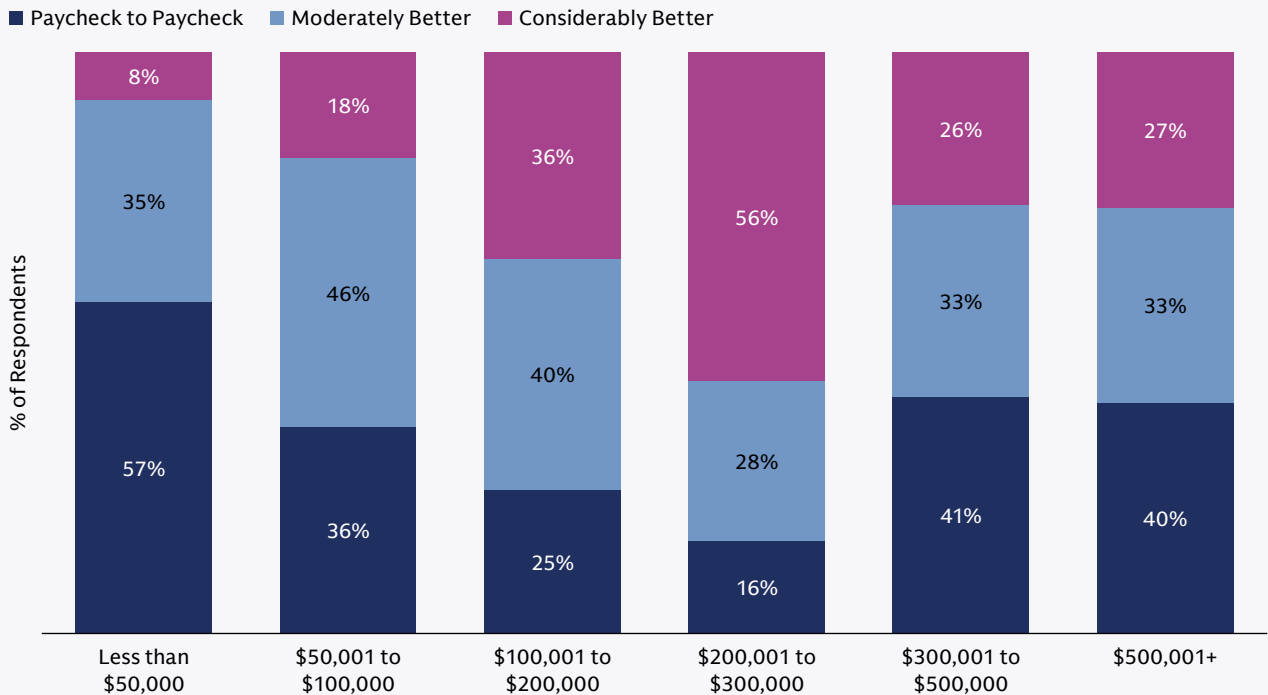
WORKING

How would you describe your financial situation?

Primarily live paycheck to paycheck: I find it tough to make progress on any long-term financial goals

Moderately improve each year: I am able to make some saving progress each year

Considerably better: I am able to make progress on both short-term and long-term financial goals



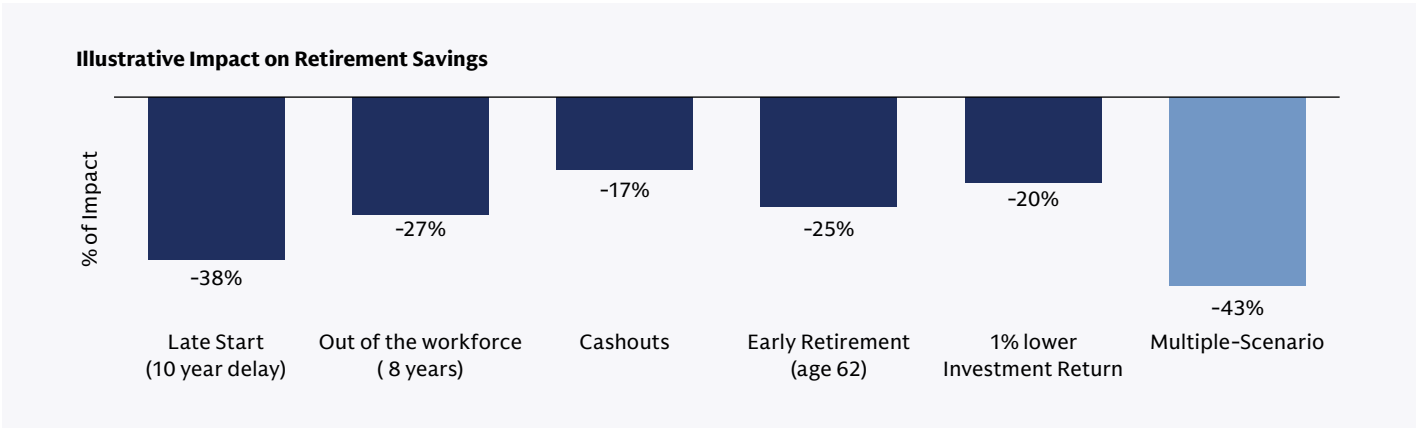
Impact of Financial Vortex May Lead to Retirement Savings Shortfall

The impact of competing priorities can significantly erode retirement savings, and without appropriate interventions, many individuals may find themselves underprepared for retirement. To illustrate the potential consequences, we conducted an analysis comparing the total retirement savings of a typical saver who contributes consistently from age 25 to 65 with those of a saver who encounters various disruptive life events.

Each of these events can have a substantial impact on retirement savings. When we consider that many individuals may experience multiple such events throughout their lives, it becomes clear why even those who strive to save consistently may reach retirement

without adequate financial resources. This analysis underscores the importance of proactive planning and tailored interventions to help mitigate these challenges and ensure better retirement outcomes.

For example, an individual that was out of the workforce for 8 years would see their total retirements savings decline by 27%. As seen on the far right, if an individual experienced several scenarios over the course of their working career that impacted retirement savings, a common occurrence for many, total retirement savings would decline by over 40%.



Base Model Assumptions	Scenario Assumptions
Starting Salary: \$50,000	Late Start: Saving is delayed 10 years and starts at age 35
Annual Salary Growth: 3%	Out of Workforce: Eight years of no contributions and no salary increases between age 30 – 38
Employee Contribution Rate: 8%	Early Career Cashouts: Full savings cash-out at age 26 and 28
Employer Match: 5%	Early Retirement: Retirement begins 4 years early (beginning at age 62)
Portfolio Rate of Return: 6%	Lower Investment Return: 1% lower annual investment performance for entire working career
Saving Duration: 40 years (age 25 to 65)	Multi-Scenario: Saving is delayed 5 years due to student loans, individual is out of work four years for childcare and investment return is 1% lower during remaining of saving period.
Ending Saving Target: 10x income	

These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially. Portfolio Rate of Return is at 6% as this is assumed to be a conservative total return of a diversified portfolio. The chart above is for illustrative purposes only based on certain assumptions, hypothetical information, estimates, projections and statements regarding certain life events of a hypothetical retirement saver. This does not reflect results of any Goldman Sachs product. If any assumptions used do not prove to be true, results may vary substantially. Please refer to page 34 in the end notes for additional disclosure.

Is Retirement Growing Unaffordable?

A key question is whether these trends are abating or instead will persist into the future and impact future long-term savings success.

Our survey shows a clear link between financial stability and retirement progress, measured by the retirement savings-to-income ratio. Those living paycheck to paycheck have the lowest ratios, making even small, steady contributions difficult. Individuals with modest financial improvement post slightly higher ratios, though ongoing pressures limit progress. The highest ratios appear among those doing considerably better financially and consistently increasing savings.

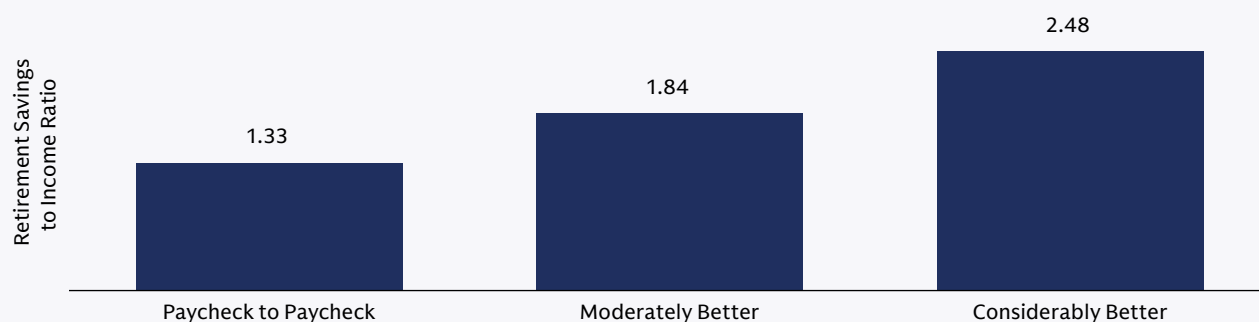
This tiered pattern highlights that retirement readiness is fundamentally tied to current financial health and available discretionary income.

Broader data indicate that the share of U.S. workers living paycheck to paycheck has risen over the past two decades. Among other self-reported surveys, approximately 38% in 2012 and 46% in 2023 reporting living paycheck to paycheck and 64% in 2023 report living paycheck to paycheck some of the time —suggesting mounting strain that could further challenge retirement affordability.

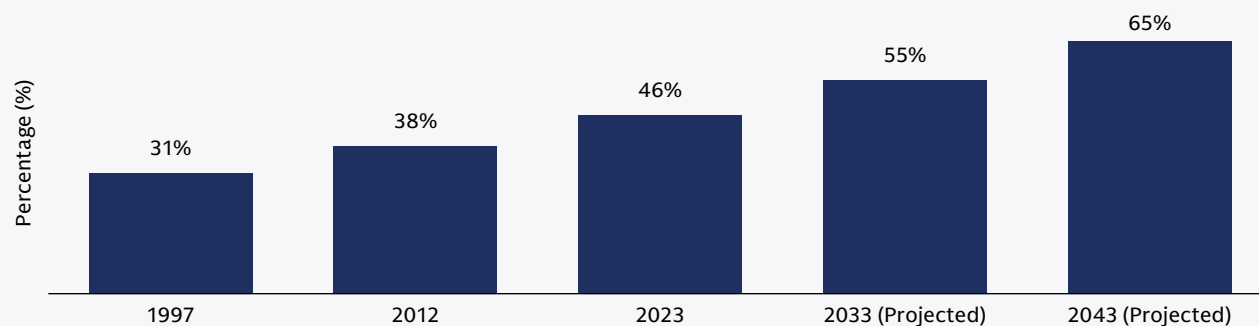
WORKING

Retirement Savings-to-Income Ratio, by Financial Situation

(For example, a saver earning \$100,000 annually who has \$130,000 of retirement savings would have a savings-to-income ratio of 1.3x.)



Percentage of Self-Reported Americans Believed to Be Living Paycheck to Paycheck¹



1. Lending Tree, Paycheck to Paycheck Survey; CFP Board Report, <https://consumerfed.org/wp-content/uploads/2010/08/Studies.CFA-CFPBoardReport7.23.12.pdf>

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SECTION 04

New Solutions Provide a Ray of Hope

Innovative solutions are transforming retirement outcomes for individuals and families by addressing the evolving challenges of today's financial landscape. Integrating private market investments into portfolios can offer new sources of diversification and potential growth, while insurance and asset-based investment strategies help manage longevity and market risks. Personalized financial advice and portfolio management ensure that strategies are tailored to each saver's unique goals and circumstances, increasing the likelihood of success. Early savings remain a critical driver of long-term financial security, and fostering behavioral factors—such as developing Financial Grit—empowers individuals to make consistent, informed decisions.

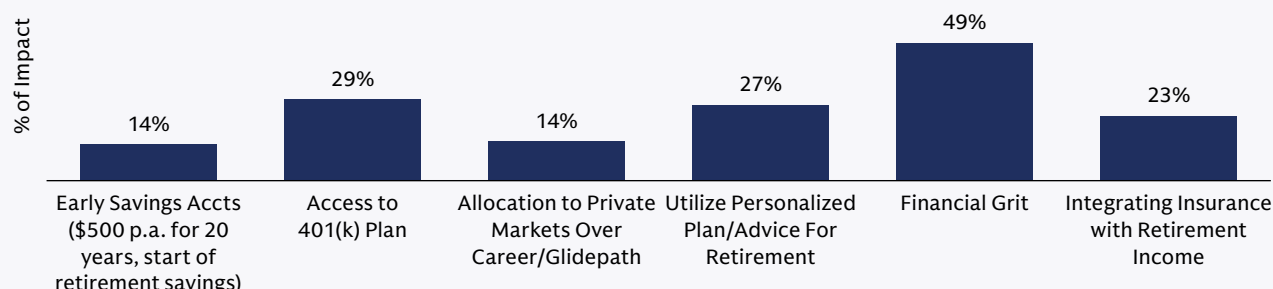
Together, these approaches create a more resilient and adaptable framework for achieving retirement readiness in a rapidly changing environment.

New Solutions Can Improve Retirement Outcomes

We evaluated a range of innovative retirement strategies to understand their impact on final retirement savings. This section introduces the framework and rationale behind each approach—private investments, personalized planning, early-start saving, guaranteed income solutions, and the role of Financial Grit—and then delves into each strategy to show how it can help individuals push back against

financial headwinds, improve retirement readiness, and build resilience for the future. From early savings, to improved portfolio construction, to incorporating personalization and advice, to broader-reaching retirement income strategies, these initiatives taken together can meaningfully strengthen the retirement system available to all savers.

Illustrative Impact on Retirement Savings



Base Model Assumptions	Scenario Assumptions
Early Savings Account	The 14% increase represents the higher retirement savings relative to the saver who starts at age 21. Further described on page 25.
Access to 401(k)	Based on survey results, this stat shows the difference between the retirement savings (per the retirement savings to income ratio) of those who have access to an employer sponsored plan compared to those who do not. Further described on page 26.
Allocation to Private Markets	Based on a modeled glidepath portfolio (illustrated on pg 28) we integrated private equity and private credit and evaluated the risk and return between the portfolio with and without private market investments. The 14% represents the difference in retirement savings based on a 50bps higher return. Further described on pages 28 -29.
Investing with a Personalized Plan	Based on survey results, this stat shows the difference in retirement savings (per the retirement savings-to-income ratio) between those who report saving with a personalized plan and those who do not. Further described on page 30.
High Level of Financial Grit	Based on survey results, this stat shows the difference in retirement savings (per the retirement savings-to-income ratio) between those who are determined to have a high level of Financial Grit compared to those with low levels of Financial Grit. Survey respondents answered a series of questions which allow us to evaluate their Financial Grit as further described on page 27.
Integrating Insurance with Retirement Income	At retirement, 30% of the retirement savings is used to purchase a single premium immediate annuity with a payout rate of 7.1% (unisex) and no inflation adjustment. This annual income is added to 4% withdrawal rate from the remaining account balance. The collective distribution rate is 23% higher than the 4% rule of thumb.

The chart above is for illustrative purposes only based on certain assumptions, hypothetical information, estimates, projections and statements regarding certain life events of a hypothetical retirement saver. This does not reflect results of any Goldman Sachs product. If any assumptions used do not prove to be true, results may vary substantially. Please refer to page 34 in the end notes for additional disclosure.

Early Savings Accounts Can Have Huge Impact on Younger Generations

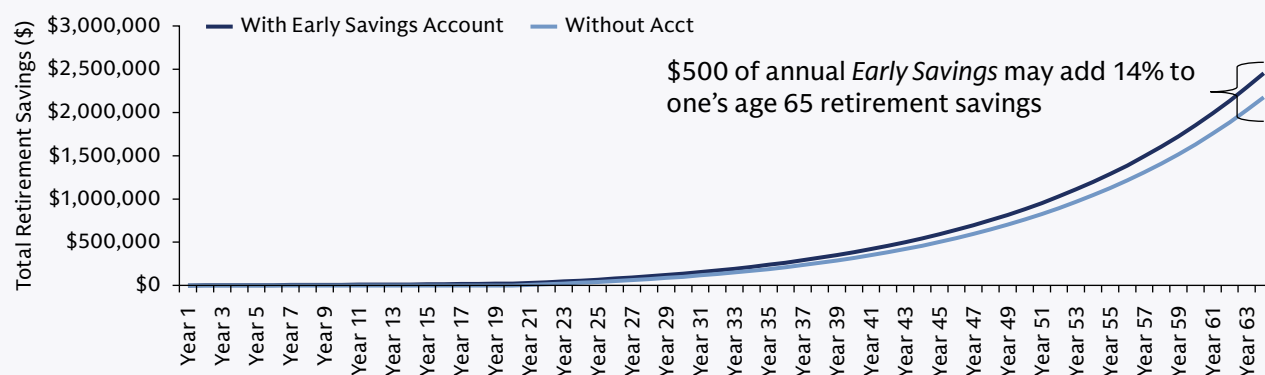
A recent tax law created a new early-savings vehicle (often referred to as “Trump Accounts”) designed to help parents—and in some cases employers—save for a child’s future. If treated as “early retirement savings” and used to seed an individual’s portfolio at career start, the compounding benefit can be substantial. While these accounts can be funded with up to \$5,000 annually, the illustration below assumes contributions of \$500 per year from age 1 through 20. This produces an initial career-start balance of approximately \$21,000 at age 21.

Held through retirement, the early savings compounding translates into roughly \$340,000 of additional wealth by age 65—about 14% more than for an otherwise similar saver who

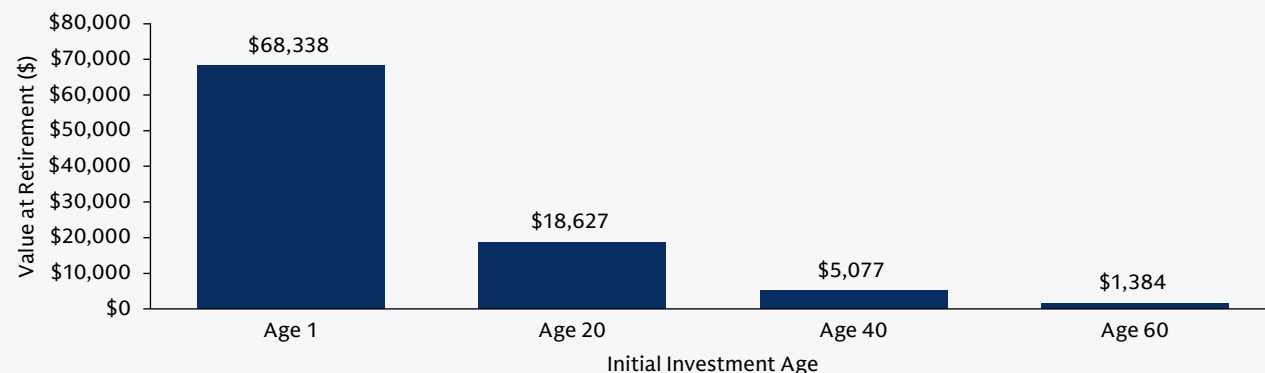
begins at age 21 without the early funding. Notably, if a parent or employer contributes up to the savings maximum (\$5,000 annually), and the individual or employer make no additional contributions during their working years, the individual could still end up with approximately 44% more total savings than a peer who make no early savings but contributes 13% (8% employees, 5% employer) from age 21 to 65, highlighting the extreme power of compounding.

Whether considering a “Trump Account,” a Coverdell Education Savings Account, or a 529 plan, starting early is a powerful catalyst for long-term financial outcomes. As always, time and the power of compounding are the retirement saver’s strongest allies.

Total Accumulated Retirement Savings With and Without Early Savings



Importance of Compounding: Value of \$1000 Invested Until Age 65 With 6.5% Annual Investment Return



Goldman Sachs does not provide accounting, tax or legal advice. Please see additional disclosures at the end of this presentation.

The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

29% Higher Retirement Savings For Those with Access to 401(k) Plan

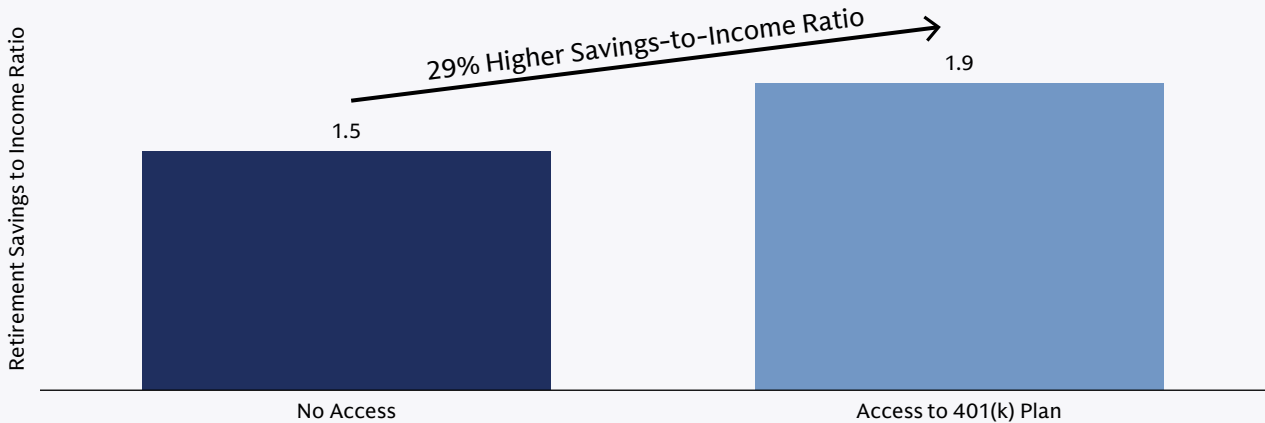
The industry remains appropriately focused on expanding access to 401(k) plans, as the evidence clearly demonstrates the benefits of consistent retirement saving when employees can participate in an employer-sponsored plan. Our survey findings align with this trend: respondents with 401(k) access report higher accumulated saving rates relative to income, greater confidence in their retirement preparedness, and a higher likelihood of being on track for their retirement goals.

Today, an estimated 75% of working Americans have access to an employer-sponsored retirement plan. As new start-up incentives and small-business solutions, like pooled employer plans, address historical barriers—such as administrative complexity and cost—broadening plan availability continues to be a foundational lever for improving retirement outcomes across the workforce. Additionally, many states have now established “auto-IRA” plans for employees who are not eligible for an employer-sponsored retirement plan.

WORKING

Retirement Savings-to-Income Ratio, by Access to 401(k) Plan

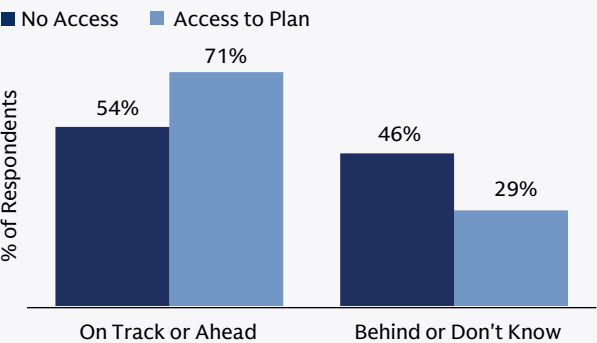
(For example, a saver earning \$100,000 who has retirement savings of \$130,000 would have a savings-to-income ratio of 1.3x).



WORKING

Where would you say your retirement savings are at this moment?

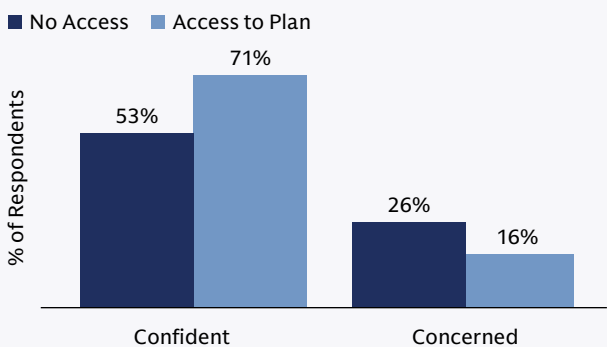
Please select one.



WORKING

How confident are you that you will be able to meet your retirement goals/needs?

Please select one.



Financial Grit Drives Long-Term Retirement Savings Success

Grit reflects the blend of determination, ongoing growth, and resilient optimism that enables people to pursue long-term goals in the face of obstacles.

Financial Grit applies this mindset to retirement money management, reflecting the future orientation and perseverance that people harness to stay committed to their long-term financial goals. As savers juggle an expanding set of competing financial priorities, their ability to remain focused on long-term growth goals, stay confident in their ability to reach retirement and willingness to persevere through periods of hardship, has become increasingly important to drive retirement success. These qualities make up Financial Grit.

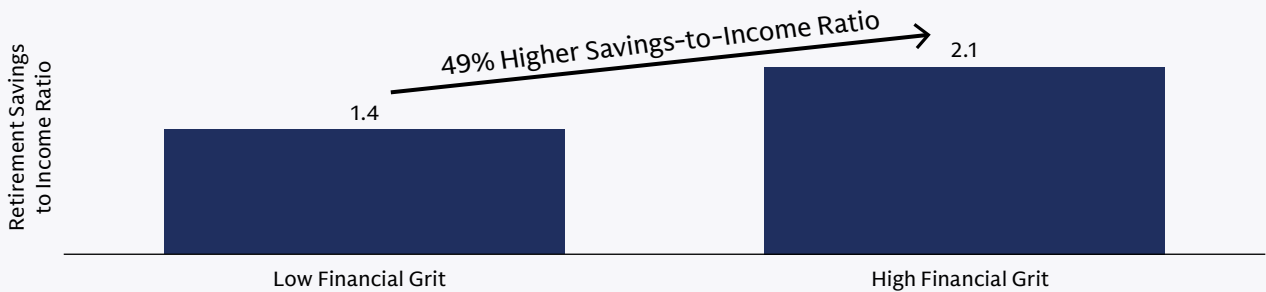
In our 2025 survey, we asked a series of questions to assess Financial Grit, encompassing perseverance, long-term orientation, attention to savings growth, optimism, and resilience. While our analysis of behavioral factors is ongoing, preliminary findings underscore the outsized role that a durable long-term growth mindset can play in retirement outcomes.

Controlling for income, respondents with high Financial Grit hold, on average, 49% more in retirement savings than those with low Financial Grit, highlighting the material impact that mindset and behavior may contribute to accumulation trajectories.

WORKING

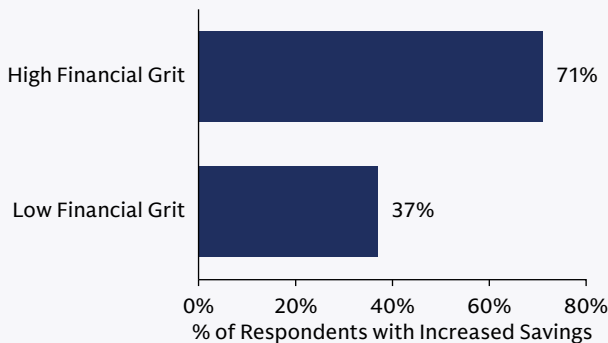
Retirement Savings-to-Income Ratio, By Financial Grit Level

(For example, a saver earning \$100,000 who has retirement savings of \$140,000 would have a savings-to-income ratio of 1.4x.)



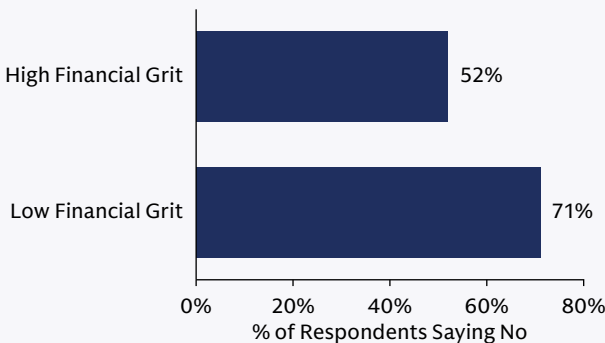
Compared to the last year, has your annual retirement spending / retirement savings increased, decreased or stayed the same?

Answered "Increased Savings."



Do you expect competing priorities to delay your retirement?

Answered "No."

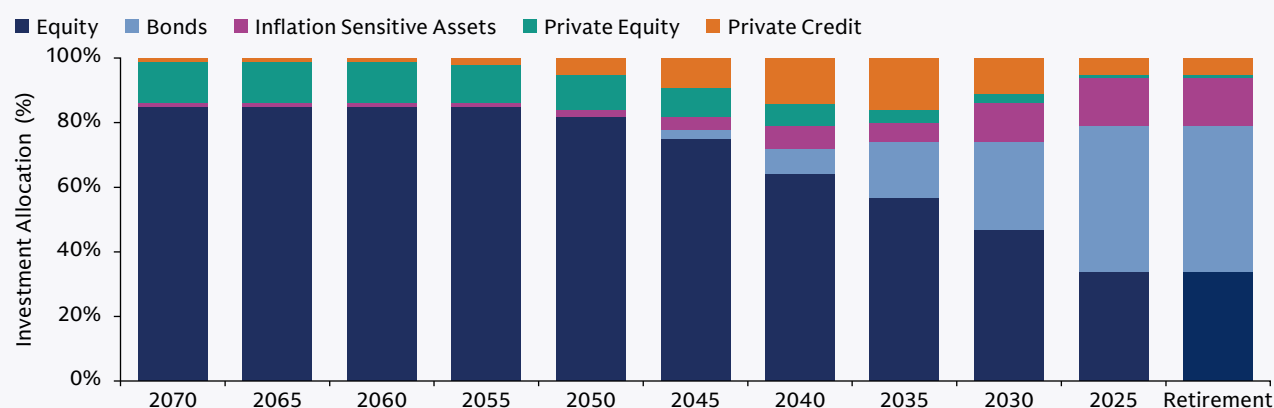


Enhancing Investment Returns Can Improve Retirement Outcomes

Given the headwinds facing savers, portfolio construction should be deliberately tailored to seek higher risk-adjusted returns. Using our proprietary investment models, we evaluated a glidepath that introduces a moderate allocation to private equity and private credit. On average, this approach increased annual expected returns, net of fees, by approximately 49 basis points.

Stronger portfolio performance can make existing savings work harder—helping compound balances faster without relying solely on higher contribution rates. By elevating expected returns within prudent risk bounds, investors may reduce the pressure to save more each year to reach on-track targets, creating more flexibility for households facing competing financial priorities.

Investment Allocation Percentage



2070 2065 2060 2055 2050 2045 2040 2035 2030 2025 Retirement

Allocation with Private Markets

Expected Return (net)	8.1%	8.1%	8.1%	8.1%	8.1%	8.0%	7.8%	7.5%	6.9%	6.1%	6.1%
Expected Volatility	14.7%	14.8%	14.8%	14.7%	14.5%	13.8%	12.4%	11.1%	9.2%	6.8%	6.8%
Expected Sharpe	28.7%	28.7%	28.7%	28.7%	29.2%	30.2%	31.3%	32.5%	34.1%	36.0%	36.3%

Allocation without Private Markets

Expected Return (Net)	7.7%	7.6%	7.6%	7.6%	7.5%	7.4%	7.1%	6.8%	6.4%	5.9%	5.9%
Expected Vol	14.5%	14.4%	14.4%	14.4%	13.8%	12.8%	11.5%	10.1%	8.5%	6.7%	6.5%
Expected Sharpe	28.7%	28.7%	28.7%	28.7%	29.2%	30.2%	31.3%	32.5%	34.1%	36.0%	36.3%

Difference

Expected Return (bps)	+44	+51	+51	+47	+55	+65	+71	+70	+50	+17	+20
Expected Vol (bps)	+28	+40	+40	+28	+62	+97	+94	+9	+69	+13	+24
Expected Sharpe	+0.025	+0.026	+0.026	+0.026	+0.026	+0.025	+0.034	+0.035	+0.029	+0.019	+0.016

The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

Alpha and tracking error assumptions reflect Multi-Asset Solutions' estimates for above-average active managers and are based on a historical study of the net-of-fee results of active management. Strategic long-term assumptions are subject to high levels of uncertainty regarding future economic and market factors that may affect future performance. They are hypothetical indications of a broad range of possible returns. All numbers reflect Multi-Asset Solutions' strategic assumptions. Please see additional disclosures.

Improved Outcomes in Retirement Balance at Age 65

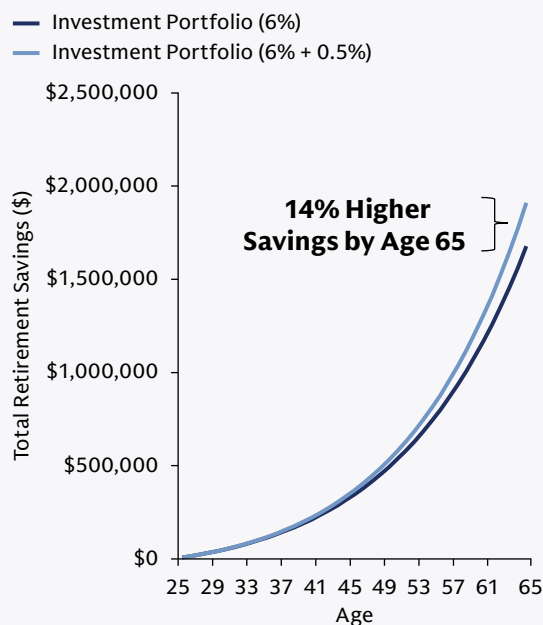
Importantly, a sustained 50-basis-point return uplift over a full career can translate into roughly a 14% increase in the retirement balance at age 65, all else being equal.

Based on findings from our plan sponsor survey, many plan sponsors are considering how they might include private investments in retirement plans. When asked what investment menu changes they are considering for the next 12 months, a top plan design change is reviewing private markets strategies. Specifically, 42% of plan sponsors said they are considering integrating private market strategies into their plan investment lineup.

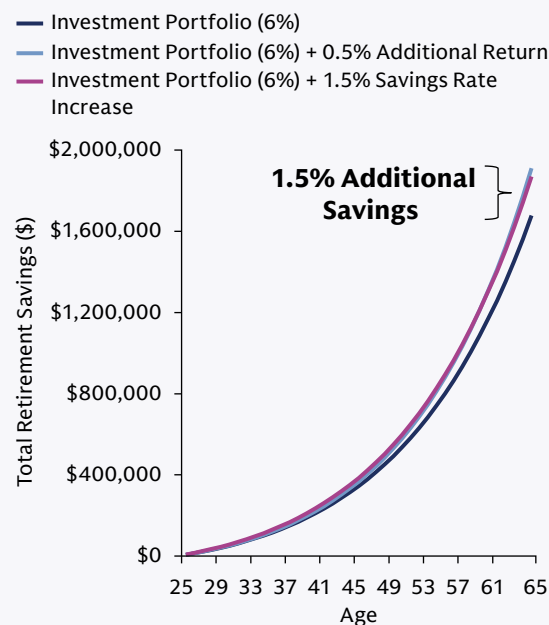
Additionally, when asked about what investment menu innovations plan sponsors wanted the industry to focus on, 54% stated that would like to see about adding private credit or private equity to a diversified multi-asset investment option.

Lastly, when asked about the ways their organization would consider integrating these private strategies into their investment menu, 45% of sponsors stated that they would consider adding them into their target date funds and 53% of sponsors said they would consider adding them to a personalized managed account.

Impact of 0.5% of Annual Investment Return



Impact of Additional 1.5% of Savings Matches 0.5% of Investment Return



Source: Goldman Sachs Asset Management, 2025. For illustrative purposes only and offered solely as a reference. This does not refer to any actual investments. This material is not intended to be used as a general guide to investing, or as a source of any specific investment recommendations, and makes no implied or express recommendations concerning the manner in which any client's account should or would be handled.

Diversification does not protect an investor from market risk and does not ensure a profit.

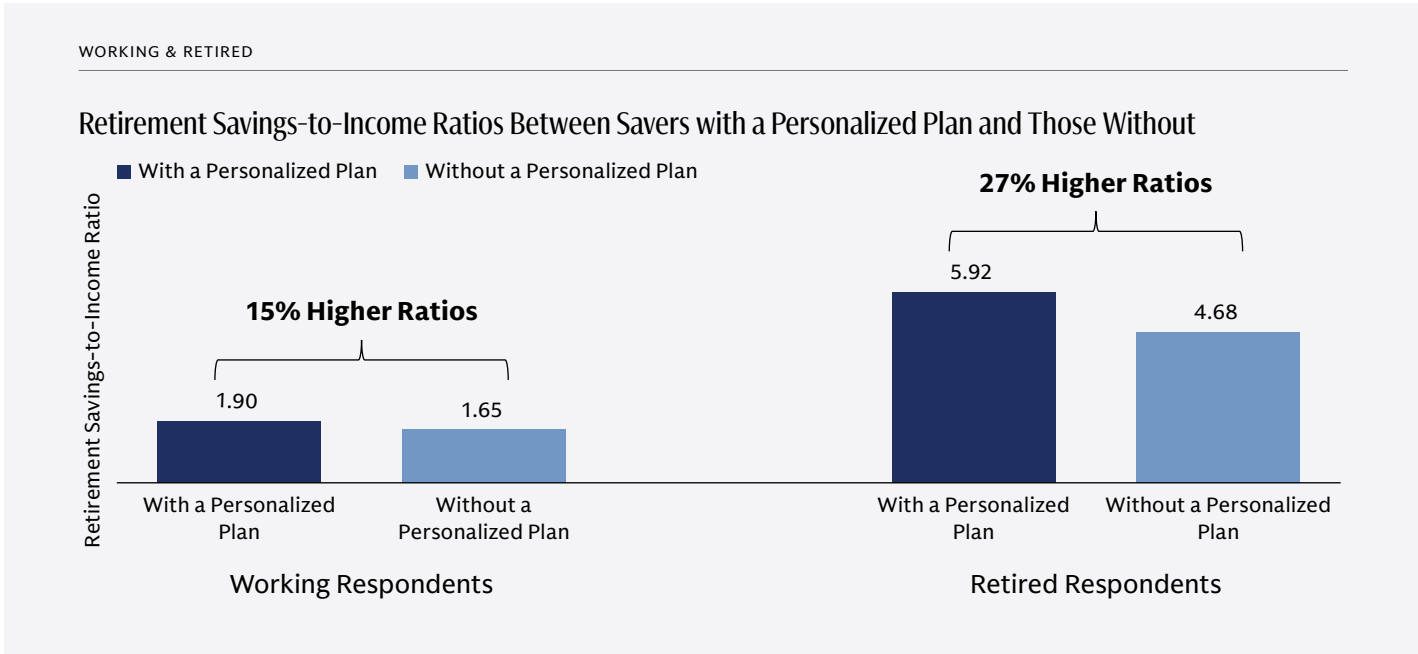
Retirees Who Saved with a Personalized Plan For Retirement Have 27% Higher Savings-to-Income Ratio

Individuals with a personalized retirement plan report materially higher savings-to-income ratios than those without a plan, among both workers and retirees. This indicates that, at comparable income levels, planners are able to save and retain more wealth.

Specifically, working respondents with a personalized plan show a 15% higher savings-to-income ratio, while retired respondents with a plan show a 27% higher ratio.

Confidence mirrors these outcomes: 83% of working respondents with a plan believe they are on track for retirement, compared with just 41% of those without a plan.

Plan sponsors also see the importance of offering personalized retirement planning to their employees: 75% of sponsors responded that they currently offer these services within their retirement plans.



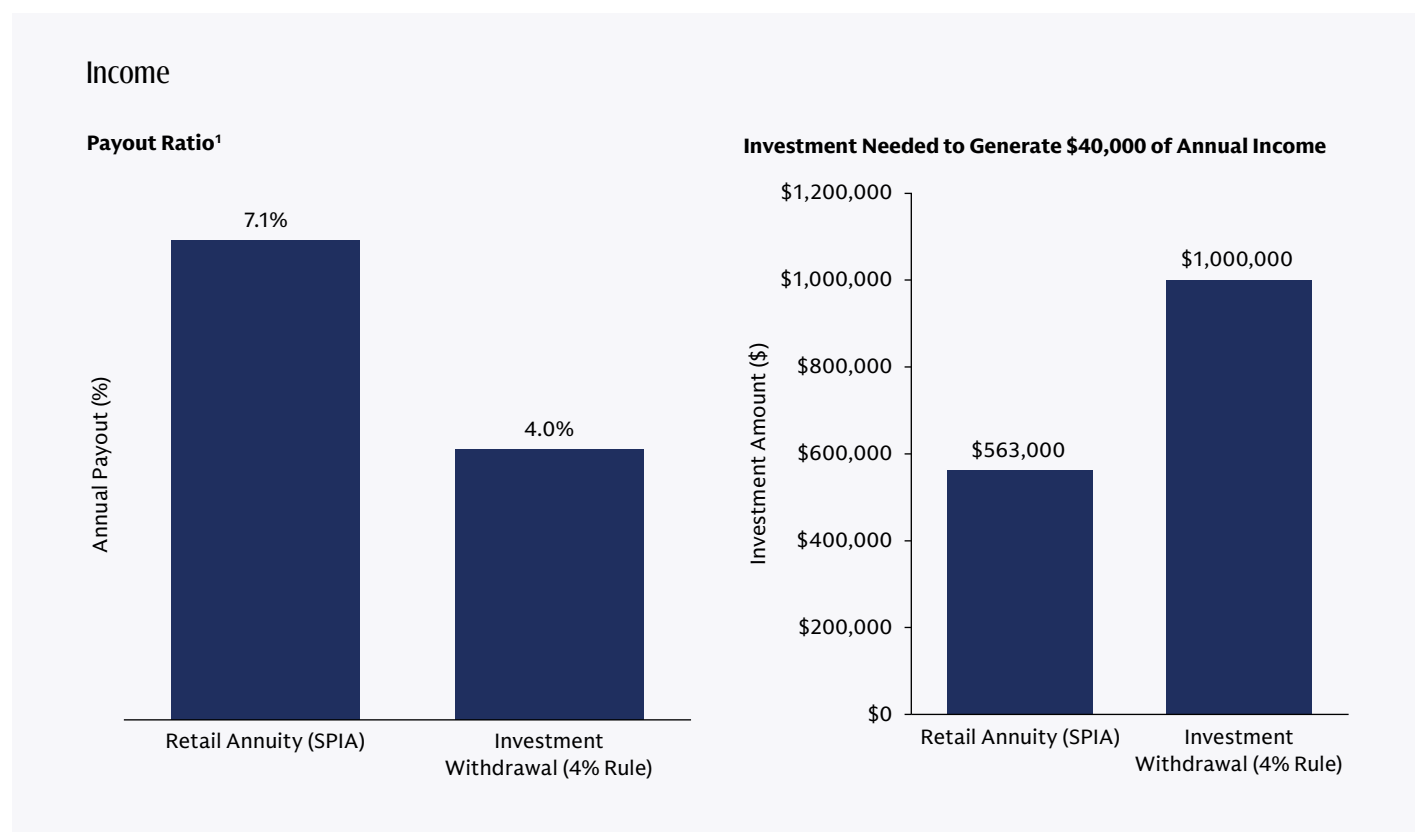
Data Comparing Those with a Personalized Plan vs. Those without a Personalized Plan

	ARE ON TRACK OR BETTER	83% with a plan vs. 41% without a plan
	INCREASED SAVINGS	67% with a plan vs. 35% without a plan
	ENGAGED (REVIEWED SAVINGS IN PAST 12 MONTHS)	85% with a plan vs. 52% without a plan
	FEEL ABLE TO REACH RETIREMENT	85% with a plan vs. 37% without a plan

Retirement Income Sources Matter: Blending Insurance and Investment Solutions Can Increase Retirement Income Levels

Retirement income sources play a critical role in how retirees convert accumulated savings into sustainable cash flow. Insurance-based solutions, such as annuities, provide guaranteed income and often deliver relatively higher payout rates than typical systematic withdrawal strategies. For example, a single premium immediate annuity can offer an annual payout around 7.1%, notably higher than the 4% withdrawal rate commonly used for investment portfolios.

Each income source carries trade-offs—liquidity, longevity protection, flexibility, and inflation sensitivity—but a key consideration is that dedicating a portion of savings to guaranteed-income products can raise the overall income level produced by a portfolio while reducing sequence-of-returns risk. Building an income portfolio that considers different sources can elevate the level of income generated in retirement.



By blending income sources (30% annuity paying out 7.1% for life and 70% investment income applying the 4% rule), retirees may be able to generate more income from the same pool of savings:

$$30\% (7.1\%) + 70\% (4\%) = 4.93\%$$

23% More Income Than 4% Distribution

1. Retail annuity payout is calculated by using major retail annuity providers' offerings at May 2025 rates. The payout percentage of 7.10% is the average of the top 5 highest paying single premiums immediate annuity starting at age 65. This is also the average between male and female rates.

The investment portfolio rate is simply based on the 4% rule, which calculates an initial 4% withdrawal amount and then increases that amount by inflation to pay out for 30 years. So, starting at age 65, this portfolio is designed to assume payout until age 95.

Retirement Income Sources Matter: Blending Insurance and Investment Solutions Can Increase Retirement Income Levels

Building on the prior section, the illustration below compares two retirement income strategies: (1) a portfolio-only approach using systematic withdrawals under a 4% rule, and (2) a blended approach that allocates 50% of savings to a single premium immediate annuity and retains 50% in an investment portfolio. Using a Monte Carlo framework to model market variability and longevity over a 30-year horizon, the blended strategy delivers the same targeted income level as the portfolio-only approach throughout the period and, in the median outcome scenario,

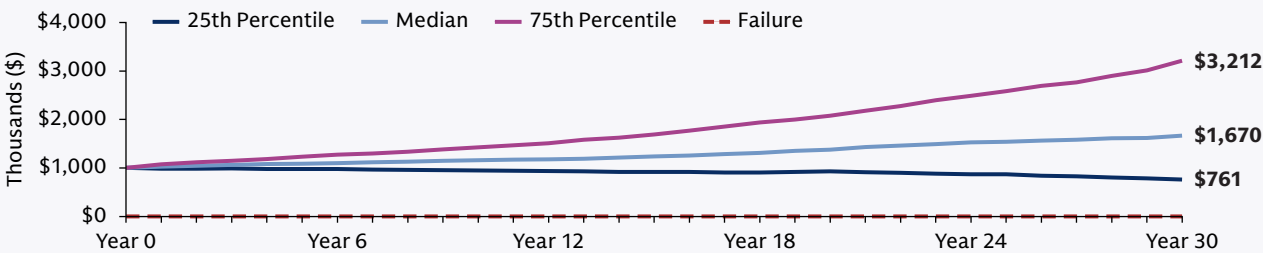
preserves approximately 8% more wealth and narrows the range of outcomes.

This result reflects the annuity’s higher payout efficiency and mortality pooling, which reduces the withdrawal amount on the remaining investment portfolio and allow more assets to compound, thereby improving retirement sustainability without sacrificing income.

Scenario 1: Investment Portfolio (4% Rule)

Portfolio Starting Value: \$1 million
Asset Allocation of Investment Portfolio: 60% US Aggregate Fixed Income, 40% Global Equity
Annual Spending: \$40,000 (indexed for inflation)

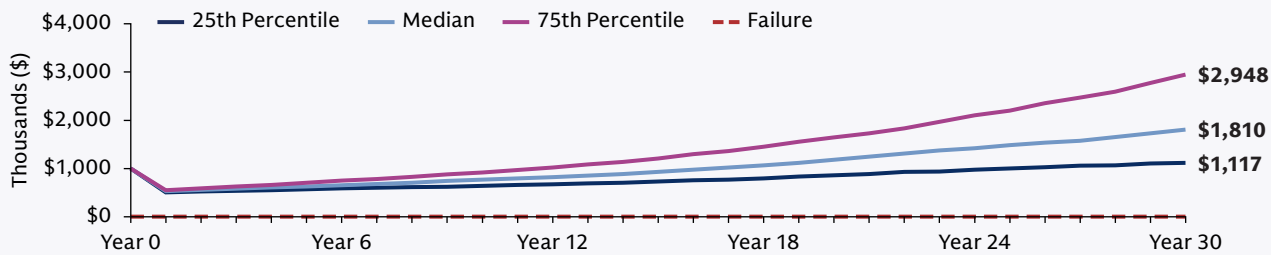
Expected Value of Investment Assets Over Time in Retirement (\$ in thousands)



Scenario 2: Retail Annuity (SPIA)

Portfolio Starting Asset: \$1 million (\$500,000 in SPIA generating 7% in annual income, \$500,000 in investment portfolio)
Asset Allocation of Investment Portfolio: 60% US Aggregate Fixed Income, 40% Global Equity
Annual Spending: \$40,000 (indexed for inflation), funded partially by annual annuity income of \$35,000

Expected Value of Investment Assets Over Time in Retirement (\$ in thousands)



Source: Goldman Sachs Asset Management as of May 2025. Please see full methodology and more information of the case studies in the appendix section before risk considerations. For illustrative purposes only. The case studies presented do not represent any Goldman Sachs products, portfolio, or strategy, and the results are simulated and not achieved by an actual investor. This material contains hypothetical information, and includes certain estimates, projections and statements which are based on assumptions regarding market conditions and other matters. We make no representations regarding the reasonableness of such assumptions or the likelihood that any of such assumptions will coincide with actual market conditions or events, and this material should not be relied upon for such purposes. Actual market conditions and scenarios could be better or worse. There is no guarantee that objectives will be met. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. Expected returns are estimates of hypothetical average returns of economic asset classes derived from statistical models. There can be no assurance that these returns can be achieved. Actual returns are likely to vary. Past performance does not predict future returns and does not guarantee future results, which may vary.

Portfolio holdings and/or allocations shown above are as of the date indicated and may not be representative of future investments. The holdings and/or allocations shown may not represent all of the portfolio’s investments. Future investments may or may not be profitable.

Conclusion

This year's Retirement Survey & Insights Report underscores that achieving retirement readiness in today's environment can require more than traditional rules of thumb. The **“New Economics of Retirement”** calls for strategies that recognize income volatility, rising costs, and competing financial priorities—while leveraging the enduring power of compounding, thoughtful portfolio construction, and earlier, more flexible savings pathways. Our findings highlight that retiree outcomes often diverge from conventional benchmarks, highlighting the potential value provided by personalized replacement targets, diversified sources of return, and planning tools that start earlier and adapt over time.

At Goldman Sachs Asset Management, we remain committed to advancing practical, research-driven solutions that help savers balance near-term affordability with long-term security, and to partnering with employers, advisors, and policymakers to translate these insights into measurable improvements in retirement outcomes.

Disclosures

Disclosures for Chart 1 on Page 6:

1. Median Household Income (after-tax): 2000: Median household income is \$42,148 and assume effective tax rate is 18%; 2025: Median household income is \$83,730 and assume effective tax rate is 18%; Source: US Census Bureau Median Household Income, Goldman Sachs Asset Management
2. Cost of Home Ownership: 2000: Median home price: \$119,600, 8% mortgage rate, 20% down payment, Insurance estimate - \$500, annual maintenance cost 1% of home value, taxes 1.1% of home value; 2025: Median home price: \$410,800, 6.5% mortgage rate, 20% down payment, Insurance estimate - \$1500, annual maintenance cost 1% of home value, taxes 1.1% of home value: Sources: HYPERLINK "https://fred.stlouisfed.org/series/MSPUS" Federal Reserve Bank of St. Louis, US Census Bureau, Goldman Sachs Asset Management
3. Cost of Renting: 2000: Median gross rent: \$602 monthly; 2025: Median gross rent: \$1638 monthly; Source: US Census data, Goldman Sachs Asset Management
4. Cost of Child Care (Center-based): 2000: Median cost center-based childcare: \$4,000 annually; 2025: Median cost center-based childcare: \$12,500 annually; Source: Child Care Aware, Goldman Sachs Asset Management
5. Cost of Public College: 2000: Average tuition \$3,510; average room and board \$4,960. 2025: Average tuition \$11,610; average room and board \$13,300; Source: College Board, Goldman Sachs Asset Management
6. Cost of Private College: 2000: Average tuition \$16,332; average room and board \$6,209. 2025: Average tuition \$43,350; average room and board \$15,250; Source: College Board, Goldman Sachs Asset Management
7. Cost of Student Loan: 2000: Average federal loan balance \$16,530; Interest rate assumption 6.9%, loan term assumption 10 years. 2025: Average federal loan balance \$39,075; Interest rate assumption 6.4%, loan term assumption 10 years. Source: National Association of Colleges and Employers, Goldman Sachs Asset Management
8. Cost of Healthcare: 2000: average employee paid healthcare premiums \$1,715; estimated out of pocket expense \$1,776 (assume three family members). 2025: average employee paid healthcare premiums \$6,269; estimated out of pocket expense \$4,542 (assumes three family members). Source: Kaiser Family Foundation, Goldman Sachs Asset Management

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Glossary

Financial well-being: Per the Consumer Financial Protection Bureau, financial well-being is a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future and is able to make choices that allow them to enjoy life.

A 401(k): a feature of a qualified profit-sharing plan that allows employees to contribute a portion of their wages to individual accounts.

The Financial Vortex: a term we commonly use to describe the

magnitude of competing financial priorities that may affect one's retirement savings.

Year-over-year: a metric used to compare data from the current year to the previous year.

Financial Grit: Ability of savers to remain focused on long-term goals, stay confident in their ability to reach retirement and willingness and to persevere through periods of hardship.

Generation Z: those born between 1997 and 2012 Millennials: those born between 1981 and 1996 Generation X: those born between 1965 and 1980 Baby Boomers: those born between 1946 and 1964

Hospital Service (SA): measures the month-over-month price change relating the price of services performed and billed by a hospital. It includes both inpatient and outpatient medical services, as well as room and board, lab work, and other services provided by the hospital. It includes services performed by physicians if they are employed by the hospital. However, it excludes services performed by physicians who do not work for the hospital, even if they are using hospital facilities. Those services are captured in the professional services index. Eligible payers for the hospital services index are: patient self-pay (cash), commercial or private insurance, and Medicare Part B

CPI (SA): measures the month-over-month price change of a representative basket of goods and services paid by urban consumers

Sharpe Ratio: The difference between the returns of the investment and the risk-free return, divided by the standard deviation of the investment returns.

METHODOLOGY & DEFINITIONS

4% Rule: This rule calculates the withdrawal rate that will allow the investment portfolio to pay a consistent rate that increases with inflation yearly but doesn't run out money over 30-year period using Monte Carlo simulations. Under the 4% Rule, the initial 4% withdrawal amount increases by inflation to pay out for 30 years.

Monte Carlo simulation: a way to model the probability of different outcomes in a process that cannot easily be predicted due to the intervention of random variables. It is a technique used to understand the impact of risk and uncertainty.

The case studies presented in the document represent a typical retiree's portfolio under different sets of investments – a traditional 60% fixed income / 40% public equity portfolio, a traditional investment portfolio with an allocation to single-premium immediate annuity (SPIA), and a traditional investment portfolio with pension income – to evaluate the range of retirement investment outcomes when the retiree could incorporate sustainable income options in his / her portfolio.

For each of the three case studies, 1,000 scenarios over each of the 30-year period are randomly generated for each year is set up for the Global Equity and US Aggregate Fixed Income asset classes. We leverage Goldman Sachs Asset Management Multi-Asset Solutions team's forward-looking expected risk and return assumptions for this Monte Carlo simulation exercise. The portfolio returns take a weighted average of asset class returns. The simulation also considers the annual required spending of 4% (indexed to inflation rate of 1% per year) over the 30-year period. The spending amount is held consistent across all three case studies.

The threshold for "Failure" in the analysis is determined based on the occurrence of the retiree's portfolio running out of money at any point in the 30-year period. The rationale for this is that, given the goal of the

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analysis is to evaluate the sustainability of the investment strategy, a case where the retirement saver runs out of money sooner than expected would indicate that the investment strategy is not sustainable. Hence, we establish the “failure” threshold when the investment account balance reaches \$0 for all three case studies.

The expected value of investment assets over time in retirement charts for each of the three case studies showcase the range of potential portfolio balances at the end of the 30-year period, given market movements may impact all / parts of the retirement portfolio that is invested in the 60% US Aggregate Fixed Income / 40% Global Equity portfolio.

For case study 2, the key driver that causes dispersion of ending portfolio balances is the annual percentage return of the guaranteed income portion of the portfolio (\$500,000 allocated in an SPIA, which generates around 7.0% or \$35,000 in annual income return. Given that spending is held constant (4% annually indexed to inflation, starting at \$40,000 in year 1), the SPIA returns \$35,000 and covers a majority, but not all, of the annual required spending. Taking year 1 as an example, the retiree would have to draw an additional \$5,000.

All investing involves risk, including loss of principal.

The survey was conducted by Goldman Sachs Asset Management and Qualtrics Experience Management between June 27, 2025–July 21, 2025. Views expressed are those of survey respondents.

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Percentages may not sum to 100% due to rounding.

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Date of First Use: October 2, 2025.

Compliance Code: 457481-OTU-2366444



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