RETIREMENT INCOME INSTITUTE Alliance for Lifetime

Lifetime Income

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ABSTRACT

Pre-retirement and post-retirement financial planning require different approaches, as retirees face the frightening reality that – unless they plan wisely – they may outlive their money. Especially when it comes to determining risk tolerance.

This paper asks: how effective common risk tolerance questionnaires (that emphasize short-term market volatility) are when it comes to addressing the concerns that individuals have in retirement and is there a better way? We explore how the Retirement Income Style Awareness[®] (RISA[®]) Profile framework moves beyond investmentfocused risk tolerance questionnaires and does a better job of capturing individual attitudes and concerns regarding risks related to retirement planning, such as longevity, health care spending risk, general liquidity needs, and lifestyle spending.

Finally, we examine the ways in which this understanding creates a common language for clients and their advisors, making sense of the many competing views about retirement. This shared understanding of individual preferences can inform which of the four broad investment strategies: Total Return, Income Protection, Risk Wrap and Time Segmentation are most aligned with individual preferences and will best support their financial and psychological needs for retirement. **RETIREMENT INCOME SERIES – PART 3 OF 3**

RISK TOLERANCE QUESTIONNAIRES AND RETIREMENT INCOME CONCERNS

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INTRODUCTION

here are clear differences with the immediate financial planning problems faced by individuals before and after retiring. The financial services profession has mostly evolved around meeting the needs of pre-retirees. The investment management framework offered is based on Modern Portfolio Theory (MPT), which uses portfolio diversification to seek the highest risk-adjusted returns for portfolio growth over a single period, assuming there are no liabilities to be funded by the investment portfolio. The naïve approach extending from this is to treat the post-retirement investing problem in the same manner.

We say naïve because in 1991, Markowitz surmised that his MPT was not equipped to fully handle the household investing problem. In MPT, cash flows are ignored, and the investment horizon is limited to a single, lengthy period. This simplification guides investing theory for wealth accumulation as investors build portfolios to seek the highest expected returns for an accepted level of volatility. The advisory profession has developed risk questionnaires to determine the level of short-term volatility an investor can stomach and accept within an asset allocation decision.

However, while MPT may provide a reasonable approximation for the pre-retirement accumulation problem, maximizing risk-adjusted returns is typically not the direct goal for most retirees. Instead, retirees use their assets from an investment portfolio and other sources to fund their living expenses and other financial goals over an unknown time period. Investment risk also behaves differently when spending from assets in retirement in a manner not accounted for by the assets-only assumption of MPT. While market downturns can happen during the accumulation

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years, individuals are still earning a living and can continue to draw from their human capital to cover expenses, while the portfolio remains invested. If anything, a market downturn allows savers an opportunity to buy more shares with their new savings. Human capital is funding the daily spending needs, creating a significant degree of separation from the investment portfolio during the accumulation phase.

Once retired, individuals will begin distributing from financial assets to cover spending, and a market downturn has the opposite effect by increasing the number of shares to be sold to meet a fixed expense. This is sequence-of-return risk and its practical impact is to amplify investment volatility by making retirement outcomes disproportionately dependent on the market returns experienced in the early retirement years, even if the retirement lasts 30 years or more. When funding essential expenses from an investment portfolio, the phrase "investing for the long term" is incomplete.

In retirement, there is also the burden of spending shocks and other contingencies. Retirees must consider not just how much of their asset base is available for their retirement budget, but also how much must be set aside as reserves to cover unexpected events like a longterm care need, a large healthcare bill, higher-than-expected inflation, and so on. Retirement can be framed as a life transition away from dependence on human capital to dependence on financial assets for funding spending goals. That changes the mental calculus.

If retirement is different, then this leaves an open question about the appropriateness of a risk tolerance questionnaire to establish a retirement income strategy. Investors are generally told to invest as aggressively as possible to earn the greatest risk premium from the stock market over the long term, subject to their comfort with tolerating short-term market fluctuations that could balance out into a greater growth rate over time. Risk tolerance questionnaires have emerged as a tool to help advisors identify the amount of volatility their clients can handle with their investment portfolios. This is important because individuals who invest more aggressively than they can tolerate will be more prone to abandoning the market after a downturn. That, in turn, makes it more difficult to benefit from the long-term risk premium that stocks are expected to provide.

Over the years, a number of concerns have been noted in the academic literature about risk tolerance questionnaires. While we applaud the many new developments that incorporate risk tolerance, capacity, and composure into risk tolerance questionnaires, it is unclear how well they actually measure risk tolerance, how stable risk tolerance is during different market environments, and so forth. Guillemette and Finke (2014) provide an excellent review of work in this area. They find a strong correlation between risk tolerance and recent S&P 500 movements, with individuals becoming more risk tolerant after market gains and less risk tolerant after market losses.

But this article is not focused on these types of concerns with risk tolerance questionnaires. We can provide such questionnaires with the benefit of the doubt for our purposes.

Rather, we identify a major shortcoming with risk tolerance questionnaires that is not commonly discussed. These questionnaires are not necessarily suited to the task of choosing a retirement strategy. Individuals may approach investing during retirement differently from investing for retirement because retirees may worry less about maximizing risk-adjusted returns and worry more about ensuring that their assets can support their spending goals for the rest of their lives. After retiring, the fundamental objective for asset management is to sustain a living standard while spending down assets over a finite but unknown length of time, while also supporting liquidity to assist with unexpected expenses. But risk tolerance questionnaires are an accumulation-based tool, and they pre-suppose that all retirees maintain the same views about maximizing risk-adjusted returns in a manner that may only be partially correlated with the concerns related to meeting the differential financial goals for the portfolio. To the extent that retirement is about asset-liability matching rather than maximizing risk-adjusted returns, a risk tolerance questionnaire may not be the right starting point for the transition toward retirement.

The alternative to a risk tolerance questionnaire that we investigate and compare in this study is the Retirement Income Style Awareness[®] (RISA[®]) Profile outlined in Murguia and Pfau (2022) and Pfau and Murguia (2022). These research studies sought to validate factors that explain distinct preferences for retirement, to define re-

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tirement styles as a combination of these preferences, and to then translate these retirement styles into appropriate retirement strategies. They use a nationally representative sample to investigate the role of two primary retirement income factors and their prevalence for a variety of demographic subgroups.

The primary factors that best capture an individual's retirement income style are Probability-Based versus Safety-First (PS) and Optionality versus Commitment (OC). The Probability-Based versus Safety-First factor explains whether individuals are more comfortable with market growth or with contractual protections as an income source for their essential retirement spending. The Optionality versus Commitment factor describes whether individuals place an emphasis on keeping options open to be able to make changes or whether they prefer to commit to a strategy known to solve for a lifetime retirement goal. They conclude that these two factors can be identified and reliably measured as consistent across a variety of demographic subgroups, as based on age, gender, relationship status, net worth, and retirement timeline.

Pfau and Murguía (2022) then investigated whether these factors can be combined in a manner that describes retirement styles which can be mapped into the core retirement income strategies offered in the broader retirement literature. They provide this mapping of preferences to styles and to strategies, following with an analysis of the frequency for these styles within the broader population and for different demographic subgroups. Four broad strategies include Total Return (spending systematically from a diversified investment portfolio focused on total returns); Income Protection (building a lifetime income floor with fixed annuities); Risk Wrap (building a lifetime income floor with variable annuities offering lifetime withdrawal benefits wrapped around a risk-based portfolio); and Time Segmentation (bucketing strategies that use less volatile assets for shorter-term expenses and more volatility assets offering higher growth potential for longer-term expenses). Specifically, they found that 35% of the representative sample of individuals between ages 50 and 80 identify most closely with Income Protection, followed by 33 percent for Total Return, 17 percent for Time Segmentation, and 15 percent for Risk Wrap. With this distribution of preferences, it is misguided to narrowly promote one type of retirement strategy as above others. Though so much of the consumer media focus about retirement income is on systematic withdrawal strategies described by the Total Return approach, two-thirds of the population are looking for ways to source their essential retirement spending in a manner that provides greater protections and commitment than available with systematic distributions from a diversified investment portfolio. Pfau and Murguía found that retirement styles remain consistent by age and before and after retirement. Women also have stronger Income Protection focus than men, which is important because they tend to live longer and are more likely to be the remaining survivor of a heterosexual couple.

In this study, we consider whether this RISA® Profile framework provides a stronger starting point for retirement strategy selection than does a risk tolerance questionnaire. Risk tolerance measures have been popularized even though there is a disconnect from a retirement income point of view. The profession must seek a broader approach for understanding the psychological preferences of retirees for how to position their assets to achieve retirement satisfaction. We provide a deeper comparison between RISA Profiles and traditional risk tolerance questions to determine whether the RISA can provide a better starting point to assess a retirement income strategy.

We proceed as follows. First, we describe retirement concerns that we measured in the survey detailed by Murguía and Pfau (2022). We also then define the portfolio loss aversion measure used to define a traditional risk tolerance measure. This is followed by a summary of the styles and strategies outlined in previous research. We then move into the specific research questions related to how we can best measure the concerns people have for retirement- with a risk tolerance questionnaire or with the RISA® Profile. We use linear regression analysis to determine that the RISA® Profile provides a stronger starting point for understanding the concerns of individual retirees. We conclude that the retirement income strategy discussion should happen before considering asset allocation within the investment portfolio portion of the strategy.

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RETIREMENT CONCERNS

Retirees must find a way to convert their financial resources into a stream of income that will support them for the remainder of their lives. In addition,, they must deal with sequence of returns risk, which amplifies the impact of financial market volatility on the sustainability of an investment portfolio supporting distributions by increasing the importance of the order of investment returns in retirement (Bengen, 1994; Milevsky and Abaimova, 2006; Pfau, 2014). Retirees may also deal with a broader range of spending shocks related to health care and long-term care that can increase liquidity needs for their assets, especially when there is no longer an income stream from employment.

Concerns about the effects of retirement risks on financial goals can be classified into several distinct areas:

Longevity. Longevity concerns are directly related to the main risk of retirement income: outliving your money. Most examples center on financial independence and knowing that people can pay their basic expenses and not be a burden to others. These include, but are not limited to, daily living expenses.

Lifestyle. Lifestyle concerns focus on maintaining a desired standard of living and enjoying retirement with more discretionary spending. Unless people are very wealthy and overfunded with respect to their goals, meeting lifestyle concerns will usually mean increasing spending power in a manner that increases the risk for retirement sustainability. This aspect of retirement planning includes maintaining or improving people's current lifestyle rather than behaving more frugally than they would like throughout retirement. Typical lifestyle goals include travel and leisure, self-improvement, and social engagement. This also includes spending on loved ones without impeding retirement success.

Liquidity. Liquidity concerns involve maintaining enough reserves for unexpected contingencies. Maintaining enough liquidity is especially important for dealing with family emergencies, home repairs, longterm care, and an unexpected death or illness. Liquidity can also be a resource to fill in gaps when there is an unexpected market downturn. We have found that our liquidity questions loaded onto two distinct dimensions in the Exploratory Factor Analysis described in Murguía and Pfau (2022a). Further inspection of the items indicates that there is an observable difference between seeking liquidity for unknown general spending needs versus seeking liquidity for eventual, albeit unknown, health care needs.

In addition, Legacy concerns are about leaving assets for subsequent generations or to charities as well as contributing to meaningful activities with time and talent. in this study, we did not find evidence that Legacy is a strong enough concern for individuals to investigate further. Individuals are more focused on addressing other retirement concerns and view legacy as something that may be left over at the end of retirement.

PORTFOLIO LOSS AVERSION (RISK TOLERANCE QUESTIONNAIRE)

We also measure portfolio loss aversion because this construct is the basis for common risk assessment tools used with portfolio selection. To measure a general sense of portfolio loss aversion, we present respondents with an equal probability gamble between a positive and negative portfolio outcome. After directions were presented, the first question reads: Please state whether you would accept the following options? A 50-50 gamble of your portfolio losing 11% or gaining 35%. As an example; [sic] if you had a \$1,000,000 portfolio, would you take a 50-50 gamble of your investment portfolio losing \$110,000 or gaining \$350,000? Questions with a decreasing gain-to-loss ratio are presented until the respondent responds "no." The first question presented here represents a 3.18 gain to loss ratio (35 percent gain versus 11 percent loss), and each subsequent question reduces the spread between the gain to loss ratio by roughly 20 percent. Respondents willing to accept gambles with a low ratio have lower loss aversion or greater risk tolerance.

With portfolio loss aversion, scores were computed by dividing the number of questions completed by the total number of available questions. As an example, a score of .17 would indicate that only the most conservative question was answered "yes" (.17 = 1/6). A low score indicates greater loss aversion, which in turn implies a lower tolerance for risk. The average score was .38, indicating that the average gain-to-loss multiplier was 2.34.

RETIREMENT STRATEGY OPTIONS

Because of the concerns we outlined, various retirement income strategies have been developed to source retirement income in a different manner than how assets are accumulated. The link between the RISA® Profile and these retirement strategies was explored in Pfau and Murguía (2022). The RISA® Profile is developed from the two primary retirement income beliefs:

Probability-based versus safety-first (PS) details how individuals would like to source their retirement income. Probability-based income sources are dependent on market growth to provide a continuous and sustainable retirement income stream. Safety-first income sources incorporate contractual obligations. Though no strategy is completely safe, the inclusion of contractual protections implies a relative degree of safety compared to unknown market outcomes.

The second factor, Optionality versus Commitment (OC), delves into the degree of flexibility desired. Optionality reflects a preference for flexibility to respond to economic developments or changing personal situations. Commitment reflects a preference for one solution that solves for a lifetime need.

We review the retirement strategies and their links to the RISA® factors since they become important in the subsequent analysis about explaining retirement concerns. Common retirement income strategies include:

Total return approach. A total return approach sources retirement income from a diversified investment portfolio, reflecting the characteristics of probability-based and optionality. Investors rely on portfolio growth to sustainably support their spending. This means drawing income from a diversified investment portfolio rather than using contractual sources to fund retirement expenses. People are comfortable using the expectation of portfolio growth to support a sustainable spending rate. An investment strategy also implies optionality and a lack of commitment because changes can be more easily made.

Protected-income approach. A protected-income approach reflects a preference for safety-first and com-

mitment. It allows for immediate and deferred annuitization to support greater downside spending protection by relying on contractually guaranteed lifetime income to build a floor for essential expenses. Portfolio distributions may be used for more discretionary goals, but contractual protections with a lifetime commitment are sought for the essential longevity expenses. This speaks to positioning assets differently to match the risk characteristics of a spending goal.

Risk wrap approach. A risk wrap strategy provides a blend of investment growth potential with lifetime income guarantees through a deferred annuity offering living benefits. This meets preferences for probability-based and commitment by blending investment growth potential with lifetime income benefits, generally through a variable annuity, a registered index-linked annuity, or a fixed-index annuity. These tools can be designed to offer upside growth potential alongside secured lifetime spending, even if markets perform poorly. This helps to provide a protected source of lifetime income as part of the overall investing strategy while also relying more on market growth for the underlying assets.

Time segmentation or bucketing approach. A time segmentation strategy (also frequently referred to as a bucketing strategy) usually sources short-term retirement income needs with a rolling bond ladder. This offers safety-first protections for short-term spending as well as optionality for assets earmarked to longer-term needs. This approach offers contractual protections without sacrificing flexibility. Money is divided into different categories, earmarking assets for spending immediately, soon, and later. Bond ladders as well as period certain immediate annuities or deferred fixed annuities are often a good solution for shorter to intermediate income needs, and a diversified growth-focused investment portfolio is deployed for longer-term expenses. The longer-term portfolio can gradually replenish the short-term buckets as these funds are spent.

One of these strategies must be chosen *before* considering an investment allocation in retirement. But there is a significant gap in the planning profession because there have not been tools to help retirees, or their advisors, assess what retirement income strategies will best match retiree preferences.

LONGEVITY CONCERN (RISK OF RUNNING OUT OF MONEY)				
N	2824			
F Value	213.00			
Pr > F	<.0001			
R-Square	0.41			
Parameter	Estimate	t Value	Pr > t	
Intercept	2.55	41.55	***	
Risk Tolerance	0.02	0.86		
Age	-0.11	-4.57	***	
Have Spouse/ Partner	0.07	1.50		
Net Worth	-0.38	-19.62	***	
Retired	-0.36	-7.24	***	
Female	0.19	4.73	***	
Risk Wrap	0.47	7.69	***	
Income Protection	1.29	25.39	***	
Time Segmentation	0.88	14.66	***	

*** Significant at 0.1% level; ** Significant at 1% level; * Significant at 5% level

EXHIBIT 1. Risk Tolerance, Retirement Styles, and Longevity Concerns

RESULTS

Our concern is that risk tolerance questionnaires, with their emphasis on short-term market volatility, may not properly address the concerns individuals have regarding retirement risks.

In this section we explore this matter by using linear regressions with ordinary least squares to explain retirement concerns as based on independent variables including risk tolerance, retirement style, and demographic factors including age, gender, marital status, retirement status, and net worth. We consider how risk tolerance compares with these broader retirement style quadrants to understand the concerns people have when facing the new risks of retirement. Specifically, we look at whether portfolio loss aversion tolerance, which is the foundational component of risk tolerance questionnaires, is significantly associated with the retirement income concerns related to longevity, liquidity, and lifestyle. We will also account for gender, age, marital status, and net worth (a potential proxy for risk capacity) in the analysis.

Exhibit 1 provides the results from the linear regression explaining the degree of concern individuals hold for their longevity and their worry about outliving the ability to fund their essential retirement spending. For demographic variables, we find that concerns about longevity decrease as people age, have a higher net worth, and are retired. Women show a higher degree of concern for longevity, even though having a spouse or partner is not shown to be significant after controlling for these other factors. Moving on to our specific variables of interest, we do observe an important role for retirement styles. Though not shown, an F-test reveals that retirement style quadrants are jointly significant at the 1 percent level. What we do observe in the exhibit with Total Returns as the omitted condition is that each of the other three retirement income styles are significantly different from Total Returns at the 1 percent level. The

RESERVES CONCERN (HEALTH-RELATED)			
Ν	2824		
F Value	88.96		
Pr > F	<.0001		
R-Square	0.22		
Parameter	Estimate	t Value	Pr > t
Intercept	3.12	41.26	***
Risk Tolerance	0.00	-0.19	
Age	-0.14	-4.65	***
Have Spouse/ Partner	0.10	1.78	*
Net Worth	-0.24	-10.27	***
Retired	-0.28	-4.50	***
Female	0.15	3.09	***
Risk Wrap	0.29	3.89	***
Income Protection	1.09	17.28	***
Time Segmentation	0.78	10.60	***

*** Significant at 0.1% level; ** Significant at 1% level; * Significant at 5% level



ordering of retirement styles from least concerned to most concerned about longevity is Total Returns, Risk Wrap, Time Segmentation, and Income Protection. This ordering suggests that those with a probability-based outlook are less concerned about outliving their assets, as well as those oriented more toward optionality. Retirement styles are quite important in understanding this primary retirement risk. Meanwhile, results from a risk tolerance questionnaire do not have a link to longevity concerns. We might imagine that those with a greater tolerance for market volatility would be less concerned about longevity, but this relationship cannot be established after controlling for retirement styles and other demographic characteristics. Stated again, loss aversion, the foundational component of risk tolerance questionnaires, is not significantly related to an individual's concerns about outliving their assets. While a risk tolerance questionnaire may be a viable tool to develop an asset allocation, it falls short of the mark as a first step in helping to determine an appropriate retirement strategy based on preferences for sourcing retirement income and the degree of longevity concern people experience.

Next, Exhibit 2 provides the results from the linear regression explaining the degree of concern individuals hold specifically about health care risks and the need for reserves to manage this spending. All the demographic variables are significant. Those who are most concerned about health care spending risk are younger, have a partner or spouse, have a lower net worth, are still in the pre-retirement phase, and are female. As with longevity concerns, it is interesting that concerns about health care spending risk decrease with age and in retirement. We also again observe an important role for retirement styles. The ordering of concerns is the same as with longevity. The retirement styles ranked from showing the least to the most concern about health care spending risk are Total Return, Risk Wrap, Time Segmentation, and Income Protection. Meanwhile, it is again the case that risk tolerance is not linked to health care spending

Ν	2824		
F Value	30.40		
Pr > F	<.0001		
R-Square	0.09		
Parameter	Estimate	t Value	Pr > t
Intercept	4.11	58.62	***
Risk Tolerance	-0.08	-3.62	***
Age	-0.04	-1.46	
Have Spouse/ Partner	-0.10	-1.93	**
Net Worth	-0.03	-1.21	
Retired	0.03	0.51	
Female	0.11	2.48	***
Risk Wrap	0.03	0.49	
Income Protection	0.65	11.23	***
Time Segmentation	0.64	9.35	***

EXHIBIT 3. <i>F</i>	Risk Tolerance,	Retirement Styles,	and General Reserves
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concerns after controlling for retirement styles and other demographic characteristics.

Exhibit 3 investigates the linear regression explaining the degree of concern individuals have about other general spending surprises and the need to hold reserves. In this case, we observe that single people and women are more concerned about these general spending shocks. The other demographic variables are not significant. Though not shown, we find that retirement styles are jointly significant at the 1 percent level. The Total Returns and Risk Wrap styles express similar concerns about general spending risk, and this level of concern is less than for the Income Protection and Time Segmentation styles that are also close to one another. Effectively, those with a safety-first outlook express greater concerns about general spending risks. For this retirement concern we do find that a risk tolerance questionnaire can also provide explanatory power. Those with a greater tolerance for risk, which implies a lower loss aversion score, express less concern about having reserves to manage spending shocks. Comfort with market volatility does have a negative association with the desire for general reserves. Nonetheless, as the data is standardized, the smaller coefficient value means that risk tolerance has a smaller effect.

Finally, Exhibit 4 investigates the linear regression explaining the degree of concern individuals have about being able to maximize their overall lifestyle in retirement. We observe that older people become less concerned about maximizing lifestyle spending, while those with a greater net worth and women are more concerned with lifestyle. Relationship status and retirement status are both not significant. Again, retirement styles are jointly significant at the 1% level, though a similar finding as with general spending risk concern is also found here. The Total Returns and Risk Wrap styles express similar concerns about lifestyle spending, which are at a lower level than for the Income Protection and Time Segmentation styles. Those with a safety-first outlook express greater concerns about lifestyle spending.

	LIFESTYLE CONC	CERNS	
Ν	2809		
F Value	10.61		
Pr > F	<.0001		
R-Square	0.03		
Parameter	Estimate	t Value	Pr > t
Intercept	3.29	52.94	***
Risk Tolerance	0.05	2.23	**
Age	-0.12	-4.69	***
Have Spouse/ Partner	0.03	0.59	
Net Worth	0.12	6.11	***
Retired	0.05	0.96	
Female	0.07	1.72	*
Risk Wrap	0.00	-0.05	
Income Protection	0.23	4.48	***
Time Segmentation	0.20	3.35	***

*** Significant at 0.1% level; ** Significant at 1% level; * Significant at 5% level

EXHIBIT 4. Ri	sk Tolerance,	Retirement St	yles, and L	ifestyle Concerns
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For this retirement concern we do find that a risk tolerance questionnaire also provides explanatory power. Those with greater risk tolerance express a stronger concern about maximizing their overall lifestyle. This is intuitive because this concern focuses on maximizing lifestyle with discretionary spending during retirement that may be more dependent on capturing market growth. In other words, those seeking to maximize lifestyle are more tolerant of risk or more amenable to relying on market growth to fund their retirement. The retirement literature emphasizes investing approaches that focus on the lifestyle goal, which matches the thought process of the risk tolerance questionnaire to maximize risk-adjusted returns. Nonetheless, as the data is standardized, the smaller coefficient value means that risk tolerance has a smaller effect.

This analysis has shown that retirement styles consistently provide explanatory power about the degree of concerns people have about longevity, liquidity, and lifestyle in retirement. A traditional risk tolerance measure was not significantly related to either longevity or liquidity concerns for health care expenses, though it did provide explanatory power for general reserves and lifestyle. Longevity and health care spending risk are two retirement concerns that represent very real risks that individuals need to address as they select a retirement income strategy. Portfolio loss aversion does not provide the necessary specificity to address these risks nor provide significant insight into potential strategies. Portfolio asset allocation suggestions implied by scoring on a risk tolerance questionnaire will miss the mark and make little sense when it comes to addressing longevity and health care concerns as individuals approach retirement.

CONCLUSIONS

How can individuals seek to source retirement income in a way that best addresses their retirement concerns? Unfortunately, in the past and as a default, risk tolerance questionnaires have been naively tasked with answering

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this question. While risk tolerance questionnaires may be directionally useful for accumulation-based portfolios, they were not intended to handle the broader question of retirement strategies. Investing for retirement is inherently different and creates a new set of variables that need to be assessed. Instead of framing the decision with portfolio risk tolerance, we need to assess the tradeoffs that people are willing to make to address the new risks they face in retirement.

Risk tolerance questionnaires may still play a role in deciding on asset allocation, but the broader question of choosing a retirement income strategy must happen before deciding asset allocation. Risk tolerance questionnaires implicitly assume everyone wants to tether their retirement income strategy to a Total Return investment portfolio as designed for accumulation strategies since they do not incorporate asset-liability matching. While Total Return may be a viable approach for about onethird of retirees, it ignores other viable and credible retirement income strategies such as time segmentation, risk wrap, and income protection that may provide better matches to address the level of concerns people have for different retirement risks.

Risk tolerance questionnaires do not explicitly address new risks retirees face, including their concerns for outliving their assets and for health care-related spending shocks. They completely sidestep the identification of an appropriate retirement income strategy.

First identifying preferences for sourcing retirement income to fund essential expenses is a better way to assess what retirement income strategies will best fit. Retirement income preferences, as assessed through the RISA®, identify how people want to source retirement income. Results of the RISA® Profile also help to identify how individuals want to best address their retirement concerns for longevity, health care spending risk, general liquidity needs, and lifestyle spending. Only after first implementing a strategy is it important to then make asset allocation decisions for the remaining investment portfolio.

We need to understand the broader context for how individuals want investments to fit into their broad strategy; we cannot assume that investments are the entire strategy. To understand the changing dimensions of risks in retirement (e.g., longevity risk, spending shocks), we need to move beyond an investment-focused risk tolerance questionnaire. Examining retirement income beliefs though the RISA[®] does a better job capturing attitudes and concerns toward the new retirement risks and can subsequently identify more appropriate solutions.

Documentable, repeatable processes are becoming increasingly critical to protect the perceived integrity of all forms of financial advice as well as to minimize the legal liability associated with its provision. Financial advisors can serve a broader range of potential clients by approaching retirement income tools and strategies with an agnostic view and recognizing the need to fit different strategies based on the preferences of the recipient. While a financial plan to assess the economic viability of any approach should be conducted, and there may be other profiles available, understanding an individual's RISA Profile provides a validated starting point for analysis. Once an individual's RISA Profile is identified, the individual can quickly and manageably have a range of strategies presented to them that will "feel right." The RISA factors provide an effective framework for determining individual retirement income styles and retirement solutions.

The RISA framework for understanding an investor's preferred retirement income sourcing method provides the backbone of a prudent process for retirement income recommendations. It goes beyond the traditional risk tolerance questionnaires because it addresses all the main risks in retirement, which risk tolerance questionnaires do not, and identifies an investor's preference for one of the four main retirement income strategies. The RISA Profile provides a way for advisors and individuals to understand how a range of preferences exist and how those preferences can be identified and linked to the appropriate retirement income strategies for an individual in ways that can help to make sense of the many competing views about retirement.

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REFERENCES

Bengen, William P. (1994) Determining Withdrawal Rates Using Historical Data. Journal of Financial Planning, 7(4), 171-180.

Milevsky, M. and A. Abaimova. (2006). "Risk Management During Retirement," in *Retirement Income Redesigned: Master Plans for Distribution*, edited by Harold Evensky and Deena Katz, 163–184. New York: Bloomberg Press.

Guillamette, M., and M. Finke. (2014). Do Large Swings in Equity Values Change Risk Tolerance? Journal of Financial Planning, 27(6): 44-50.

Markowitz, H. H. (1991). Individual versus institutional investing. Financial Services Review, 1(1), 1-8.

Murguia, A., and W. D. Pfau. (2022). Quantifying Retirement Income Beliefs and Preferences to Determine a Retirement Income Style. Alliance for Lifetime Income's Retirement Income Institute Whitepaper.

Pfau, W. D. (2014). The Lifetime Sequence of Returns: A Retirement Planning Conundrum. Journal of Financial Service Professionals, 68(1), 53-58.

Pfau, W. D., and A. Murguia. (2022). How a Retirement Income Style Informs Retirement Income Preferences. Alliance for Lifetime Income's Retirement Income Institute Whitepaper.

Murguia, A., and W. D. Pfau. (2021). Selecting a Personalized Retirement Income Strategy: A Model Approach. Retirement Management Journal, 10(1), 46-58.