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ABSTRACT

The value of a common framework to help individuals and their financial advisors develop strategies for managing retirement income is becoming more apparent as the complexity of how best to fund retirement grows. There is mounting evidence that defining retirement income styles as a combination of preferences and then matching strategies to these styles offers a compelling way forward to better align individuals with retirement income strategies that are uniquely suited to their circumstances.

This paper explores the explicit link between retirement preferences and retirement styles, and then documents how these styles link to strategies. The development of the Retirement Income Style Awareness Matrix (RISA® Matrix) tears down the barriers to shared understanding with a systematized way for individuals and advisors to quickly understand whether they are speaking the same language and to find retirement income strategies best aligned with the preferred style.

We examine the four broad investment strategies that compromise the RISA Matrix: Total Return, Income Protection, Risk Wrap and Time Segmentation and discuss the application of these approaches to ensure that advice for funding retirement is offered that resonates with clients.

RETIREMENT INCOME SERIES - PART 2 OF 3

HOW RETIREMENT INCOME PREFERENCES INFORM RETIREMENT INCOME STYLES

ALEJANDRO MURGUÍA AND WADE D. PFAU

INTRODUCTION

n this study, we seek to create a framework which focuses on the unique characteristics of retirement to align individual preferences for retirement income with appropriate strategies for providing that income. Fichtner (2021) points out that the United States is rapidly approaching Peak65™ as, by 2024, more than 12,000 Americans will reach age 65 each day. These Americans face increasing longevity, low interest rates, and a greater need to self-manage their retirement income strategy in the absence of traditional company pensions. They have complicated decisions to make regarding the many available retirement approaches. These individuals may benefit from guidance about how to choose among retirement income strategies.

A framework for understanding retirement income preferences is needed because individuals are exposed to vastly different viewpoints about the right approach for generating retirement income. Commentators argue about questions such as whether there is such a thing as a safe withdrawal rate from an investment portfolio, whether annuities provide sufficient value for their costs, and whether it is better to start Social Security as soon as possible or to defer collecting benefits until closer to age 70. Disagreements and conflict within the financial services world is creating untold confusion for consumers, leaving many unsure about where to start when transitioning into retirement.

The competing viewpoints about retirement strategies can all be justified. Though many pundits advocate for only one option, there are multiple valid approaches to building a retirement income plan. Different retirement income approaches are viable in the sense that they work best for individuals with a specific set of preferences and attitudes. No one approach or retirement income product works best for everyone. While many commentators will advocate for their own preferred style, this research seeks

to create a framework to help guide consumers toward a method that personally resonates in a stronger manner than just thinking that something "sounds good" relative to other options. Retirees need to be better positioned to stick to the plan they are comfortable with and to be successful throughout their retirements.

Individuals adjust for different outcomes based on personal styles. They have characteristics that can be determined to better position a strategy that is right for them rather than hoping for an alignment achieved through random matching with a professional or pundit largely based on another's view of what is right.

Defining retirement styles as a combination of preferences and then matching strategies to these styles provides an important step forward in aligning individuals with appropriate retirement income strategies. The foundational work toward defining retirement styles was completed in past research described in Murguía and Pfau (2021 and 2022). This study follows by explicitly linking retirement preferences and retirement styles and then documenting how these styles link to strategies. We then investigate the prevalence of different styles within a representative sample of Americans between ages 50 and 80.

To get here, Murguía and Pfau (2021) reviewed a wide range of advisor- and consumer-focused books and articles about retirement income written from different perspectives to identify factors representing a range of choices, either in terms of tradeoffs to be weighed or as different thought perspectives for making retirement decisions. They tested and quantified the role of six specific and distinct retirement income factors which make up a retirement income style, using a convenience sample of readers at RetirementResearcher.com.

Murguía and Pfau (2022) followed with a deeper focus on the two primary factors identified in the earlier work, using a nationally representative and larger sample to consider the prevalence of these factors for a variety of demographic subgroups. The primary factors that best captured 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

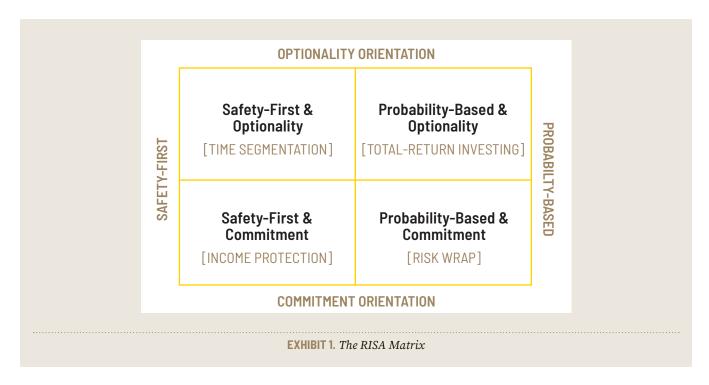
essential retirement spending. The Optionality versus Commitment factor describes whether individuals place emphasis on keeping options open so they can make changes or whether they prefer to commit to a strategy known to solve for a lifetime retirement goal.

Murguía and Pfau (2022) provided further validation that two primary factors can help to explain retirement preferences in a manner that is consistent across a broad range of demographic subgroups for a representative sample of Americans between ages 50 and 80. They concluded that these two factors can be identified and reliably measured as consistent across a variety of demographic subgroups based on age, gender, relationship status, net worth, and retirement timeline. People have distinct preferences about how they want to source retirement income, and these preferences can be reliably measured. There is sufficient evidence to treat these core retirement factors as providing a framework for understanding retirement strategies in a manner that codifies a retirement income language that will be understandable to the public. We refer to one's retirement style as their Retirement Income Style Awareness Profile (RISA® Profile).

This article investigates whether one's RISA® Profile can be mapped to the core retirement income strategies. We provide this mapping of RISA® profiles to strategies, followed by an analysis of the frequency for these RISA® profiles and the subsequent strategies within the broader population and within different subgroups.

We find that it is misguided to narrowly promote one type of retirement strategy as above others, and that two-thirds of the population is 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. Though so much of the consumer media focus about retirement income is on systematic withdrawal strategies (i.e., variations on the 4 percent rule), we find that income protection strategies deserve a bigger seat at the table and will be appealing to many Americans approaching retirement. We provide a way to sort individual retirees based on their RISA® Profile for the different retirement income strategies.

One of the core retirement strategies we consider in this analysis includes continuing investing in the same



general manner as in pre-retirement, and taking distributions to fund expenses on an ongoing basis from a diversified portfolio (Total Returns). Another option is to use a bucketed or time-segmented approach that uses bonds and bond-like assets like fixed annuities to cover shorter-term expenses and leaves a more aggressive and volatile growth portfolio earmarked to cover longer-term expenses (Time Segmentation). Retirees will also be exposed to approaches that seek to build a floor of sustainable lifetime income with annuities to cover basic retirement expenses before turning to an investment portfolio to cover other discretionary retirement expenses (Income Protection generally with fixed annuities or Risk Wrap generally with variable annuities).

While each of these approaches will have advocates believing that approach is best for everyone, we start from the position that each approach is viable. Once individuals understand their retirement style, it will be easier to sort through the various strategy options to find the most reasonable starting point. This research proceeds as follows. First, we describe how the two primary retirement income factors outlined in past research can be combined and translated into the characteristics of four broad retirement strategies through the construction of the Retirement Income Style Awareness Matrix (RISA® Matrix). We then analyze the breakdown of styles

and strategies within the broader population and within various demographic subgroups, as well as providing an investigation of whether these factors could explain secondary retirement considerations. We conclude with a look toward further research to clarify the role of these factors in understanding individual concerns about retirement risks.

HOW RETIREMENT INCOME STYLE PREFERENCES CAN IDENTIFY SUITABLE RETIREMENT SOLUTIONS

The two main retirement income factors used to define retirement styles are Probability-Based versus Safety-First (PS) and Optionality versus Commitment (OC). We create the Retirement Income Style Awareness® (RISA®) Matrix in Exhibit 1 to show the intersection of preferences between these two factors. The PS scale is aligned horizontally, and the OC scale is aligned vertically. This creates four distinct retirement income style quadrants, each of which is based on an individual's scores for these two main RISA® factors. The RISA® Matrix lays out four quadrants to set forth an individualized retirement income profile for how individuals wish to source their essential spending needs in retirement.

The Matrix examines how scores calculated for each RISA® factor can be used by translating an individual's preferences and style markers into appropriate and practical retirement income strategies (Total Returns, Income Protection, Risk Wrap, and Time Segmentation). These strategies align closely with the common framework of systematic withdrawals (Total Returns), time segmentation, and essential versus discretionary (Income Protection and Risk Wrap). We will describe the preferences identified within each of these quadrants to provide an understanding about the link between preferences and styles.

PROBABILITY-BASED AND OPTIONALITY FACTORS: TOTAL RETURN STRATEGY

Starting at the top right quadrant of the RISA Matrix, we see individuals whose preferences lean toward both Probability-Based and Optionality. Probability-Based income sources are dependent on the potential for market growth to provide a continuous and sustainable retirement income stream for both essential and discretionary expenses. They are comfortable relying on earning the risk premium from the stock market or other risky assets to increase the probability for funding a more expansive retirement lifestyle. Typically, individuals with these characteristics identify with drawing income from a diversified investment portfolio rather than using less flexible contractual sources to fund their retirement expenses. The upside potential from an investment portfolio is viewed as so significant that insurance products are not needed. Investment approaches are probability-based in the sense that they will probably work.

These investors rely on portfolio growth to sustainably support their spending and do not want to commit to a strategy that lacks flexibility for later changes. Those who value optionality wish to maintain the ability to consider retirement income withdrawal options on an ongoing basis. These preferences combine with a style that aligns with a systematic withdrawal strategy based on a total return investing approach for retirement income (i.e., Total Returns). The roots of this retirement income strategy originated from research conducted by California-based financial planner William Bengen in the 1990s (Bengen, 1994). Using U.S. historical market data, Bengen sought to determine the historically safe

withdrawal rate from a financial portfolio over a long retirement based on what could have worked when tested with historical market returns. The question is: how much can retirees withdraw from their savings, which are invested in a diversified portfolio, while still maintaining sufficient confidence that they can safely continue spending without running out of wealth?

The probability-based approach seeks to maximize risk-adjusted returns from the perspective of the total portfolio. Asset allocation during retirement is generally defined in the same way as during the accumulation phase—using the tools of modern portfolio theory to identify a portfolio on the efficient frontier in terms of single-period trade-offs between risk and return. Different volatile asset classes that are not perfectly correlated are combined to create portfolios with lower volatility. Investors aim to maximize wealth by seeking the highest possible return given their capacity and tolerance for short-term market volatility. Probability-based advocates are generally quite optimistic about the long-run potential of stocks to outperform bonds, so retirees are usually advised to take on as much risk as they can tolerate to minimize the probability of plan failure.

SAFETY-FIRST AND COMMITMENT FACTORS: INCOME PROTECTION STRATEGY

The lower left hand quadrant reflects individuals with a Safety-First and Commitment orientation. These individuals seek contractual protections to support their spending and are comfortable committing to a strategy that solves for a lifetime need. These characteristics align with retirement income strategies traditionally referred to as essential versus discretionary or income flooring. This reflects the Income Protection approach, which calls for contractually-protected and risk-pooled solutions to manage longevity and market risk.

Those with an Income Protection style are more willing to accept a role for insurance as a source of income protection to help manage various retirement risks. For investments-only strategies, retirement risks are generally managed by spending less in retirement, because longevity risk is managed by assuming a long life, and market risk is managed by assuming poor market returns. An increase in spending from investments must

be balanced with confidence that markets will perform as needed. But insurance companies can pool these market and longevity risks across a large base of retirees-much like traditional defined-benefit pensions and Social Security-allowing for retirement spending that is more closely aligned with average, long-term, fixed-income returns and average longevity. Those with average or below average lengths of life and above average market returns will have paid an insurance premium that is transferred to those who experience a more costly combination of a longer retirement and poor market returns. Relying on market growth is not necessary because market risk is offset and managed by the insurance company. This could support a better lifestyle than what is feasible for an individual self-managing these risks and is more nervous about the possibility of relying on market growth to avoid outliving assets.

Assets are positioned to match the risk characteristics of a spending goal. There is a preference for contractually-protected lifetime income to cover essential retirement expenses, while a more diversified total return portfolio is used for discretionary expenses. These characteristics are associated with using income annuities through the annuitization of assets to provide greater downside spending protection with a lifetime commitment. Deferred fixed annuities that provide principal protection as well as lifetime income protections through an optional income rider may also be attractive, especially in cases when the payout rates offered through the rider are competitive with annuitization options. In practice, this quadrant may also include fixed-index annuities with living benefits as options alongside income annuities. Murguía and Pfau (2021) showed how RISA® profile placement in this quadrant was highly predictive of individuals using income annuities as part of their retirement plan.

For those in this quadrant, there is no need to discuss the safe withdrawal rate that dominates the Total Returns discussion. Growth assets are only appropriate for discretionary goals where safety is less relevant. Once the basics are covered with protected sources, there is more flexibility to be less worried about the performance of remaining investments.

PROBABILITY-BASED AND COMMITMENT FACTORS: RISK WRAP STRATEGY

The remaining two quadrants reflect more hybrid approaches representing a less natural mix of preferences. Shifting to the lower right quadrant of the RISA Matrix, we find individuals whose RISA Profile shows both a Probability-Based and Commitment orientation. While these individuals maintain a Probability-Based outlook with a desire for market participation, they also have more desire to commit to a solution that provides an opportunity for a structured income stream.

We characterize these preferences as reflecting a Risk Wrap strategy, which provides a blend of investment growth potential with guaranteed lifetime income benefits, generally through a variable annuity, a registered index-linked annuity, or a fixed index annuity with a guaranteed withdrawal benefit or annuitization rider attached. Deferred annuities with living benefits are a relatively recent phenomenon that first started to become available in the 1990s. Tools like these can be designed to offer upside growth potential, coupled with secured lifetime spending if markets perform poorly. These tools provide guardrails and a commitment to a lifetime strategy while they also maintain exposure for market growth. The associated market exposure satisfies the Probability-Based dimension while purchasing a more structured and secured retirement income guardrail through the lifetime income benefit addresses the Commitment dimension in this quadrant.

SAFETY-FIRST AND OPTIONALITY FACTORS: TIME SEGMENTATION STRATEGY

Finally, the upper left quadrant reflects another hybrid case. Those who are in this quadrant have Safety-First and Optionality preferences. Those whose factor scores place them in this quadrant reflect a desire for retirement income solutions characterized by contractually-driven income while still maintaining a high level of flexibility to change strategies or accommodate ongoing changes. They like contractual protections but do not like sacrificing flexibility and, in practice, appear to exercise this preference by segmenting their dollars to satisfy some of each.

	TOTAL	RETIREMENT STATUS		AGE COHORT			NET WORTH	
		Not Retired	Retired	50-59	60-69	70-80	Less than \$1M	Greater than \$1M
Sample Size	2,863	1,413	1,429	964	924	975	1,716	1,147
Total Return	33%	33%	34%	35%	32%	33%	23%	48%
Income Protection	35%	35%	34%	33%	37%	34%	45%	20%
Time Segmentation	17%	18%	16%	18%	16%	17%	18%	15%
Risk Wrap	15%	14%	16%	14%	15%	16%	14%	17%
Significance of Difference	n⁄a	not sig	nificant	not significant		***		

^{***} Significant at 0.1% level; ** Significant at 1% level; * Significant at 5% level

EXHIBIT 2. RISA® Matrix Retirement Strategy Frequency Distributions

Time Segmentation is an investment-based strategy in which individuals divide their money into different categories, such as a short-term bucket (earmarking assets for spending immediately), an intermediate-term bucket (for spending that is soon but not immediate), and a long-term bucket (for spending that will not come until much later). Contractually-protected instruments (e.g., cash equivalents or government-issued securities) are often effective for shorter to intermediate income needs, and bond ladders are also often a good solution for intermediate-term buckets. A diversified investment portfolio then fulfills the longer-term expense needs. Deferred fixed annuities such as multi-year guaranteed annuities or even fixed index annuities without living benefits may also be attractive options, providing principal protection and tax deferral for shorter-term spending segments. Another option for short-term spending buckets are period-certain income annuities. Over time, the longer-term portfolio can gradually replenish the short-term buckets as these are spent to cover retirement expenses.

There is a lot of debate regarding whether time segmentation is materially different from using total-return investing. In terms of behavior, these strategies do have an important difference from a total-return portfolio if they help people displaying this style's characteristics to be more comfortable with a growth portfolio. Short-term spending protections could help some retirees get through periods of market volatility without panicking. That behavioral aspect is primarily where the value can

be. Much like risk wrap strategies, time segmentation reflects a hybrid approach that can match a less natural combination of preferences held by these retirees because it can be hard in practice to have contractual protections while also maintaining optionality.

THE PREVALENCE OF RETIREMENT STYLES AND THEIR ASSOCIATED RETIREMENT INCOME STRATEGIES

Our next step is to assess the prevalence of these RISA® Profile styles with a stratified sample delineated according to gender, age (50- to 80-years-old), net worth, and retirement status. Murguía and Pfau (2022) provided details about this data source. To summarize, this research is based on a survey provided to 2,863 Americans that reflects a more representative sample of individuals between ages 50 and 80. Participants in the survey were asked to complete an online questionnaire. Respondents were asked questions related to demographic variables, including age, gender, marital status, retirement status, and anticipated time until retirement or time since retirement. Respondents were also asked their net worth.

The primary retirement income factors (Probability-Based versus Safety-First as well as Optionality versus Commitment) were assessed with eight questions for each factor using a semantic differential method with a six-point scale. Respondents were also asked about their degree of retirement concerns related to meeting essen-

tial spending needs, meeting overall lifestyle spending goals, and holding reserves for unexpected expenses. We also assess a respondent's risk tolerance as reflected through a traditional portfolio loss aversion metric commonly used in risk tolerance questionnaires.

Murguía and Pfau (2022) included descriptive statistics for the sample's demographics. For the sample, 47 percent are male, and 77 percent are either married or living with a partner. The remaining 23 percent are either single (never married), divorced, separated, or widowed. For age cohorts, respondents are split somewhat equally by age within the broader 50 to 80 range used for the study. Respondents were also divided relatively equally between being retired and not retired. For net worth, 32 percent of respondents identified themselves as having a net worth (an estimate of all assets minus all debts) under \$150,000, while 9 percent had a net worth between \$500,000 and \$499,999, 19 percent had a net worth had a net worth of more than \$1 million.

We use this data to define the frequency distribution for the retirement strategies defined by the RISA Matrix. We start with Exhibit 2, which provides this frequency distribution for the aggregate sample, as well as by retirement status, by age cohort, and by net worth.

For the aggregate sample, our results indicate that approximately 35 percent subscribe to Income Protection, 33 percent to Total Return, 17 percent to Time Segmentation, and 15 percent to Risk Wrap. Even though the primary factors are statistically distinct from one another and reflect unique characteristics, they do share a correlation in which probability-based and optionality preferences tend to appear together along with safety-first and commitment. This leads to a stronger occurrence of the Total Returns and Income Protection strategies. As noted, Risk Wrap and Time Segmentation are hybrid strategies, and they are less common.

As for demographic subgroups, we do not find a statistically significant difference from the breakdown for the aggregate sample, between subgroups from the perspective of whether one is retired or not, or for the three different age cohorts. Overall, our results indicate that the RISA Matrix measures a stable retiree variable. There were no statistically significant differences in retirement income preferences between pre- and post-re-

tirement status. Similarly, there were no statistically significant differences in individual RISA Profile scores between the ages of 50 to 80 (we chose this age range because retirement strategies would be more relevant to them). In other words, results suggest that RISA Profiles do not change as one ages or retires.

Coupled with the retest consistency from Murguía and Pfau (2021), one's RISA Profile exhibits more as a trait than as a state. The RISA scores capture a set of stable preferences regarding how a person prefers to source retirement income. This is important because, to develop a retirement plan that is consistent, we need to assess stable traits akin to introversion as opposed to more transitory states like excitement.

Results indicate statistical differences by net worth. Because RISA factors are stable with age, however, results suggest an endogeneity factor at play. For example, being more probability- and optionality-focused throughout one's life may provide opportunities to increase net worth relative to those who are safety-first and commitment-focused. This may explain why those with a greater net worth are more likely than average to have a Total Return strategy preference (48 percent), while those with a lower net worth identify more strongly with Income Protection (45 percent). As public policy relating to retirement tends to focus on individuals with lower net worth, it is important to note the strong Income Protection preference in this demographic subgroup.

Shifting to Exhibit 3, results also indicate statistical differences by marital status and gender. Single individuals tilt toward the safety-first side more than married individuals. By gender, the Total Return style is relatively more common with men, while women display a relative preference for Income Protection. There will be overlap between being a woman and being single at typical retirement ages due to the higher longevity of women and their greater prevalence as widows. The gender differences finding in styles is important because it may reflect that couples must work to ensure that each person's preferences are satisfied, especially in cases where their retirement styles differ. In this investigation, we could not link the questionnaire results for those who are married or partnered to know about strategy breakdowns at the couple level, but in practice it is important that each spouse reflects separately on

	TOTAL	MARITAL STATUS		GENDER	
		Single	Married	Male	Female
Sample Size	2,863	669	2,194	1,367	1,487
Total Return	33%	30%	34%	39%	29%
Income Protection	35%	37%	34%	30%	39%
Time Segmentation	17%	20%	16%	16%	18%
Risk Wrap	15%	13%	16%	15%	15%
Significance of Difference	n/a	***		***	

^{***} Significant at 0.1% level; ** Significant at 1% level; * Significant at 5% level

EXHIBIT 3. RISA Matrix Retirement Strategy Frequency Distributions

their own style so that each can be fully included in the planning process. Overall, the RISA® identifies a natural frequency distribution of preferred retirement income strategies across the U.S. population.

The consistency of the general RISA frequency distribution across all demographics suggests other interesting implications. The main observation is that the characteristics presented within a Total Return approach resonate with roughly 33 percent of individuals readying themselves for a retirement income plan. While 33 percent is a large nominal percentage amount, it seems that, in practice, a Total Return approach is overrepresented by investment professionals and media personalities because it has become a default strategy for independent advisors under the increasingly popular assets-under-management or fee-only planning model. Yet our results indicate that a majority (roughly 67 percent) of individuals are looking for strategies that have different degrees of contractual protections and commitments to fund their essential expenses throughout retirement. Even at higher net worth levels, that percentage is still over 50 percent.

While a Total Return approach relies on a very credible strategy and may be appropriate for many individuals, it would be naive not to acknowledge that business model concerns, such as fee-only advisories struggling to be compensated for providing non-portfolio-based retirement income strategies, can influence strategy selection. One can also make the case that with the popu-

larity of pre-packaged model investment portfolios, a Total Return strategy is often sold, not bought. On the other hand, the rising availability of fee-based annuities and other income protection products in recent years may help to better integrate more retirement income solutions into the assets-under-management model framework.

RISA PROFILES AND SECONDARY RETIREMENT INCOME FACTORS

As a further test of strategy validity for the RISA Profiles represented by each of the four quadrants, we will explore whether they are tied to other retirement income preferences identified in Murguía and Pfau (2021) in the expected direction. The first is the Front-Loading versus Back-Loading Income factor (FB), which can be directly linked to the tradeoffs identified by the concept of longevity risk aversion. Longevity risk aversion represents a fear of outliving assets in retirement, and it will affect some individuals more strongly than others. Does a retiree feel more comfortable front-loading portfolio distributions with higher spending early in retirement to better ensure that savings can be enjoyed when they are more assured to be alive and healthy? Or does an individual prefer to spend at a lower rate in early retirement to better ensure that a particular lifestyle can be maintained without cuts during the later stages of a potentially long retirement?

N	2809		
F Value	38.14		
Pr > F	<.0001		
R-Square	0.11		
Parameter	Estimate	t Value	
Intercept	3.17	52.16	***
Loss Aversion	-0.06	-2.95	***
Age	-0.01	-0.23	
Have Spouse / Partner	-0.01	-0.23	
Net Worth	-0.05	-2.43	**
Retired	-0.07	-1.47	
Female	-0.02	-0.40	
Risk Wrap	0.27	4.49	***
Income Protection	0.78	15.47	***
Time Segmentation	0.42	7.02	***

^{***} Significant at 0.1% level; ** Significant at 1% level; * Significant at 5% level

EXHIBIT 4. RISA Profiles and the Front-Loading versus Back-Loading Factor

The second factor is True versus Technical Liquidity (TT), which reflects differences between two ways that liquidity can be defined in financial planning. Those who prefer True Liquidity would like to have assets earmarked specifically as reserves for future unknown events that can derail a retirement income plan. To be truly liquid, assets must not already be matched to other financial goals such as planned retirement expenses or a specific legacy goal. True Liquidity can involve the use of cash set asides, buffer assets, and insurance. Those who prefer Technical Liquidity would rather raise cash from investments or assets already earmarked for other goals when necessary to fund unexpected expenses, with an understanding that cuts may then need to be made elsewhere. Technical Liquidity refers more to a general sense that there is a pot of assets to draw from for any type of expense. With comfort regarding Technical Liquidity, fewer assets may be needed to feel at ease with a retirement income plan because it is not necessary to have as many additional reserve assets to cushion the potential spending shocks that retirees face.

Exhibit 4 uses the Front-Loading versus Back-Loading factor as a dependent variable. Positive estimates for the explanatory variables reflect greater longevity risk aversion as identified with a Back-Loading preference. Explanatory variables include loss aversion as our proxy for traditional Risk Tolerance Questionnaires (RTQs), age, marital status, net worth as our proxy for risk capacity, retirement status, gender, and RISA style (i.e., Total Returns, Income Protection, Time Segmentation, and Risk Wrap). Total Returns is the omitted condition for the regression, which simply means that the coefficients for the other styles indicate their relationship with respect to Total Returns. We find that portfolio loss risk tolerance and net worth are negatively related to longevity risk aversion. It is not surprising that those with a higher net worth are less worried about outliving their assets, and it is interesting to note a positive relationship between concerns for short-term volatility and concerns about outliving assets. Age, marital status, retirement status, and gender all lack statistical significance. As for retirement styles, we find that In-

N	2808		
F Value	32.43		
Pr > F	<.0001		
R-Square	0.09		
Parameter	Estimate	t Value	
Intercept	3.68	58.17	***
Loss Aversion	-0.16	-7.50	***
Age	0.02	0.81	
Have Spouse /Partner	-0.13	-2.74	***
Net Worth	0.09	4.74	***
Retired	0.08	1.58	
Female	0.03	0.67	
Risk Wrap	0.32	5.10	***
Income Protection	0.69	13.13	***
Time Segmentation	0.56	9.03	***

EXHIBIT 5. RISA Profiles and the True versus Technical Liquidity Factor

come Protection has the strongest link to a Back-Loading preference, followed by Time Segmentation, then Risk Wrap, and then Total Returns. Though not shown, each of the factors are significantly different from one another at the 1 percent level except for no difference between Risk Wrap and Income Protection. A separate F-test on the RISA quadrants also shows joint statistical significance (not shown in the exhibit). The RISA Profile is significantly related to the FB factor in the expected directions because those with a safety-first orientation exhibit greater concerns about outliving assets.

Next, Exhibit 5 uses the True versus Technical Liquidity factor as a dependent variable. Positive estimates for the explanatory variables reflect a True Liquidity mindset. The explanatory variables are the same, with Total Returns again serving as the omitted condition for which the other styles are compared. We find that higher portfolio risk tolerance relates to a technical liquidity preference as does having a spouse or partner. Those with a higher net worth favor true liquidity. Age, retirement status, and gender all lack statistical significance. As for retirement styles, we find that Income Protection has the strongest link to a True Liquidity preference, followed by Time Segmentation, then Risk Wrap, and then Total Returns. Though not shown, each of the factors are significantly different from one another at the 1 percent level except for no difference between Time Segmentation and Income Protection. A separate F-test on the RISA quadrants showed joint statistical significance (not shown in the exhibit).

CONCLUSIONS

Our underlying assumption is that there are many credible ways to solve the retirement income puzzle, but the right starting point is the one that is most aligned with an individual's preferences. Discussions about retirement income planning can become quite confusing because there are so many different viewpoints expressed in the consumer media. Each individual investor must ultimately identify the style that can best support their financial and psychological needs for retirement. Individuals may not be aware of the different retirement strategy options. Financial services professionals and retirees should understand which style they most identify with to know how that affects advice and whether retirees are thinking along the same lines as those providing them with advice. The RISA Profile provides a systematized way for people to quickly understand whether they are speaking the same language and to find retirement income strategies best aligned with their style.

Notable findings from this research include that twothirds of individuals in our nationally representative sample are looking for strategies that extend beyond a Total Returns investing strategy for sourcing their retirement income. This is important because the conventional retirement income strategy explained to retirees is Total Returns, and those who are told to use this strategv but who are not comfortable with its assumption will struggle throughout retirement. This research provides a method to understand when protected income solutions can best resonate with the preferences of those most likely to appreciate such products. We also find that retirement styles remain consistent by age and both before and after retirement. Additionally, women have a stronger Income Protection focus than men, which is important because they usually live longer and are more likely to be the remaining survivor from a heterosexual couple. As a starting point for retirement income, it is important to meet individuals where they are and offer a strategy that will resonate with them.

In subsequent research we provide a deeper comparison between RISA Profiles and traditional risk tolerance questionnaires to determine whether the RISA can provide a better starting point to assess a retirement income strategy.

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