# UBS Wealth Way

### A purpose-based approach to managing your wealth

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**UBS** 

This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved.

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### **UBS** Wealth Way

This report has been prepared by UBS Financial Services Inc. (UBS FS). Please see the important disclaimer at the end of the document.

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**Cover picture** UBS

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# Foreword



Solita Marcelli



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### Dear reader,

Investing is a deeply personal undertaking, which is why we always start with a discussion about what's most important to you. With a deep understanding of your values and your goals, we can help you shape your wealth strategy and organize your investments to align to your definition of financial and personal success.

The goal of the UBS Wealth Way framework is to help families understand how their assets can best be used to meet their objectives. This purpose-based approach uses three strategies to organize your investments so that you always know where your money is—and why:

- 1. A Liquidity strategy to help maintain your lifestyle.
- 2. A Longevity strategy to help improve your lifestyle.
- 3. A Legacy strategy to help improve the lives of others.

In this report, we will explore this framework, explaining why it works, how it works, and how to implement it in practice.

Since first introducing this framework a decade ago, we have used it to help hundreds of families. Both in theory and in practice, this approach helps families to better understand their personal situation, uncover new goals and opportunities, and make better decisions over their lifetimes.

Through this process—and the plan we create together—our unique wealth management approach will help give you the confidence that you have all you need—for today, for tomorrow, and for generations to come.

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Chapter 1

# Our approach

Every family has unique financial goals and needs. Our approach is designed to reflect your priorities by creating a customized investment strategy that reflects and adapts to your priorities. We achieve this by organizing your family's wealth into three purpose-based strategies—the Liquidity. Longevity. Legacy. strategies—to align with the size, importance, and time frame of each of your goals (Figure 1).

### Liquidity strategy

Our Liquidity strategy is designed to help your family meet its cash flow needs regardless of market conditions.

To fund the Liquidity strategy, we recommend setting aside enough resources to cover 3–5 years of cash flow needs from the portfolio—any planned spending that will exceed income from reliable sources such as your salary, Social Security, annuity, and pension income.

The Liquidity strategy can be funded with both assets and borrowing capacity. Your Liquidity strategy portfolio can incorporate cash, savings accounts, high-quality fixed income, and a CD/bond ladder that is aligned with your planned portfolio withdrawals.

### Longevity strategy

Our Longevity strategy is designed to include all the assets and resources that you will need to fund your spending for the rest of your lifetime.

To fund the Longevity strategy, we recommend using a financial plan to assess how much wealth you need to meet your lifetime goals with a high probability of success, even if you experience a series of poor market returns.

Your Longevity strategy can be funded with any resources that you plan to tap during your lifetime, such as retirement accounts, real estate investments, annuity income, and longterm care insurance policies. When building a Longevity strategy portfolio, we recommend a well-diversified, balanced portfolio approach designed to generate consistent growth and income, helping your assets grow faster than inflation. Over time—for example, annually when markets are healthy—these assets will be used to periodically replenish the Liquidity strategy to support spending needs.

### Figure 1



Segmenting your wealth by purpose helps to align your portfolio with the size and timing of your goals The Liquidity. Longevity. Legacy. framework

### Legacy strategy

Our Legacy strategy clarifies how much your family can afford to give to improve the lives of others—either now or in the future.

It includes assets that exceed what you need to meet your lifetime objectives, and is generally the focus of multi-generational estate and/or philanthropy planning. With lifetime spending covered with other resources, the Legacy strategy can often be invested aggressively to maximize after-tax growth potential—whether that is for the next generation of your family, or to give to the causes that are most important to you. In addition to investment assets, the Legacy strategy can also be funded with other assets that are not earmarked for lifetime spending, such as collectibles, charitable funds, or other homes and real estate.

At its core, the UBS Wealth Way approach is a blueprint to help families allocate their assets and manage their liabilities to meet their objectives. It is designed to provide clarity for all financial decisions embedded in your family's specific goals.

Over your lifetime, the relative sizing of the Liquidity. Longevity. Legacy. strategies will evolve, as illustrated in Figure 2.

### Defining your "Why"

When building a portfolio, it's crucial to start with **why** you are investing. Investment strategies should be guided by your family's unique goals and values, rather than market trends. The UBS Wealth Way approach empowers you to tailor every aspect of your financial plan to your specific priorities. To ensure that your plan is aligned with your priorities, we begin by understanding what matters most to you. While defining goals is easy for some, it can be overwhelming for others. To get started, consider these questions with your family and advisor:

- What do you want to accomplish in life?
- Who are the people that matter most?
- What legacy do you wish to leave?
- What are your main concerns?
- How do you plan to achieve your life's vision?

By deeply understanding your goals, values, and priorities, you and your financial advisor can collaboratively design a strategy that truly reflects your family's aspirations and ensures your financial plan is optimized for your unique needs.

### Why segment your wealth?

There is no "one-size-fits-all" solution to achieve every goal and manage every risk. The Liquidity. Longevity. Legacy. framework helps us to tackle each risk with a dedicated strategy, and to reflect the size and importance of each risk in the context of your family's financial plan. In short, these strategies help align assets with purpose and timing.

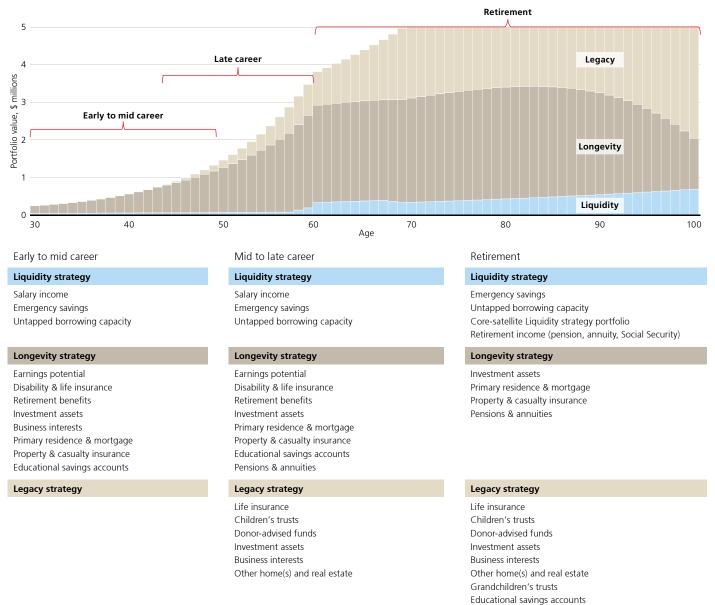
Segmenting your wealth into the Liquidity. Longevity. Legacy. framework can help give you:

- Clarity about how much you need to achieve your goals,
- Confidence that you can maintain your lifestyle even during a bear market, and
- Context that can empower you to harness opportunities to enhance your after-tax growth potential.

#### Figure 2

### The relative size of each strategy will change throughout your lifetime, mirroring your changing priorities

Example Liquidity. Longevity. Legacy. framework for a hypothetical family, \$ millions



Note: Assumes that the Liquidity strategy is invested a 50% cash, 50% US fixed income portfolio; the Longevity strategy is invested in an Aggressive portfolio (85% global stocks, 15% US fixed income) during working years, and in a Moderate risk portfolio (50% global stocks, 50% US fixed income) during retirement; and the Legacy strategy is invested in an Aggressive risk portfolio (10% US fixed income, 60% global stocks, 5% hedge funds, and 25% private equity). Source: UBS. For illustration purposes.

**In your working years**, an emergency fund should suffice for your Liquidity strategy, as your salary should pay for all expenses. During this phase, your Longevity strategy can grow through savings and investment returns.

We recommend following the Savings Waterfall (Figure 3) to prioritize your savings based on each account type's after-tax growth potential. When compared to other saving strategies, we estimate that following the spending waterfall can add about 20–40% to your inflation-adjusted retirement spending potential.<sup>1</sup>

When transitioning to retirement, your Longevity strategy should be completely funded, and you may begin to earmark some assets for the Legacy strategy. As you approach retirement, you will direct some of your savings to fund your Liquidity strategy to support any planned portfolio withdrawals that fall within the next 3–5 year period. Your Liquidity strategy will have a natural de-risking effect for your overall investment strategy and will help to protect you against sequence-of-returns risk, such as a large market decline during your early retirement years.

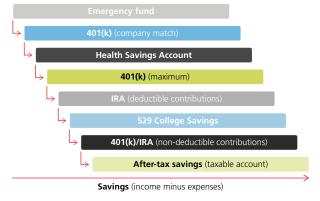
**During retirement**, you will slowly spend down your Longevity assets, while your Legacy strategy assets will continue to grow. As a result, you may see a rising allocation to risk assets in retirement as your Legacy strategy assets will comprise a growing portion of your overall assets.

This decision is intuitive once assets have been segmented by purpose using this framework, but is quite different than the conventional "glide path" approach, which reduces the allocation to stocks over time. For more details, see the "Benefits of the Liquidity. Longevity. Legacy. framework" section below.

### Figure 3

### A "savings waterfall" can help you prioritize your savings

Investment account types, ranked from highest to lowest after-tax growth potential



Source: UBS. For illustration purposes.

### Chapter 2

# How UBS Wealth Way builds on classic investment approaches

The UBS Wealth Way approach represents a significant evolution in investment strategy, building upon the foundational principles of modern portfolio theory, liability-driven investing, and the endowment investing approach. By integrating these established investment frameworks, UBS Wealth Way offers a comprehensive and dynamic methodology designed to address the diverse financial goals and challenges faced by investors today.

In this section, we will explore how the UBS Wealth Way framework innovates on classic investment strategies to provide a holistic, intuitive, and adaptable approach to managing wealth.

### Modern Portfolio Theory (MPT)

As investors, we have long known that we should diversify our investments. In the fourth century, Rabbi Isaac Bar Aha proposed that one should have "a third in land, a third in merchandise, and a third ready at hand" (Babylonian Talmud).

However, it wasn't until 1952, when Harry Markowitz published "Portfolio Selection" in The Journal of Finance, that asset allocation was given a Nobel Prize-winning quantitative framework.

By introducing Modern Portfolio Theory (MPT), Markowitz introduced the concept that portfolio construction should be driven by targeting the highest expected return for a given level of portfolio "risk," as measured by the variance of returns.

The main innovation of MPT is that by estimating the risk and return characteristics of the investments in their portfolio, as well as the correlations between assets, investors can create portfolios with higher expected returns per unit of risk by maximizing return for a given level of risk or minimizing risk for a targeted level of return (i.e., mean-variance optimization). MPT introduced a couple of important insights:

- 1. To earn higher returns, investors generally need to accept more risk. MPT formalized the tradeoff between risk and return, showing that higher returns are associated with higher risk.
- 2. **Diversification can reduce risk.** By combining assets with low or negative correlations, investors can reduce the overall risk of the portfolio and create a portfolio that has lower overall risk—and a higher risk-adjusted return—than the individual assets.

MPT has worked in practice, as well—at least, over long time horizons, in hindsight, and assuming that you are using variance of returns as your measurement of risk. As we show in Figure 4, diversified portfolios (represented by the efficient frontier) have maximized return for a given level of risk and provided higher risk-adjusted returns than the individual asset classes.

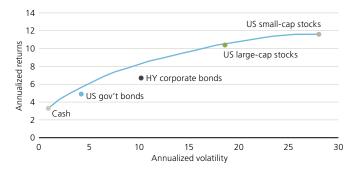
We identify two main challenges with applying Modern Portfolio Theory as a solution for investment.

**First, we need to build portfolios that are resilient and robust, not historically 'optimal.'** If you had to make a single portfolio choice and stick with it from 1925 to 2024, the 'optimal' portfolio would have mostly included US government bonds, US large-cap stocks, and US small-cap stocks. This would have been difficult to predict in 1925. Moreover, these portfolios would have been inferior to many other portfolios during long stretches of that 98-year period. For example, while US small-cap stocks have outperformed US large-cap stocks by about 1.3% per year since 1925, they have underperformed US large-cap stocks by about 1.6% per year since 1983.

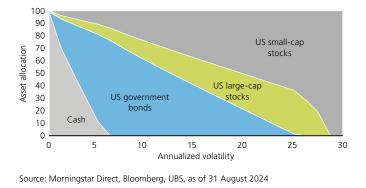
### Figure 4

### Long-term efficient frontier, 1925–2024

Annualized return (vertical axis) and volatility (horizontal axis) for select asset classes and portfolios, 1925–2024, in %



Asset allocation for the efficient frontier (the portfolio with the highest return for each level of volatility standard deviation), in %



Rather than attempting to build an optimal portfolio, we should design portfolios that are robust to different assumptions (returns, risk, and correlations between asset classes) and resilient to changing market environments.

### Second, we need a better definition of risk. MPT

assumes that risk is measured by a portfolio's expected variance of returns. Variance is more a measure of uncertainty than risk, and it can differ quite significantly across different time horizon. Uncertainty is a factor in measuring risk, but it isn't the whole story. We need a different methodology to assess a portfolio's risk of failing to meet goals.

With this in mind, we developed the Liquidity. Longevity. Legacy. framework, which moves away from the notion that volatility appropriately measures investment risk and incorporates more modern research to help build purpose-driven portfolios: Liability-driven investing, the endowment model of investing, behavioral finance, and a holistic balance sheet approach. We believe each of these concepts further benefits investors when compared to the traditional Markowitz approach (see Figure 5).

### Figure 5

The Liquidity. Longevity. Legacy. framework incorporates investment approaches that are aligned each strategy's purpose

	Liquidity	Longevity	Legacy
Purpose	Provide cash flow to fund short-term spending regardless of market conditions	Generate consistent growth and income to achieve lifetime spending goals and avoid outliving wealth	Maximize after-tax growth and intergenerational transfer potential
Intellectual Framework	Liability driven investing (LDI)	Total wealth LDI	Tax-aware endowment model
Sizing	Next 3–5 years of cash flow needs	A stressed portfolio performance scenario approach aiming to achieve lifetime goals with a high probability of meeting personal needs over your lifetime	Excess wealth that isn't needed for lifetime goals
Investment approach	Core bond/CD ladder, yield enhancing satellite strategies	Well-diversified portfolio focused on generating growth, with a secondary objective of producing income	Endowment-style portfolio with a high allocation to risk assets
Key risk factors	Drawdown risk, time under water, sequence of return risk	Probability of success, funding ratio, shortfall risk, longevity risk	Opportunity cost, estate and inheritance taxes

Source: UBS

### Liability-driven investing

Liability-driven investing (LDI) is a goal-oriented framework that focuses on matching investments to future expenses, rather than just growing assets.

Instead of measuring risk based on market changes, LDI aims to ensure that future financial obligations will be met. LDI is commonly used by pensions and other institutional funds. Success is measured by how well the investments cover these future liabilities.

### How it works

LDI treats future expenses like debts that need to be paid.

In theory, the safest way to meet a future spending need is to buy a bond that matures just in time for the expense. For example, to meet a \$10,000 expense in 2 years, buy a bond that delivers \$10,000 at maturity in 2 years. If the goal's cost is tied to inflation, a 2-year Treasury Inflation-Protected Security (TIPS) would be even better.

Buying a bond ladder that directly mirrors all future spending from the portfolio would be quite safe, as long as one knows the exact timing and cost of all their future expenses. However, it would be expensive and inefficient as an investment approach, failing to tap into risk premia that can allow for any real returns above inflation. Even so, the bond ladder is a useful concept for modeling the cost of "immunizing" future spending against market risk.

The LDI approach uses this concept to compare the value of assets against liabilities (future spending, which can be modeled as a short position in the bond ladder). In doing so, LDI seeks to find an investment portfolio that maximizes the surplus (assets minus liabilities), while considering the volatility of this surplus.

In other words, families can use LDI to evaluate and optimize their portfolio so that they can meet their future spending needs efficiently and with a high degree of certainty.

### Time horizon and risk

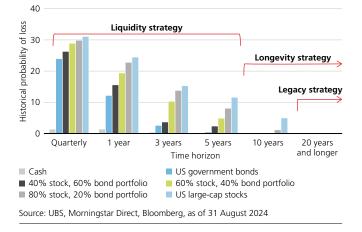
It would be prohibitively expensive to aim to "immunize" your lifetime spending with bonds alone, because they are unlikely to provide much (if any) return above inflation. When investing in asset classes that do provide substantial real returns over the long term, it's vital to consider the role of time horizon in an LDI framework. After all, drawdown risks are far more common over short-term holding periods than over longer-term holding periods (see Figure 6).

For most diversified portfolios, it has taken around 3–5 years to fully recover their losses following a bear market decline (a 20%+ drop in the S&P 500), with a longer recovery period for portfolios with a higher allocation to stocks (see Figure 7).

#### Figure 6

### Losses are less likely over long time horizons

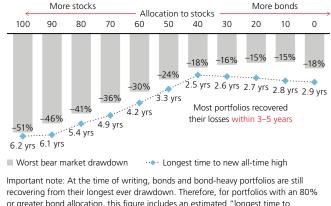
Historical probability of loss, by time-frame, for US large-cap stocks, US government bonds, cash (1–3 month T-bills), and select stock/bond portfolios, using monthly returns since December 1945, in %



#### Figure 7

### Stock-heavy portfolios have experienced larger bear market declines and longer recovery periods

Bear market performance, based on allocation to US large-cap stocks (the remainder is invested in intermediate US government bonds), since December 1945, in %



or greater bond allocation, this figure includes an estimated "longest time to new all-time high" figure for the 2022 bear market. Source: Morningstar Direct, Bloomberg, UBS, as of 31 August 2024

This feature is why we recommend using a bond ladder sized to meet the next 3–5 years of net portfolio withdrawals—as the core of the Liquidity strategy.

By building a Liquidity strategy to meet cash flow needs during a bear market, you can protect your family against being forced to sell investments at bear market prices, which would lock in otherwise temporary losses and increase the risk of prematurely depleting financial assets. This mitigates what the UBS Wealth Way philosophy defines as the true definition of risk: the permanent loss of capital.

Longer time horizons not only reduce the probability that diversified portfolios will experience a loss, but they also improve the probability that the portfolio will beat a hurdle rate of return.

As you extend your investment time horizon, it becomes easier to reliably generate real returns if you are investing using a stock-heavy portfolio than if you hold cash. In fact, the worst 20-year annualized real return for US large-cap stocks (+0.02% p.a.) was almost as high as the <u>best</u> 20-year annualized real return for cash (+0.24% p.a.).

### Glide path

Because of the relationship between time horizon and risk, a liability-driven optimization strategy will intuitively drive dynamic asset allocation decisions that take spending needs and investment risk into account, helping to find a portfolio risk level that aligns with goals.

When applied to a hypothetical investor, the LDI framework will recommend a "glide path"—taking less equity market risk as the investor moves into and through retirement. This is because, as the investor approaches their life expectancy, the duration of their liabilities—the weighted average length of time until cash is needed to fund the spending goals—will fall.

"Target date" retirement funds, which are a popular option in retirement accounts such as 401(k)s, tend to follow this glide path approach, reducing their stock allocation as their retirement target date approaches, and then keeping this more-conservative asset allocation throughout retirement. However, since target date funds are not directly calibrated to your specific needs and financial situation, their glide path is unlikely to match the optimal allocation for your family at any given time. (See the "100 minus your age" illustration in the next section).

Although LDI is a useful framework for investing assets earmarked for lifetime spending—namely, the Liquidity strategy and the Longevity strategy—it doesn't fully account for a family's excess assets, which is to say the Legacy strategy. Because the Legacy strategy assets don't need to meet specific lifetime goals, they can be invested in a strategy that aims to maximize after-tax growth potential over a longer time horizon. As we will discuss further below, this means that the UBS Wealth Way framework will often recommend a glide path with a <u>rising</u> allocation to stocks as a family moves through retirement.

### The endowment model

The endowment model is an investment process—popularized by the Yale University endowment, among others—that embraces diversification, alternative investments, active management, and leverage to enhance long-term investment returns. When adjusted accordingly for taxable investors, this framework can help to generate superior long-term after-tax growth, especially valuable for a family's Legacy strategy assets. We will further discuss portfolio management for the Legacy strategy in the "Managing the Liquidity. Longevity. Legacy. strategies" section.

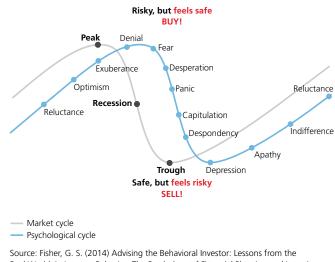
### **Behavioral finance**

In finance and economics, we assume that individuals and investors behave rationally, as modeled by mathematicians and economists. But the reality is quite different. Information and anticipation of future market performance produce strong emotional reactions (see Figure 8). The excitement and subsequent fear of loss can drastically change investors'

Figure 8

### Because of recency bias, investors tend to chase performance

Illustration of market cycles and psychological cycles



Real World, in Investor Behavior: The Psychology of Financial Planning and Investing (eds H. K. Baker and V. Ricciardi), John Wiley & Sons, Inc., Hoboken, NJ, USA

short-term willingness to allocate their assets effectively often at the expense of long-term goals. Moreover, investors feel the pain of losses twice as powerfully as they experience the pleasure of gains; this "loss aversion" bias can often cause investors to become risk-averse and to de-risk during times when they should be invested.

To help address that our risk preferences can change over time, the Liquidity. Longevity. Legacy. approach is designed to make risk budgeting decisions in an objective, purposedriven framework. To learn more about how to tackle behavioral biases, check out the "Benefits of the Liquidity. Longevity. Legacy. framework" section below.

### Holistic balance sheet approach

When building out the Liquidity. Longevity. Legacy. framework for a family, it can be helpful to map out a balance sheet to incorporate the household's assets and liabilities.

**Assets** might include real estate, retirement accounts, partnership interests, brokerage accounts, pension income, and Social Security.

For younger families, human capital— the value of a person's future earnings potential—is an extraordinarily important intangible asset. From an earnings standpoint, a 30-year-old newly minted surgeon is wealthier than a 30-year-old without post-high-school education or stable employment.

Although it is difficult to quantify human capital with precision, understanding and accounting for general risk attributes and balance sheet impact of human capital can drive investment decisions. For example, it's important to hedge your human capital risk by owning the right amount of disability insurance and life insurance, ensuring that your family will be able to achieve your goals.<sup>2</sup> Human capital is also an important asset for investment. Building skills and knowledge, earning advanced degrees and certifications, and other indirect investments such as networking can help to boost a person's earning potential and reduce the risk of experiencing extended periods of unemployment.

**Liabilities** include outstanding obligations, such as mortgages, securities-backed loans (SBLs), student loans, and other types of debt.

As we mentioned in the "Liability-driven investing (LDI)" section above, liabilities can also be expanded to include future spending objectives, like a second home purchase, a child or grandchild's education, and retirement spending. Such spending is a future liability for the household, similar to mortgage payments or other debt.

The Liquidity. Longevity. Legacy. framework also allows your family to clearly see how you are using liabilities, like mort-gages and securities-backed loans (SBLs), to accomplish your objectives—and to see which untapped resources exist. For example, you may have used your SBL as a Liquidity strategy resource to cover an unexpected expense that would otherwise have required selling investment assets and realizing otherwise-deferrable capital gains taxes. Alternatively, you may have used a mortgage to purchase your primary residence (for the Longevity strategy) or to purchase a Legacy strategy asset, such as a vacation home that's intended to be part of a bequest.

Once you have composed your full balance sheet, comparing assets to liabilities can provide vital information. If your assets exceed liabilities, your family has a surplus, or margin of safety, in excess of liabilities. If your liabilities exceed assets, you may need to address the deficit by finding a way to increase assets, reduce planned spending, or modify the investment strategy.

Chapter 3

# Benefits of the Liquidity. Longevity. Legacy. framework

Improved performance compared to other approaches A fundamental benefit of the Liquidity. Longevity. Legacy. framework is that it can help your family choose the right asset allocation at each stage of your life. Unlike other strategies, which do not tailor your investments to your circumstances, goals, and purpose, organizing your life into the Liquidity. Longevity. Legacy. strategies will help you to adapt your asset allocation to grow your wealth more effectively.

Although selecting the right asset allocation might sound trivial, it's not. For instance, many investors choose an asset allocation that fails to account for assets like human capital or Social Security, causing them to hold suboptimal portfolios that often overallocate to cash and fixed income.

With this in mind, the Liquidity. Longevity. Legacy. framework will guide most families' asset allocations to follow an intuitive path:

- **Early to mid career:** A large allocation to stocks and a small emergency fund of cash and bonds.
- Late career: The portfolio's allocation to cash and bonds will rise slightly as retirement approaches and the Liquidity strategy is funded with resources to support 3–5 years of net portfolio withdrawals.
- **Retirement:** The portfolio's allocation to stocks will rise steadily throughout retirement as the Legacy strategy grows more quickly than the rest of the portfolio.

Choosing the right asset allocation can have a meaningful impact on results. For example, based on our Capital Market Assumptions, we estimate that shifting just 10% of the portfolio from bonds to stocks could improve the portfolio's expected annualized return by between 0.4% and 0.7% per year. This would translate to about 17% to 32% of additional growth over a 40-year retirement period, all things being equal.<sup>3</sup>

Of course, risk must be managed appropriately; a higher expected return isn't worthwhile if it increases the risk that your family will run out of money prematurely. That's one reason the Liquidity. Longevity. Legacy. framework works so well: it helps families to naturally adjust their asset allocation over a family's lifetime, increasing or decreasing risk as appropriate.

To demonstrate the potential benefits of the Liquidity. Longevity. Legacy. framework, we used a Monte Carlo analysis—which simulates thousands of potential investment returns, incorporating contributions and withdrawals—to evaluate the results of funding a hypothetical family's retirement spending for 40-year periods (e.g., from age 60 to 100). We ran this analysis comparing two common asset allocation strategies with the UBS Wealth Way approach:

- 1. A "**100 minus your age" portfolio**, starting with a global stock allocation of 40% (100 minus the family's starting age of 60) and a 60% allocation to US bonds. Each year, this approach moves 1% of the portfolio from stocks to bonds.
- 2. A **Balanced portfolio**, keeping the stock allocation unchanged (50% global stocks, 50% US bonds) throughout retirement.
- 3. A **Liquidity. Longevity. Legacy. strategy portfolio.** An asset allocation designed to meet the family's lifetime spending needs, targeting a 99% probability of success and incorporating a portfolio of cash, stocks, bonds, hedge funds, and private equity. Over time, as the Legacy strategy outgrows the rest of the portfolio, the portfolio's allocation to stocks and other risk assets steadily rises.

Our analysis found that the Liquidity. Longevity. Legacy. approach would have increased the median ending portfolio value by about 52% (1.0% per year) relative to a static balanced portfolio, and 190% (2.7% per year) when compared to a "100 minus age" glide path portfolio.

This additional growth came at the cost of incurring a 1% probability that the Liquidity and Longevity strategy assets would be depleted before the end of the 40-year period.\*

In each of the three scenarios in Figure 9, the portfolios were invested extremely conservatively, significantly overfunding the portfolio's spending needs and forgoing substantial growth potential.

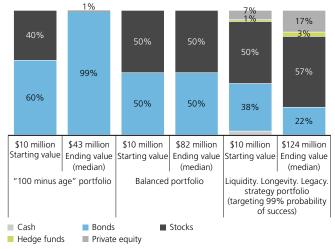
\* **Note:** in this simulation, the Balanced portfolio and "100 minus age" portfolios would not have been depleted in any of the simulation trials. However, in simulations with a higher spending rate, these portfolio approaches' lower return potential would likely have resulted in a much lower probability of success. With a Liquidity strategy to protect against bear market risk, we believe that a 99% probability of success is far too conservative, as it retains a large buffer of assets in the Longevity strategy that is likely to significantly exceed your needs in retirement—even if you encounter poor market conditions in retirement. This comes at the cost of decades of potentially compounding at a higher rate in the Legacy strategy, not to mention potentially higher tax liabilities. An 85% probability of success is a more reasonable target to balance opportunity cost (foregone growth potential) and sequence of return risk (the probability of needing to adjust spending).

Figure 10 helps to demonstrate the tradeoff between safety and return potential, showing the results of Liquidity. Longevity. Legacy. strategy approaches that are sized to target different probabilities of success over the 40-year retirement period. It's also worth noting that Longevity strategy assets that are still in your taxable estate at the end of your life are likely to be subject to estate taxes. By contrast, the

#### Figure 9

### The Liquidity. Longevity. Legacy. strategy can help to improve growth potential

Starting and median ending portfolio value and asset allocation after a 40-year retirement period



#### Figure 10

Families with more spending flexibility can afford to allocate more to the Legacy strategy, enhancing growth potential

Median ending portfolio value,  $\$  millions, depending on the targeted probability of success



Note: Assumes a \$10 million starting portfolio value and \$200,000 annual portfolio withdrawals in the first year of retirement, increased by 2.4% each year to account for inflation. Ending wealth reflects the median outcome of thousands of simulations. In the Liquidity. Longevity. Legacy. strategy portfolio, the Liquidity strategy is invested a 50% cash,50% US fixed income portfolio; the Longevity strategy is invested in a Moderate risk portfolio (50% global stocks, 50% US fixed income); and the Legacy strategy is invested in an Aggressive risk portfolio (10% US fixed income, 60% global stocks, 5% hedge funds, and 25% private equity). The Liquidity. Longevity. Legacy. strategy portfolios' initial weights are designed to target a specific probability of success, with the strategies' relative weights allowed to drift throughout the simulation. This simulation does not account for taxes or fees, uses the UBS 2024 Capital Market Assumptions, and does not include a dynamic refilling process for the Liquidity strategy.

Timeframes may vary. Strategies are subject to individual client goals, objectives, and suitability. This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved.

Legacy strategy often comprises assets that are outside of your taxable estate. Therefore, you are able to more effectively pass after-tax wealth to future generations when you can confidently fund your Legacy strategy by targeting a more reasonable probability of success.

It's important to note that many of the simulation failures could be avoided with spending flexibility, or a policy of dynamically refilling the Liquidity strategy. For more details regarding the probability of success, see the "Managing the Liquidity. Longevity. Legacy. strategies" section below.

### Conclusion

The Liquidity. Longevity. Legacy. approach typically outperforms other strategies because it effectively addresses the financial decisions that are embedded in your family's goals and objectives (e.g., lifetime spending). In other asset allocation approaches, little or no distinction is made between the assets that are intended to be used today (e.g., near term) and the assets that are intended to be used in 10, 20, or 30 years—much less the assets that are unlikely to ever be used during the lifetime of your family's first generation.

Without the context of financial goals and time horizons, it is impossible to find an optimal solution for your family's financial assets' various purposes. After all, there is no "one-sizefits-all" portfolio that can accomplish the contradictory goals of capital preservation, consistent growth and income, and maximizing after-tax growth potential. Even if there were an optimal portfolio for a point in time, the portfolio should change over time and with changes to your family's goals and priorities. This is why the Liquidity. Longevity. Legacy. approach is the intuitive solution to align investment and allocation decisions with your family's objectives and capacity for risk which, in turn, produces optimal portfolios across time.

### Managing bear market risk

When it comes to understanding market risks and their impact on investment success, there is an elephant in the room—or rather, a bear. A "bear market" occurs when there is a greater-than-20% drop in the S&P 500. Although the 20% threshold is arbitrary, crossing this level has historically been an important dividing line between painful-but-short-lived corrections—where recovery time is measured in months and the years-long recovery period for bear markets.

Most investors hate bear markets, and they can be quite stressful, but context is important. Bear markets only cause damage when you liquidate risk assets during the market drawdown or before markets have fully recovered their losses.

If you are in your working years, and you are actively saving for retirement, bear markets offer you a rare and valuable opportunity to invest at a lower price point. In fact, because markets tend to go higher over time, bear markets offer the only opportunity to buy stocks at prices that haven't been seen for several years. Buying during bear markets can be highly accretive to long-term wealth.

If you are in retirement, bear markets pose a more difficult challenge. A bear market early in retirement—coupled with portfolio withdrawals for retirement spending—can lead to "sequence of return risk:" Your portfolio is forced to lock in otherwise-temporary losses, leaving the portfolio with fewer assets to benefit from a market recovery and dwindling resources to fund future spending needs.

The S&P 500 has gone through 9 bear markets since December 1945 (see Figure 11). Each of these episodes created dramatic losses, but drawdown size is only one part of the equation; a bear market's damage potential is also driven by how long the market takes to recover its losses. After all, if you are living off your portfolio, you will still be forced to lock in losses even if the market has already started to recover.

Some bear markets lasted just months, while others lasted much longer. The Tech Bubble—which saw the S&P 500 fall about 45% from peak to trough—was the longest-lasting decline, taking stocks over 6 years (from August 2000 to October 2006) to fully recover its losses. Diversified investors would have fared better, with a 60% stock, 40% bond portfolio experiencing milder losses (about 22% from peak to trough) and reaching a fresh all-time high by October 2002 (after about 4 years).

### Figure 11

### Portfolios have usually recovered their losses in 3-5 years

Statistics for bear markets since December 1945

											Average excluding
Peak year	1947	1962	1969	1973	1988	2001	2008	2020	2022	Average	2020
Market cycle overview											
Length of prior bull market*	13.9 yrs	15.1 yrs	6.4 yrs	2.5 yrs	12.9 yrs	12.8 yrs	5.1 yrs	10.8 yrs	1.8 yrs	9.0 yrs	9.8 yrs
Time between market cycles**	16.7 yrs	15.6 yrs	6.9 yrs	4.1 yrs	14.7 yrs	13.0 yrs	7.2 yrs	12.2 yrs	2.0 yrs	10.3 yrs	11.2 yrs
Peak	May 1946	Dec 1961	Nov 1968	Dec 1972	Aug 1987	Aug 2000	Oct 2007	Dec 2019	Dec 2021		
Trough	Nov 1946	Jun 1962	Jun 1970	Sep 1974	Nov 1987	Sep 2002	Feb 2009	Mar 2020	Sep 2022		
US large-cap stocks											
Recovery date	Oct 1949	Apr 1963	Mar 1971	Jun 1976	May 1989	Oct 2006	Mar 2012	Jul 2020	Dec 2023		
Max drawdown	-21.8%	-22.3%	-29.4%	-42.6%	-29.6%	-44.7%	-51.0%	-19.6%	-23.9%	-31.6%	-34.5%
Time to full recovery (new all-time high)	3.4 yrs	1.3 yrs	2.3 yrs	3.5 yrs	1.8 yrs	6.2 yrs	4.4 yrs	0.6 yrs	2.0 yrs	2.8 yrs	3.3 yrs
Drawdown time	0.5 yrs	0.5 yrs	1.6 yrs	1.8 yrs	0.3 yrs	2.1 yrs	1.3 yrs	0.3 yrs	0.7 yrs	1.0 yrs	1.1 yrs
Recovery time	2.9 yrs	0.8 yrs	0.8 yrs	1.8 yrs	1.5 yrs	4.1 yrs	3.1 yrs	0.3 yrs	1.3 yrs	1.8 yrs	2.1 yrs
Years of prior gains 'erased'***	1.2 yrs	2.9 yrs	5.4 yrs	9.7 yrs	1.5 yrs	5.3 yrs	11.6 yrs	2.2 yrs	1.6 yrs	4.6 yrs	5.4 yrs
60/40 stock/bond portfolio											
Recovery date	Oct 1948	Mar 1963	Dec 1970	Jan 1976	Jan 1989	Oct 2004	Dec 2010	Jun 2020	Feb 2024		
Max drawdown	-13.4%	-13.0%	-17.6%	-26.4%	-17.4%	-21.7%	-29.9%	-9.1%	-19.4%	-18.7%	-19.9%
Time to full recovery (new all-time high)	2.4 yrs	1.3 yrs	2.1 yrs	3.1 yrs	1.4 yrs	4.2 yrs	3.2 yrs	0.5 yrs	2.2 yrs	2.3 yrs	2.5 yrs
Drawdown time	0.5 yrs	0.5 yrs	1.6 yrs	1.8 yrs	0.3 yrs	2.1 yrs	1.3 yrs	0.3 yrs	0.8 yrs	1.0 yrs	1.1 yrs
Recovery time	1.9 yrs	0.8 yrs	0.5 yrs	1.3 yrs	1.2 yrs	2.1 yrs	1.8 yrs	0.3 yrs	1.4 yrs	1.3 yrs	1.4 yrs
Years of prior gains 'erased'***	1.2 yrs	1.4 yrs	3.3 yrs	6.1 yrs	1.2 yrs	4.3 yrs	9.2 yrs	0.9 yrs	1.9 yrs	3.3 yrs	3.8 yrs

\* Time from previous trough to this cycle peak

\*\* Time between previous peak and this cycle peak

\*\*\*At the bear market's trough, how much earlier could an investor have bought at that level?

Source: UBS, Morningstar Direct, Bloomberg, as of 31 August 2024.

### How can the Liquidity strategy manage sequence of returns risk?

The Liquidity strategy offers a potential solution for managing bear market risk. By funding spending needs with Liquidity strategy assets during bear markets, a family's Longevity strategy will have more time to recover from losses and will reduce the potential bear market damage caused by sequence of returns risk. Dynamically refilling the Liquidity strategy—fully funding it during bull markets and allowing it to be depleted during bear markets—can significantly improve long-term investment returns during bear markets.

Figure 12 shows the portfolio growth for a family retiring with \$3 million in August 2000, at the peak of the Tech Bubble, spending an inflation-adjusted \$120,000 (4% of the portfolio's starting value) per year. In one scenario, the family invests their whole portfolio in a 70% stock, 30% bond portfolio. In the other scenario, they carve off about 12% of the starting portfolio value to fund a 3-year Liquidity strategy (invested 50% in cash, 50% in bonds).

### Without a Liquidity strategy

By February 2009 (the trough of the Global Financial Crisis), the family's portfolio would have dropped 50% from its starting value, to \$1.48 million. At this point, the portfolio has distributed about \$1.14 million of spending and lost another \$378,000 due to the "bear market damage" from locking in otherwise-temporary losses to raise cash for that spending. Before starting to recover, the family's withdrawal rate would have gone as high as 10% per year.

### With a 3-year Liquidity strategy

The family's portfolio would have only dropped 35% from its all-time high, with a trough value of \$1.94 million, which is higher than the \$1.86 million net amount invested up to that point (\$3 million starting value minus \$1.14 million spending).

### Figure 12

### A Liquidity strategy can help protect against the damage caused by market losses

Growth of a \$3 million 70% stock, 30% bond portfolio, after 4% inflation-adjusted withdrawals, with and without a 3-year Liquidity strategy



Note: The Liquidity strategy is sized to meet 3 years of spending needs, invested in a 50% cash, 50% bond portfolio, and refilled annually during bull markets (and when markets have fully recovered their losses after a bear market). Source: Morningstar Direct, Bloomberg, UBS, as of 31 August 2024

### Conclusion

Based on a simulation of past bear markets, we estimate that a Liquidity strategy can add about 1% to a portfolio's annualized return during bear markets. A Liquidity strategy can also reduce the risk that an investor will overtrade or panic-sell their portfolio during a drawdown because investors have confidence that they have the resources needed to support their spending needs throughout the financial storm.

On the other hand, a Liquidity strategy can be a drag on returns during bull markets, all things being equal. With that in mind, it's important to consider increasing the allocation to risk assets in the Longevity strategy when adding a Liquidity strategy to the portfolio. It's also important to properly size, fund, and invest the Liquidity strategy, as described in the Liquidity strategy section below, to provide capital preservation as efficiently as possible.

### Enhancing tax efficiency

Managing taxes can significantly boost a family's ability to achieve their goals. When managing taxes, the goal should always be to maximize after-tax growth potential, not simply to minimize taxes.

There are three main categories of tax strategies that a family should incorporate into their financial plan and their investment approach:

**1. Portfolio tax efficiency**. High pre-tax returns can look much worse after taxes are paid, and improving a portfolio's tax efficiency can meaningfully improve its after-tax growth potential. There are a few strategies to help improve a portfolio's tax efficiency:

- Asset location: In taxable investment accounts, build taxaware portfolios that contain relatively tax-efficient asset classes (e.g., municipal bonds index funds) and use taxefficient implementation (e.g., exchange-traded funds and separately managed accounts). In tax-deferred and taxexempt investment accounts (e.g., Traditional and Roth IRA/401(k) accounts), build tax-agnostic portfolios that allocate a greater weight to less tax efficient asset classes and investment options, such as high yield corporate bonds and actively managed mutual funds with high turnover. Research has shown that asset location can add around 0–0.6% of annual value to a portfolio.<sup>4</sup>
- **Tax loss harvesting:** Buying a security and then selling it at a higher price than the purchase price (your "cost basis") generates a capital gain. By contrast, selling a security at a lower price than your purchase price generates a capital loss. At the end of each tax year, you will owe taxes based on the net capital gains (gains minus losses) that you lock in-or "realize"- that year. If you realize a net capital loss each year, you can deduct up to \$3,000 against that year's ordinary income and carry forward all your unused realized losses to future years, adding to your stock of carryforward losses. Tax loss harvesting helps to offset capital gains in this tax year and helps to defer capital gains taxes into the future (and possibly avoid paying them entirely, as mentioned in next bullet point). According to research, tax loss harvesting can generate a median annualized alpha after liquidation of 0.5% for a portfolio of individual equity securities.⁵

- Deferring capital gains taxes. The longer you defer paying capital gains taxes, the longer that the "tax dollars" will keep growing in your account. Moreover, if you are able to defer capital gains taxes until you pass away, your heirs will get a step-up in cost basis, which means that beneficiaries inherit the assets with a cost basis that represents the value at which they receive the assets, instead of the basis at which the assets were originally purchased. In other words, the implied tax obligation associated with unrealized capital gains in your taxable estate will be essentially "forgiven" at the time of transfer.
- Managing retirement income taxes. Many families hold investments across a variety of account types, including taxable, tax-deferred (such as a traditional 401(k) or IRA), and tax-exempt (such as a Roth 401(k) or IRA). When it comes to tapping into these accounts to fund retirement, the order matters because retirement distributions from tax-deferred accounts will incur income taxes, and selling taxable account assets may trigger capital gains taxes. Carefully managing the order of retirement account withdrawals and incorporating other strategies—such as partial Roth conversions—can help to improve after-tax growth potential by up to 1.2% per year.<sup>6</sup>

To learn more about portfolio tax costs, ask your financial advisor and read the latest version of our report, <u>Constructing</u> and managing taxable portfolios.

**2. Intergenerational tax planning.** The Liquidity. Longevity. Legacy. framework can help you to segment your Legacy strategy assets—assets that you aren't planning to spend during your lifetime—from the resources that you will need to support your family's lifetime goals.<sup>7</sup> This context can help you to unlock numerous strategies to manage state and federal gift and estate taxes, inheritance taxes, and generation skipping taxes.

The top marginal federal estate tax rate is 40%, and there are also state-level taxes with rates as high as 20% and can affect taxable estates as small as \$1 million. Effectively managing these taxes with a comprehensive trust and estate strategy—including lifetime gifts, not just end-of-life bequests—can significantly enhance the amount of after-tax wealth that can be transferred across generations and ensure that your wealth is distributed to all your beneficiaries according to your intentions.

Below is a list of some prominent estate planning strategies that can be used. A comprehensive trust and estate strategy will often result in you funding several types of trust accounts. By segmenting a portion of your wealth into these trusts, you can unlock ways to enhance after-tax growth and wealth transfer potential. By optimizing each of your trust's investment strategies to achieve your goals, you can also unlock additional opportunities to add value through asset location.

- **Spousal lifetime access trusts (SLATs)** provide a way to transfer assets out of the taxable estate while allowing the spouse to access the trust assets during their lifetime.<sup>8</sup> When you gift into a SLAT, you retain indirect access to the assets through your spouse (who can make unlimited gifts to you during your lifetime). This access ends upon the death of your spouse or in the case of a divorce.
- **Irrevocable trusts** can allow you to make an irrevocable gift of assets to a trust that benefits your intended beneficiaries, allowing them to grow outside of your taxable estate. Families often purchase life insurance using an irrevocable trust; this helps to provide income-tax-free assets to provide liquidity for paying estate taxes and other expenses.<sup>9,10</sup>
- Family limited partnerships (FLPs) allow family members to jointly own and manage assets. This strategy is often used to transfer wealth to younger generations at a reduced tax cost; although the value of your interest in the FLP is included in your taxable estate, its value can be discounted (e.g., for lack of control and marketability), which can reduce your estate tax liability.
- Generation-Skipping Trusts (GSTs) are designed to skip a generation of beneficiaries to help your family avoid paying estate taxes twice (once when the assets are transferred to your children, and again when they go to your grandchildren).
- **Dynasty Trusts** are designed to last for multiple generations—potentially indefinitely, depending on state laws. They aim to preserve and grow wealth within the family while minimizing estate taxes over successive generations. Dynasty trusts can provide long-term financial security and asset protection for future generations.
- Intentionally defective grantor trusts (IDGTs) allow you to make a completed gift to a trust, thus excluding its assets from your taxable estate, while retaining the option to pay taxes on the trust's income (interest income, capital gains, etc.). In essence, the trust is "effective" for estate taxes but "defective" for income tax purposes. Paying taxes on behalf of the trust can further reduce your taxable estate while allowing the trust to grow "income tax free," in a sense, boosting its ability to grow wealth for your beneficiaries.<sup>11</sup>

Qualified Personal Residence Trusts (QPRTs) allow you to transfer your personal residence to beneficiaries at a reduced gift tax value while retaining the right to live in the residence for a specified period (e.g., 20 years, or for the rest of your life).<sup>12</sup> Upon funding a QPRT, you make a taxable gift equal to the "remainder interest" of the property (its value minus the value of your retained interest, which is the value of your right to live in the home for the specified term). The value of the retained interest is determined using IRS tables and depends on factors such as the length of the trust term and the applicable federal interest rate. If you pass away before the end of the trust term, the full value of the property is included in your taxable estate. If you survive the trust term, the property passes to your beneficiaries, and the value of the remainder interest is removed from your taxable estate.

To learn more about the trust and estate strategies, talk with your financial advisor and check out the resources available on the homepage of the UBS Advanced Planning group, https://www.ubs.com/us/en/wealth-management/our-solutions/private-wealth-management/advanced-planning.html.

**3. Philanthropy.** The Liquidity. Longevity. Legacy. approach can help individuals make philanthropic gifts more tax efficiently by strategically aligning their financial goals with their philanthropic intentions. Here are some examples of how you can implement tax-efficient philanthropy:

• **Donating appreciated securities.** Donating appreciated securities can help you avoid capital gains taxes, and the fair market value of your donation can provide you with a charitable deduction.<sup>13</sup> You may want to consider "bunching" several years of charitable gifts into a single year to make itemizing your taxes more valuable than taking the standard deduction, thus retaining the tax benefits of charitable gifting.

- **Donor-advised funds.** If you'd like to make a large donation this year to reduce your taxes, but you would like to stretch your charitable donations over more years rather than make a big one-time gift, you may want to consider using a Donor Advised Fund (DAF) or a private foundation. These vehicles can allow your family to make a charitable contribution—including appreciated securities—and keep these funds growing before they are eventually granted or donated.<sup>14</sup>
- Qualified charitable distributions (QCDs) can help you make tax-efficient charitable donations by funding your philanthropic objectives using distributions from your IRA. QCDs count toward your RMDs and aren't included in your taxable income that year. This effectively makes those charitable contributions tax-deductible, without the need to itemize your taxes. QCDs cannot be made to Donor Advised Funds or private foundations. In addition, QCDs are only an option if you are at least age 70½, can generally only be done with Traditional IRA assets, and cannot exceed \$105,000 in 2024 (indexed for inflation).<sup>15</sup>
- Charitable remainder trusts (CRTs) can provide you with income during your lifetime, with the remainder going to charity. This can offer immediate tax deductions, help to reduce your taxable estate, and help you to defer capital gains taxes.<sup>16</sup>

To learn more about philanthropy strategies, talk with your financial advisor and check out the UBS Advanced Planning group's full report, *Charitable giving: the rules of the road*, available at <u>https://www.ubs.com/us/en/wealth-management/our-solutions/private-wealth-management/advanced-planning/articles/charitable-giving.html</u>.

### Addressing behavioral biases

Benjamin Graham—one of the best-known investors of the last century—observed that "The investor's chief problem and even his worst enemy—is likely to be himself."

Investors overtrade, chase returns, panic, and generally buy high and sell low—and these irrational behaviors can lead to significant underperformance. For example, in "Trading is Hazardous to your Wealth," Brad Barber and Terrance Odean found that the average household turned over 75% of their equity portfolio annually and underperformed a buy-andhold investment by about 1.5% per year.<sup>17</sup> Another analysis, performed by Vanguard, estimates that behavioral coaching may add 1–2% per year to net investment returns.<sup>18</sup>

The Liquidity. Longevity. Legacy. framework provides a disciplined investment approach that can help to minimize the risk related to costly emotional behavior by addressing key behavioral biases. For example:

- 1. **Myopia and loss aversion bias.** "Loss aversion" is a behavioral bias that acknowledges that most of us feel the pain of losses about twice as powerfully as we experience the pleasure of gains. The effect of loss aversion can be supercharged when it's combined with the fact that losses are much more common over short holding periods; for example, the S&P 500 has fallen in about 46% of all daily returns since 1945, but only 36% or monthly returns and only 7% of all 5-year returns. By dedicating the Liquidity strategy to provide for a family's short-term cash flow needs—and investing these resources to prioritize capital preservation—families should be able to focus on their long-term goals and confidently stay invested because they know that they have adequate resources to cover their short-term needs.
- 2. Mental accounting bias. Investors often feel more comfortable thinking about their wealth in "buckets," treating some dollars differently than others. This tendency can make it more difficult to make decisions that are rational in the context of the "big picture." For example, we tend to spend a larger share of income that comes in the form of an unexpected "windfall"-such as a tax refund or a bonus—than income that we are expecting.<sup>19</sup> By segmenting wealth by purpose, the Liquidity. Longevity. Legacy. framework aims to harness the mental accounting bias to help families make rational decisions more intuitively. It also helps to put returns into the context of the funds' purpose, as shown in Figure 13, which can help to make it easier to avoid the urge to panic sell and to take advantage of market declines (e.g., by rebalancing and accelerating dollar-cost averaging strategies with assets earmarked for long-term goals).

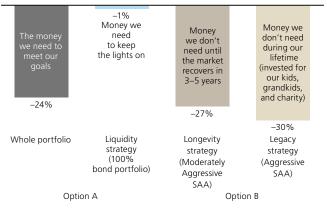
3. Recency bias. Harry Markowitz once noted that "The chief problem with the individual investor: He or she typically buys when the market is high and thinks it's going to go up, and sells when the market is low and thinks it's going to go down." Chasing performance is tempting, but it can be quite damaging for investors. For example, looking at the annual returns of 14 major asset classes since 1999, the prior year's best-performing asset class has had a roughly 40% chance of experiencing a loss the next year, versus 27% for a randomly chosen asset class and 31% for a well-diversified portfolio. Rebalancingselling the recent best-performing asset classes to add to other asset classes—feels counterintuitive due to recency bias, but it can help you to prevent your portfolio from "drifting" into an allocation that you never intended and can also help to improve your annual return by about 0.14% per year on a risk-adjusted basis.<sup>20</sup>

The Liquidity. Longevity. Legacy. framework isn't a panacea for solving our emotional biases, but it does provide a concrete framework for decision-making that you can fall back on during times of market stress.

### Figure 13

### The UBS Wealth Way framework can help you keep returns in context

Two ways of viewing performance during the 2020 market selloff, 19 February 2020 to 23 March 2020



Note: Using Bloomberg Barclays US Aggregate Bond Index for the Liquidity strategy (initial value \$1.08 million), the Moderately Aggressive Strategic Asset Allocation (SAA) for the Longevity strategy (initial value \$7.86 million), and the Aggressive risk SAA for the Legacy strategy (initial value \$1.06 million).

For illustration purposes. Not official performance. Strategies are subject to individual client goals, objectives and suitability.

Source: Bloomberg, Morningstar Direct, UBS, as of 31 August 2024

Chapter 4

# Managing the Liquidity. Longevity. Legacy. strategies

The final part of this report provides an in-depth discussion regarding how to allocate and manage the Liquidity. Longevity. Legacy. strategies to confidently meet your objectives and enhance after-tax growth potential.

### You, your family, and the lives of others

Your goals should form the basis of nearly all investment and estate planning decisions. Developing and updating your goals requires the deliberate action of asking yourself what your desired lifestyle includes and how you want to improve the lives of others. Some goals, such as updating and selling your home, paying for college, or contributing to charity are easy to recognize. Other goals, like ensuring potential health issues don't burden your children, can be more obscure. Identifying your goals and objectives, no matter their clarity, is like marking points on a map. It's a necessity for planning a meaningful path forward. The Liquidity. Longevity. Legacy. approach uses those points to allocate and manage your assets and resources effectively—throughout time—to reduce the role of luck in your investment success and help you make better decisions.



### Liquidity strategy

The Liquidity strategy contains assets and resources to help meet the next 3 to 5 years of spending.

Purpose	Provide cash flow to fund short-term spending regardless of market conditions
Sizing	3–5 years of cash flow needs (spending minus reliable income)
Investment objectives	Capital preservation and income
Assets and resources	Cash, savings accounts, money markets, and high-quality bonds. Untapped borrowing capacity. Income from reliable sources (i.e., sal- ary, Social Security, pensions, and annuities).
Investment approach	Core bond/CD ladder, yield enhancing satellite strategies
Risk factors	Drawdown risk, time under water, sequence of return risk

### Defining your "Why"

To help define your Liquidity strategy, consider the following questions:

- When you hear news of a market downturn or loss, how do you feel?
- How much do you prefer to have liquid (in savings) at any time?
- If you could create a monthly paycheck in retirement, how much would it be?
- In the next 3 years, do you have any large purchases or expenditures planned in addition to your regular expenses (e.g., vacations, home remodeling, new cars, etc.?

For those still working, also consider the following:

- Does your current income cover your regular expenses?
- If you lost all or a portion of your income, how would that impact your family?

### Purpose

The Liquidity strategy aims to set aside enough resources to meet a family's short-term cash flow needs, regardless of market conditions. Liquidity strategy investments prioritize capital preservation. Growth and income are a secondary objective, to help protect purchasing power.

### Strategy

### Determining cash flow needs

There are three factors that can impact your family's cash flow needs from the portfolio:

- 1. The ratio of your regular income to your regular expenses;
- 2. The risk of not receiving your regular income; and
- 3. Unusual and unforeseen expenses.

The greater the uncertainty of regular income or the risk of unforeseen expenses, the more one should set aside in one's Liquidity strategy. Cash flow needs—and thus Liquidity strategy sizing—will differ based on your age:

### Working years

During your working years, your salary will generally cover all day-to-day expenses—and hopefully leave you with extra funds that can be saved and invested for future spending needs. Your family will generally not need to set aside Liquidity strategy assets during your working years, but you should still make sure to fund an emergency reserve to cover unforeseen expenses and accumulate temporary Liquidity strategy resources ahead of large one-time expenses such as a home purchase.

### Retirement years

As you near and enter retirement, you will want to build up a Liquidity strategy to create cash flow to replace the income from your salary. We recommend funding your Liquidity strategy so that it will provide sufficient cash flow to cover any regular and irregular expenses that are not already covered by reliable income sources such as pension and annuity income.

Although your family will often receive significant investmentbased income during retirement—for example, dividends and interest from their portfolio, or rental income from investment properties—this income can fluctuate and may decline, especially during economic recessions and bear markets.

To ensure that you can maintain your lifestyle even if your investment income is interrupted by a market disruption, we recommend a policy of reinvesting investment-based income during both bull markets and bear markets. This will also help to ensure that your longer-term investments can continue to benefit from compounding growth.

### Sizing

As shown earlier (p. 10) in Figure 7, riskier portfolios tend to experience larger drawdowns and take longer to recover from losses. Investors with a higher allocation to stocks in their Longevity strategy should manage this risk—buying more time for a recovery—by allocating more resources to the Liquidity strategy.

Since 1945, it has taken around 3–5 years for most balanced portfolios to fully recover their losses, moving from a bull market peak to a fresh all-time high. This is why we generally recommend that investors size their Liquidity strategy by evaluating the amount of funds that they will need to withdraw from their portfolio in the next 3–5 years—by comparing planned spending to their income from reliable sources—and then setting aside enough resources to match those cash flow needs.

### Investing the Liquidity strategy

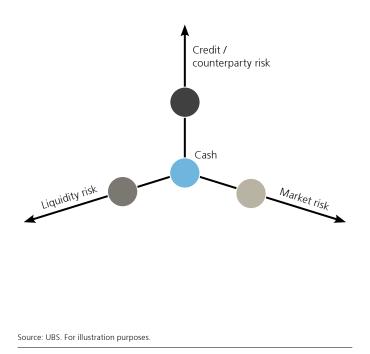
Your Liquidity strategy can be funded by both investment assets and untapped borrowing capacity.

When building a Liquidity strategy portfolio, the objective is to limit the potential for a mismatch between your spending needs and the marketable value of your Liquidity strategy. We identify three main types of risk: **liquidity risk** (the ability to withdraw money without any restrictions); **market risk** (the volatility of asset prices and the potential risk of capital loss); and **counterparty risk** (the risk of capital losses tied to a default) (Figure 14).

To balance these risks and the potential benefits available in the market, we recommend a Core-Satellite approach for the Liquidity strategy portfolio (Figure 15).

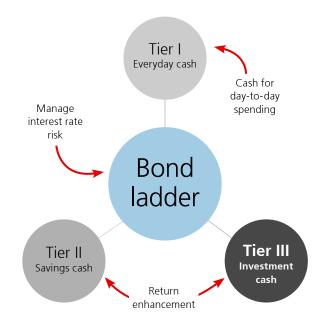
### Figure 14

Liquidity strategy solutions face three primary risks



### Figure 15

### The Liquidity strategy portfolio framework



Source: UBS. For illustration purposes

### Core: A "bond ladder" approach.

The best approach for aligning spending and investing especially for expenses with a known amount and a known timing—is to construct a "ladder" of bonds, fixed-term solutions, and other solutions (Figure 16). After all, aligning the size and duration of individual bonds with the amount and timing of your planned withdrawals helps to manage your interest rate and market risk, prioritizing capital preservation over return potential. This strategy mirrors the "liability-driven investing" approach implemented by many professional investors who are charged with carefully managing risk for institutions.

### Satellite: A "Three Tier" approach.

As a complement to the core bond ladder approach—and to address spending objectives that are unknown in either amount or timing—we recommend a "Three Tier" approach that reflects a higher risk budget for funds that have a longer time horizon within your Liquidity strategy portfolio (Figure 17):

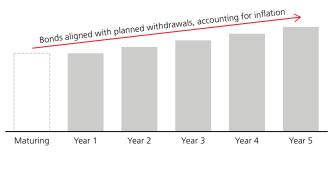
• Tier I (Everyday cash): Cash earmarked for day-to-day expenses. Because of the immediacy of these needs, you should stick with solutions with minimal market, liquidity, and credit/counterparty risks, such as cash deposits.

- Tier II (Savings cash): Funds that are needed for known expenses in the near future, but not immediately. For Tier II, investors can afford to take on a small amount of market and liquidity risk, but strictly limit credit and counterparty risks. For instance, fixed-term deposits, savings accounts, or money market funds may be appropriate here, allowing investors to earn a higher yield in exchange for sacrificing some liquidity.
- **Tier III (Investment cash):** Investments dedicated to finance medium-term spending (generally, years 3–5). Tier III solutions are the broadest category, with a variety of market, liquidity, and credit risk characteristics, but capital preservation—especially in environments that are poor for the stock market—is the priority. For example, investors may find it valuable to invest these funds in short-term corporate bonds from highly rated issuers or select structured investments with capital preservation characteristics. When considering investments with credit or counterparty risk such as investing in lower-rated short-term corporate bonds or depositing at lower-rated banks—we recommend exercising caution. After all, these funds may need to be sold for spending during a bear market (a deep and long-lasting decline in stock prices)—in which case the investor may not have the intrinsic "patience" to take advantage of these investments' potentially higher returns.

### Figure 16

### A bond ladder aligns cash flows with planned withdrawals

Bond/CD ladder illustration

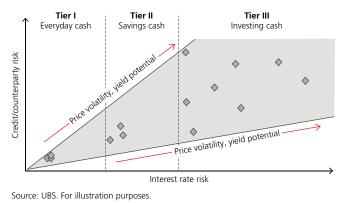


Source: UBS. For illustration purposes.

### Figure 17

## Taking on additional credit and interest rate risk may help enhance income potential

The "Three Tier" framework



### **Borrowing strategies**

During bear markets, tapping into borrowing capacity can be a useful "Plan B" instead of selling Longevity strategy assets. If the Liquidity strategy's assets are depleted before the market has fully recovered its losses, mortgages, home equity loans, and security backed lines of credit can provide cash flow for spending, allowing a family to maintain their lifestyle. Borrowing strategies can be an attractive option in long-lasting bear markets because the Federal Reserve has historically cut interest rates during most bear markets to help the economy recover more quickly; this means that tapping loans at this stage of the economic cycle may incur lower interest costs.

Borrowing strategies can also be a valuable resource during bull markets. Funding a portion of the Liquidity strategy with untapped borrowing capacity allows more of the investment assets to be invested in the Longevity strategy portfolio instead of low-risk Liquidity strategy portfolio assets, reducing the "cash drag" of the Liquidity strategy during bull markets.

When setting aside borrowing capacity for a family's Liquidity strategy, it's important to focus on the portion of their loan capacity that can be tapped safely—without triggering a margin call—during a bear market. In general, we find that diversified balanced portfolios could have supported a securities-backed loan-to-value ratio of about 15–20%, even during the worst bear markets in history, with a negligible risk of triggering a margin call.<sup>21</sup>

### Implementation

Follow these steps to build a Liquidity strategy to meet your short-term cash flow needs:

- Evaluate your short-term cash-flow needs by comparing reliable income to expected expenses over the next 3–5 years, choosing a time horizon that reflects the time that it will likely take your Longevity strategy to fully recover from a market disruption. Add further funds to reflect emergency fund resources that may be needed due to unforeseen expenses and/or the risk of an interruption to income.
- 2. Consider your appetite for liquidity, market, and credit risks, as well as your currency and country-risk exposure. Using these insights—and applying the principle of diversification across different solutions, tenors, and issuers—invest the Liquidity strategy portfolio using a core-satellite approach to reflect to your needs and preferences.
- 3. Refill your Liquidity strategy periodically, taking care to reflect changes to your expected portfolio withdrawals, such as income from Social Security that will reduce the need to fund spending from the portfolio. We recommend refilling the Liquidity strategy annually, but pausing this process—and allowing your Liquidity strategy to be depleted by spending—when markets are experiencing a significant disruption, such as a bear market. This will help keep you from being forced to lock in otherwise-temporary losses in your long-term investment portfolio.

### Longevity strategy

Your Longevity strategy contains the assets and resources for your family's lifetime goals and objectives.

Purpose	Provide consistent growth and income to provide cash flow for lifetime spending needs and manage longevity risk
Sizing	A stressed portfolio performance scenario ap- proach aiming to achieve lifetime goals with a high probability of meeting personal needs over your lifetime
Investment objectives	Primary goal of growth, with a secondary objective of income
Assets and resources	Retirement accounts, pensions, personal residence, annuities, Social Security, disability insurance, and long-term care insurance.
Investment approach	Well-diversified portfolio focused on consistent growth and income
Risk factors	Probability of success, funding ratio, shortfall risk, longevity risk

### Defining your "Why"

To help define your Longevity strategy consider the following questions:

- What do you want retirement to look and feel like?
- What do you want your wealth to do for you and your family?
- Do you have any assets earmarked for specific financial goals?
- What concerns, if any, do you have about your current investment strategy?
- How important is having guaranteed income to meet some or all your retirement expenses?

### Purpose

The Longevity strategy focuses on meeting your financial goals over your lifetime. Its aim is to invest in a way that gives you a high probability of achieving those objectives. Here, risk is measured in terms of shortfall risk—the likelihood of not meeting your investment goals or outliving your wealth.

### Strategy

When building your Longevity strategy portfolio, two important questions to ask are: "How should you invest?" and "How much risk should you take?" Your investment approach should reflect your goals, resources, and expected cash flows, as well as your investment preferences and risk tolerance.

Your Longevity strategy can be funded with investment assets as well as any other resources that can contribute cash flows to help you achieve your goals. For example, if you plan to use your residential home to generate rental income or sell it for a lump sum, these expected cash flows should be factored into your Longevity strategy.

During your working years, your human capital can be factored in by adding your expected salary income over the foreseeable future. A sensitivity analysis can help you understand how your plan might be affected by employment fluctuations or interruptions, and help you identify the disability and life insurance coverage that you will need to protect your family against these risks.

We recommend that you review your Longevity strategy annually so that you can adapt your strategy for any changes in your circumstances or goals. For example, you may want to increase your insurance coverage to account for a higher income, or change where you are directing your retirement savings to manage your income tax bracket.

### Sizing

When considering how many funds you need to meet your lifetime spending goals, we recommend setting aside enough resources to protect against the risk of poor investment returns.

We measure shortfall risk using a detailed financial simulation that considers your planned expenses and thousands of possible market scenarios (a so-called "Monte Carlo" analysis) to help ensure your plan will succeed. We cite four key variables to consider when building and evaluating your financial plan:<sup>22</sup>

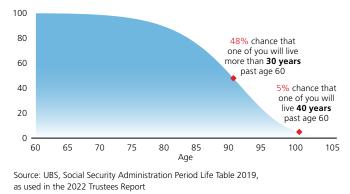
### #1: Time horizon

The first aspect to consider when determining the durability of your savings is the duration of your retirement. How early are you planning to retire, and how long will you and your spouse live?

#### Figure 18

### How many years will your retirement last?

Probability that one partner in a 60-year-old male-female couple will live to a given age, in %



In the past, it was common for financial planners to recommend planning for a 30-year retirement. However, looking at actuarial data, there is a nearly 50% chance one partner in a male/female 60 year old couple could live well into their 90s and a 5% chance that at least one partner will make it to their 100s (Figure 18). With this in mind, we typically recommend planning for a 40-year retirement if you are in your early to mid 60s. If you are very healthy, have a younger spouse, have a history of long-lived relatives, or plan to retire earlier, you may want to assume an even longer retirement period.

Generally, we find that investors need 25 to 30 times their first year spending amount to sustain 40 years of withdrawals during retirement (see Figure 19).

Since each family faces unique financial situation and spending needs, we recommend running a personal analysis with your financial advisor to properly size your Liquidity and Longevity strategy portfolios.

### #2: Spending and inflation assumptions

When forecasting spending, one simplistic approach is to take your current budget and apply a single inflation rate to account for how this spending will change over time. While this approach can be a good starting point, the truth is that economy-wide inflation measures such as the Consumer Price Index (CPI) are very unlikely to accurately describe most families' spending changes from year to year, especially as they move through retirement.

### Figure 19

### Will your savings be enough to fund your portfolio withdrawals?

Estimated wealth-to-withdrawal multiples (top table) and sustainable withdrawal rates (bottom table) targeting an 85% probability of success, depending on time horizon and Longevity strategy risk profile

Risk profile	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive
Years					
20	18.1x	17.6x	17.4x	17.5x	17.5x
30	24.7x	23.5x	22.9x	22.6x	22.4x
40	29.7x	27.6x	26.4x	25.4x	25.1x
50	34.0x	31.1x	29.4x	28.2x	27.6x

Risk profile	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive
Years					
20	5.5%	5.7%	5.7%	5.7%	5.7%
30	4.1%	4.2%	4.4%	4.4%	4.5%
40	3.4%	3.6%	3.8%	3.9%	4.0%
50	2.9%	3.2%	3.4%	3.5%	3.6%

Assumes a portfolio comprised of a 3-year Liquidity strategy portfolio holding 50% US cash and 50% US fixed income and a Longevity strategy invested in a Strategic Asset Allocation (SAA) for non-taxable investors. Also assumes that spending increases by 2.4% p.a. to preserve purchasing power. All risk and return characteristics are based on UBS's 2024 equilibrium CMAs. For details, see "2024 Capital Market Assumptions Update" published February 2024. Source: UBS

When we look at retirees' spending, we see a few patterns that can inform a more accurate spending forecast:

- From early to mid retirement, families' spending tends to rise more slowly than broad economic inflation, as families transition from an active early retirement lifestyle in their 60s to a more sedentary lifestyle in their 80s. This is partially due to falling spending on the vacation and housing categories.
- 2. For families in late retirement, spending tends to rise more quickly than broad economic inflation as healthcare costs become a larger share of spending and this category experiences faster rates of inflation.

To fully account for your retirement spending, rather than applying one constant inflation rate to your entire budget, we recommend the following:

- Don't assume that all expenses will always increase by inflation.
- Be as specific as possible when developing goals for your financial plan.
- Pay attention to the impact of health care expenses throughout retirement and potential long-term care costs in the second half of retirement. These costs often rise more quickly than broad economic inflation.
- Think of your retirement in phases to improve estimates of future expenses.
- Plan for some drop in spending as you move into mid-retirement.

### #3: Investment strategy

Prior to retirement—when the Longevity strategy represents the bulk of a family's assets, and your family is actively saving into their investment portfolio—an Aggressive or All-equity portfolio may be the most effective at building wealth for retirement.

As you approach retirement, we generally recommend reducing your Longevity strategy portfolio's risk to generate more consistent growth and income and mitigate drawdown risk. Here are some key considerations:

• **Risk profile.** Investing in a too-conservative Longevity strategy would require your family to dedicate more assets to their lifetime spending needs, while a too-aggressive portfolio would increase the chance of a sustained draw-down. Choosing the wrong risk profile could require your family to delay retirement, cut spending, or curtail inheritance and philanthropy objectives. It's important to work with your financial advisor to find a risk profile that

efficiently meets your lifetime spending needs, as evaluated using a comprehensive financial plan, and suits your risk tolerance so that you can stay invested through market cycles.

- Annuities. We estimate that annuities can boost a Longevity strategy's sustainable spending level by about 7% to 19% when used as a complement to a balanced portfolio, with a greater improvement accruing to families who are targeting a higher probability of success.<sup>23</sup> Because adding annuities can allow you to meet your life-time spending needs with fewer Liquidity strategy and Longevity strategy assets, more of your portfolio can be allocated to the Legacy strategy and invested for maximizing growth potential.
- **Insurance.** During your working years, disability and life insurance policies can help protect your family against the risk that your earnings power will be damaged. In retirement, long-term care insurance can help protect your family against the risk that you or your spouse will need costly long-term care services. Other types of insurance are valuable throughout your lifetime at protecting your assets and managing the risk of unexpected out-of-pocket expenses.
- **Borrowing strategies.** Looking at data from the Survey of Consumer Finances, most families use debt during their working years (e.g., to pay for college, buy a home, and to build credit), but it's quite common for families to pay off their debt in retirement.<sup>24</sup> As a result, many families enter retirement with significant home equity and untapped borrowing potential. Borrowing strategies such as mortgages and securities-backed lines of credit can help you tap into these resources as a way to fund the Liquidity strategy (as a temporary "bridge loan"), to help you manage taxes (by providing cash flow as an alternative to realizing capital gains taxes), to boost your return potential (by borrowing to apply portfolio leverage), or to enhance diversification (by taking a loan to invest in diversifying investments that complement your concentrated positions).
- **Sustainable investing.** For investors who want to pursue their financial return goals, along with their social and environmental objectives—in other words, investing for returns and for sustainability—there are a few options. First, the UBS House View Sustainable Investing (SI) Strategic Asset Allocations (SAAs) can be used to build a 100% sustainable diversified investment portfolio with diversified exposure to strategies with distinct and explicit SI purpose as well as expected volatility-adjusted returns comparable to traditional portfolios over the long run.<sup>25</sup> Alternatively, you could choose to use sustainable building

blocks to complement your existing portfolio. For example, sustainability-focused themes such as *Energy transition(s)* and *Oncology* can help capture the upside driven by long-term trends, while ESG leader strategies can help introduce companies that are best performers at managing their ESG risks. These are often the type of high-quality companies that form the core of any diversified portfolio.

- Alternative investments. In addition to hedge funds, adding a modest allocation to private markets (30% or less) can help to enhance the Longevity strategy's return potential—and potentially improve your sustainable withdrawal rate—without compromising on portfolio diversification or incurring liquidity risks. Click <u>here</u> to learn more.<sup>26</sup>
- **Structured investments.** Structured investments are a potential solution for helping your family to invest with greater certainty while holding onto as much return potential as possible. Some structured investments can help to provide explicit capital preservation characteristics, and potentially enhance the consistency of your Longevity strategy portfolio's growth and income potential.<sup>27</sup>

### #4: Targeted probability of success

Most wealth planning simulations run your family's planned contributions and withdrawals through hundreds or thousands of possible market scenarios to evaluate the risk that you will outlive your savings. These simulations tend to make a few key assumptions that can overstate the risk of failure:

- 1. **Spending inflexibility.** Simulations usually assume that you and your family will not be able to adjust spending along the way. This may be true if all your budget items represent "Needs," but many families have "Wishes" and "Wants" in their retirement goals and would be willing to reduce or postpone some of their spending—especially during bear markets—in exchange for greater spending power in the future.
- 2. Sequence of returns risk. Simulations assume that you will always sell risk assets to fund spending during a bear market. We recommend fully funding your Liquidity strategy during bull markets, but allowing it to be depleted during bear markets. As illustrated earlier, in the "Managing bear market risk" section, this "dynamic refilling" strategy—which isn't accurately modeled in most simulations—can reduce "bear market damage" and help to prevent the portfolio from being prematurely depleted.

- 3. Longevity risk. As noted in the "Time horizon" section above, there is no guarantee that you will live for the entire duration of your planned retirement period. Planning simulations will follow your mortality assumptions, rather than simulating your mortality along with investment returns. We recommend planning that at least your or your spouse will live to age 100 for the purpose of these simulations; if your financial plan shows that your Liquidity and Longevity strategy resources are likely to fail due to a scenario where you live longer than life expectancy, annuities will often be an efficient solution for managing this longevity risk, rather than cutting your spending in early retirement or overfunding your Liquidity and Longevity strategy assets, thus forgoing growth potential in your Legacy strategy.
- 4. Inaccessible Legacy strategy. In simulations, the "probability of success" measures the likelihood that your family can fund your lifetime goals solely with your Liquidity and Longevity strategy assets. For scenarios that include a starting allocation to the Legacy strategy, the simulation will assume that your Legacy strategy assets are completely untouchable. That could very well be the case, if you plan to irrevocably gift all your Legacy strategy assets (which may be a prerequisite for some trust and estate planning strategies). On the other hand, if you keep some of your Legacy strategy assets in your own name, or retain the right to access these assets, then the simulation's "Probability of success" may overstate the risk of failure. After all, many families' Legacy strategy assets will have ample time to grow substantially by the time their Liquidity and Longevity strategy assets are depleted. For example, in the portfolio targeting an 85% probability of success in Figure 10 (in the "Improved performance compared to other approaches" section), it took about 27 years before the Liquidity and Longevity strategy assets were depleted in more than 1% of the simulation trials.

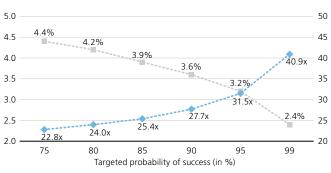
These assumptions can have a significant impact on the simulation results. Therefore, we generally recommend aiming for an 85% probability of success for most families. In our analysis, an 85% probability of success usually provides enough funding to substantially address sequence of return risks while keeping the portfolio from being invested too conservatively and thus missing opportunities to generate growth.

If your family has more spending flexibility—meaning that you are willing and able to cut spending during periods of poor market returns—you may be able to target a lower

probability of success. On the other hand, if your family's spending needs are inflexible, you should consider increasing your allocation to guaranteed income sources such as annuities to improve your probability of success. You can also choose to set aside more Longevity strategy resources, but this can be quite expensive, especially if you are targeting a high probability of success (see Figure 20).

#### Figure 20

### Targeting a higher probability of success requires more assets or a lower withdrawal rate



Sustainable withdrawal rate (Ihs) and Wealth-to-withdrawal Multiple (rhs) for a 40-year retirement period

Note: Assumes a portfolio comprised of a 3-year Liquidity strategy portfolio holding 50% US cash and 50% US fixed income and a Longevity strategy invested in a Moderately Aggressive risk Strategic Asset Allocation (SAA) for non-taxable investors. Also assumes that spending increases by 2.4% p.a. to preserve purchasing power. All risk and return characteristics are based on UBS's 2024 equilibrium CMAs.

For details, see "2024 Capital Market Assumptions Update" published February 2024. Source: UBS

### Implementation

Follow these steps to build a Longevity strategy to meet your lifetime goals:

- 1. Assess how much you plan to spend in retirement, and take stock of your reliable income sources, such as Social Security, annuity, and pension income.
- 2. Consider any non-market risks that may impact your retirement strategy, such as unexpected long-term care expenses or outliving your life expectancy and incorporate these risks into your financial plan.
- 3. Determine which resources you plan to tap for funding your retirement spending—and which assets you will earmark for inheritance and philanthropy objectives—bearing in mind your assets' tax and liquidity characteristics.<sup>28</sup>
- 4. Work with your financial advisor to determine how much wealth you will need to fund the net cash flows from your portfolio over the course of your lifetime with a high probability of success (i.e., 85%) given possible market outcomes.
- 5. Evaluate potential adjustments that could help you to improve your financial plan, such as modifying your planned spending, adjusting your Longevity strategy risk profile, or boosting your reliable income by increasing your allocation to annuities.
- 6. Revisit your Longevity strategy annually, incorporating any changes to your goals and priorities. All things being equal, you will be able to move some excess funds from your Longevity strategy to your Legacy strategy as you move through retirement.

Sustainable withdrawal rate (in %, lhs)
Wealth-to-withdrawal ratio (in x, rhs)

### Legacy strategy

Your Legacy strategy represents your family's surplus wealth; the funds that can be used for the benefit of others

Purpose	Tax-efficient bequests, multi-generational wealth, philanthropy, and other legacy or estate planning purposes
Sizing	Excess wealth that isn't needed for lifetime goals
Investment objectives	Maximize after-tax growth and intergenera- tional transfer potential
Assets and resources	Life insurance, real estate, irrevocable trusts, Roth IRAs & 401(k)s, highly appreciated stocks donor advised funds, and foundations
Investment approach	Endowment-style portfolio with a high alloca- tion to risk assets
Risk factors	Opportunity cost, estate and inheritance taxes

### Defining your "Why"

To help define your Legacy strategy consider the following questions:

- How do you want to be remembered?
- What does a successful legacy look like?
- What would you like to do for your family or community?
- How do you feel about transferring wealth to your children or the next generation?
- Does your current estate plan reflect these wishes?

### Purpose

A Legacy strategy allows you to focus on goals that extend beyond your own lifetime. By separating these resources from the rest of your portfolio, you can invest them to maximize growth for future generations and philanthropic causes. You can also use your Legacy strategy to reflect your passions and values, ensuring that they will live on for generations to come.

### Strategy

Once your Liquidity and Longevity strategies are adequately funded, you can confidently earmark your remaining wealth for goals that go beyond your lifetime. Your Legacy strategy should include any assets that you don't intend to sell to fund lifetime spending. For many families, the best assets to earmark for the Legacy strategy are those that are illiquid, have a large unrealized capital gain, or have more sentimental value.

When compared to the rest of your portfolio, your Legacy strategy assets are much less impacted by traditional risk management considerations. For example, "sequence of return" risk is largely irrelevant, because the Legacy strategy is unencumbered from cash flows for spending needs. Where a sustained drawdown can cause the Liquidity and Longevity strategies to be prematurely depleted, the Legacy strategy will typically be able to take advantage of market pullbacks.

As a result, your Legacy strategy can be invested in a higherrisk portfolio that aims to maximize after-tax growth potential.

Here are some key considerations:

- **Trust and estate strategies.** Gift and estate taxes, inheritance taxes, and generation skipping taxes can be significant hurdles to passing wealth across generations. Effectively managing these taxes with a comprehensive trust and estate strategy—including lifetime gifts, not just end-of-life bequests—can significantly enhance the amount of after-tax wealth that can be transferred across generations and ensure that your wealth is distributed to across all your beneficiaries according to your intentions.<sup>29</sup>
- Life insurance. There is generally no tax on the dividends, interest, and capital gains that are generated by investments within a life insurance policy, which allows for taxdeferred growth during the life of the insured individual(s). This can be especially useful for mitigating the tax cost of owning investments with a high tax drag—such as corporate bonds, hedge funds, and private credit funds—and for actively managed strategies with a high level of turnover.\* The death benefit paid to life insurance policy beneficiaries is also generally income tax-free. Especially if owned outside of your taxable estate—for example, in an irrevocable trust—life insurance can be a useful tool to provide liquidity to your heirs, allowing you to more effectively preserve and transfer wealth across generations.

<sup>\*</sup> Carbone, A., Scansaroli, D., Waring, J., & Williams, K. (2023). Private placement strategies: Tax-efficiency for alternative investments. UBS Wealth Way. UBS. Note: To purchase a private placement life insurance policy, you must be a Qualified Purchaser and an Accredited Investor.

- Borrowing strategies. Borrowing strategies can be incorporated to enhance the returns of your Legacy strategy. Although not without risk, taking a loan against your Legacy strategy and reinvesting the proceeds may help to enhance the portfolio's yield and return potential. A well-diversified balanced portfolio with leverage may offer a superior risk/return profile than an unleveraged portfolio with a higher allocation to stocks. Borrowing can also help to add diversification to a concentrated stock position, defer realizing capital gains, or fund intrafamily gifts as a part of a trust and estate planning strategy.
- **Collectibles.** If you want family heirlooms and art collections to stay in your family, you should make sure that you leave them for family members who can afford to maintain them and will derive enjoyment from them.
- **Charitable giving.** If philanthropy is also part of your Legacy strategy, you can help make your charitable gifts

go further by putting funds to work in a donor-advised fund (DAF) or private foundation, where they can be invested to grow tax-free before they are granted or donated. When implemented correctly, charitable gifts can help to reduce your taxable income, reduce your gift and estate tax obligations, and make a positive impact on the people and causes that you support.<sup>30</sup>

• **Private markets.** With a longer time frame, less emphasis on day-to-day volatility, and a lower need to meet ongoing cash flows, your Legacy strategy assets represent "patient capital" that can get the most out of private markets, such as private equity, infrastructure, private credit, and real estate. In our view, private markets can help boost return potential and enhance risk-adjusted returns, as shown in Figure 21. To preserve diversification and flexibility, we recommend allocating up to 40% of the portfolio to illiquid investments in your Legacy strategy portfolio, mirroring institutional investors' asset allocations, as shown in Figure 22.

Figure 21

Historically, alternatives have helped to improve a portfolio's risk / return profile

Historical return (y-axis) and volatility (x-axis) for select portfolios, in %

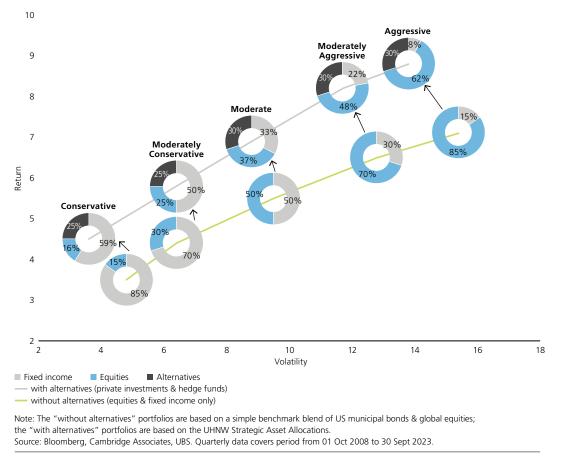
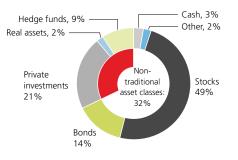


Figure 22

Legacy strategy assets represent "patient capital" that can get the most out of private markets

Average endowment asset allocation



Source: 2023 NACUBO-Commonfund Study of Endowments, which surveyed 688 institutions with an average AUM of \$1.2 billion. Average represents an equal-weight to each surveyed institution.

- **Thematic investment strategies.** Long-term thematic investing strategies—which aim to tap into structural trends, including population growth, aging, technology, and urbanization—can help to boost the portfolio's return potential.
- Sustainability and impact investing. Sustainable Investing (SI) solutions can help you to reflect your values and to make a lasting positive impact in your community. The Legacy strategy's inherently long time horizon also opens potential opportunities in impact-oriented investments—such as private equity or venture capital solutions in sustainable industries like health care or education technology—where it is easier to drive measurable change than similar public market investments. These approaches can also be a great way to engage your children and grandchildren.
- Structured investments. Structured investments can help you to enhance your portfolio's return and income potential, while mitigating the portfolio's tail risk. Structured investments are also a way to take advantage of the Legacy strategy's long investment time horizon; buying longer-dated structured investments can often lead to more attractive terms, such as upside leverage, upside participation, and coupon rates. Longer-dated structured investments also benefit from the longer time horizons' lower risk of losses (see Figure 6, on page 10).

### Implementation

Follow these steps to build and manage a Legacy strategy to meet the goals that go beyond your lifetime:

- 1. Identify your goals for inheritance and philanthropy, considering the values and causes that are important to you and your family.
- 2. Identify the assets you will use to fund your lifetime spending objectives, and which assets you plan to earmark for inheritance and philanthropy goals.
- Ensure that you are confident that you have identified and accounted for all your lifetime goals—and that your Liquidity and Longevity strategy assets are fully funded for meeting these goals—before making any irrevocable gifts.
- 4. Develop a comprehensive philanthropic plan and update your estate plan—including wills, trusts, and other legal documents—to ensure your assets will be distributed according to your wishes.
- 5. Work with your financial advisor, tax advisor, and estate planning attorney to implement a trust and estate strategy that manages estate and inheritance taxes and helps you to achieve your inheritance and philanthropy goals.
- 6. Create a succession plan to minimize family conflict, ensure a smooth transfer of assets, and engage your heirs in investment decisions to prepare them for managing the inherited wealth responsibly. Begin conversations with family members and other beneficiaries to explain your estate plan and the motivation behind your decisions.
- 7. Regularly review and update your Legacy strategy to incorporate any changes in your circumstances, goals, or market conditions, ensuring it remains aligned with your long-term objectives.

# Conclusion

Based on our analysis and observation, we believe that the UBS Wealth Way approach is highly effective for managing family wealth. We've made a technical and behavioral case for the approach in this report, but our practical experience has provided additional evidence.

Over the last decade, we've used the UBS Wealth Way approach to help hundreds of families. By adopting the framework, many families have realized that their Legacy strategy—previously undefined—deserved the bulk of their attention. Many other families uncovered opportunities to change their asset allocation, add life insurance or annuities, or update their trust and estate strategy to better align their portfolio with their objectives.

Ultimately, our goal is straightforward: To help families understand how their assets can best be used to meet their objectives. It's a purpose-driven approach to wealth management. What should you do to maintain your current lifestyle? What should you do to improve your lifestyle? What should you do to improve the lives of others? The UBS Wealth Way approach provides the answers to those questions.

### Appendix

# Strategic Asset Allocation tables

	SA	A: Taxable v	aditional ass	SAA: Taxable without non-traditional assets						
	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressiv
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fixed Income	72.0%	54.0%	36.0%	19.0%	6.0%	81.0%	65.0%	48.0%	28.0%	11.0%
US Fixed Income	70.0%	52.0%	34.0%	17.0%	6.0%	79.0%	63.0%	46.0%	26.0%	11.0%
US Gov't FI (short)	12.0%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	0.0%	0.0%	0.0%
US Gov't FI (intermediate)	7.0%	2.0%	2.0%	2.0%	0.0%	7.0%	2.0%	2.0%	2.0%	0.0%
US Gov't FI (long)	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	5.0%
US Municipal FI (short)	28.0%	20.0%	7.0%	0.0%	0.0%	32.0%	24.0%	11.0%	0.0%	0.0%
US Municipal FI (intermediate)	19.0%	20.0%	18.0%	6.5%	0.0%	24.0%	25.0%	22.0%	11.0%	0.0%
US Municipal FI (long)	0.0%	6.0%	5.0%	6.5%	3.0%	0.0%	8.0%	9.0%	11.0%	6.0%
US IG Corp FI	4.0%	2.0%	0.0%	0.0%	0.0%	4.0%	2.0%	0.0%	0.0%	0.0%
US HY Corp FI	0.0%	2.0%	2.0%	2.0%	0.0%	0.0%	2.0%	2.0%	2.0%	0.0%
Int'l Fixed Income	2.0%	2.0%	2.0%	2.0%	0.0%	2.0%	2.0%	2.0%	2.0%	0.0%
EM FI (Hard)	1.0%	1.0%	1.0%	1.0%	0.0%	1.0%	1.0%	1.0%	1.0%	0.0%
EM FI (Local)	1.0%	1.0%	1.0%	1.0%	0.0%	1.0%	1.0%	1.0%	1.0%	0.0%
Equity	16.0%	31.0%	49.0%	69.0%	87.0%	17.0%	33.0%	50.0%	70.0%	87.0%
US Equity	11.0%	18.0%	28.0%	39.0%	47.0%	11.0%	20.0%	28.0%	40.0%	47.0%
US Large cap growth	4.0%	6.5%	10.0%	14.0%	16.0%	4.0%	7.0%	10.0%	14.0%	16.0%
US Large cap value	4.0%	6.5%	10.0%	14.0%	16.0%	4.0%	7.0%	10.0%	14.0%	16.0%
US Mid cap	2.0%	3.0%	5.0%	7.0%	9.0%	2.0%	4.0%	5.0%	8.0%	9.0%
US Small cap	1.0%	2.0%	3.0%	4.0%	6.0%	1.0%	2.0%	3.0%	4.0%	6.0%
International Equity	5.0%	13.0%	21.0%	30.0%	40.0%	6.0%	13.0%	22.0%	30.0%	40.0%
Int'l Developed Markets	5.0%	10.0%	15.0%	21.0%	28.0%	6.0%	10.0%	16.0%	21.0%	28.0%
Emerging Markets	0.0%	3.0%	6.0%	9.0%	12.0%	0.0%	3.0%	6.0%	9.0%	12.0%
Non-traditional	10.0%	13.0%	13.0%	10.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hedge Funds	10.0%	13.0%	13.0%	10.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Real Estate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Note: The estimated risk and returns of the allocations are provided for illustrative purposes only and are based on UBS's Capital Market Assumptions ("CMAs ") for each of the asset classes in the allocation. The CMAs are UBS's estimated risk and return assumptions for various asset classes and are based on our proprietary methodology. The CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from the results shown. Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

Source: UBS Wealth Management USA Asset Allocation Committee, as of February 5, 2024

	SAA:	Non-taxable	e with non-	-traditional a	ssets	SAA: Non-taxable without non-traditional assets				
	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressiv
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fixed Income	73.0%	54.0%	36.0%	20.0%	6.0%	81.0%	65.0%	48.0%	28.0%	11.0%
US Fixed Income	67.0%	48.0%	30.0%	15.0%	6.0%	74.0%	58.0%	42.0%	25.0%	11.0%
US Gov't FI (short)	22.0%	12.0%	4.0%	0.0%	0.0%	22.0%	12.0%	5.0%	0.0%	0.0%
US Gov't FI (intermediate)	15.0%	12.0%	10.0%	4.0%	0.0%	16.0%	12.0%	10.0%	4.0%	0.0%
US Gov't FI (long)	0.0%	4.0%	3.0%	4.0%	6.0%	0.0%	4.0%	4.0%	4.0%	6.0%
US Municipal Fl	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
US IG Corp FI	24.0%	15.0%	8.0%	2.0%	0.0%	30.0%	24.0%	17.0%	12.0%	5.0%
US HY Corp FI	6.0%	5.0%	5.0%	5.0%	0.0%	6.0%	6.0%	6.0%	5.0%	0.0%
Int'l Fixed Income	6.0%	6.0%	6.0%	5.0%	0.0%	7.0%	7.0%	6.0%	3.0%	0.0%
EM FI (Hard)	3.5%	3.5%	4.0%	3.5%	0.0%	4.5%	4.5%	4.0%	1.5%	0.0%
EM FI (Local)	2.5%	2.5%	2.0%	1.5%	0.0%	2.5%	2.5%	2.0%	1.5%	0.0%
Equity	14.0%	29.0%	47.0%	67.0%	87.0%	17.0%	33.0%	50.0%	70.0%	87.0%
US Equity	9.0%	17.0%	26.0%	36.0%	46.0%	11.0%	19.0%	28.0%	37.0%	46.0%
US Large cap growth	3.0%	6.0%	10.0%	13.0%	16.0%	4.0%	7.0%	10.0%	13.0%	16.0%
US Large cap value	3.0%	6.0%	10.0%	13.0%	16.0%	4.0%	7.0%	10.0%	13.0%	16.0%
US Mid cap	2.0%	3.0%	4.0%	6.0%	8.0%	2.0%	3.0%	5.0%	7.0%	8.0%
US Small cap	1.0%	2.0%	2.0%	4.0%	6.0%	1.0%	2.0%	3.0%	4.0%	6.0%
International Equity	5.0%	12.0%	21.0%	31.0%	41.0%	6.0%	14.0%	22.0%	33.0%	41.0%
Int'l Developed Markets	5.0%	9.0%	15.0%	22.0%	29.0%	6.0%	10.0%	16.0%	24.0%	29.0%
Emerging Markets	0.0%	3.0%	6.0%	9.0%	12.0%	0.0%	4.0%	6.0%	9.0%	12.0%
Non-traditional	11.0%	15.0%	15.0%	11.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hedge Funds	11.0%	15.0%	15.0%	11.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Real Estate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Note: The estimated risk and returns of the allocations are provided for illustrative purposes only and are based on UBS's Capital Market Assumptions ("CMAs ") for each of the asset classes in the allocation. The CMAs are UBS's estimated risk and return assumptions for various asset classes and are based on our proprietary methodology. The CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from the results shown. Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

Source: UBS Wealth Management USA Asset Allocation Committee, as of February 5, 2024

		SAA: Taxable US-Focused Investor					SAA: Non-taxable US-Focused Investor					
	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Conservative	Moderately e Conservative	Moderate	Moderately Aggressive	Aggressive		
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
Fixed Income	81.0%	65.0%	48.0%	28.0%	11.0%	81.0%	65.0%	48.0%	28.0%	11.0%		
US Fixed Income	81.0%	65.0%	48.0%	28.0%	11.0%	81.0%	65.0%	48.0%	28.0%	11.0%		
US Gov't FI (short)	12.0%	0.0%	0.0%	0.0%	0.0%	22.0%	12.0%	5.0%	0.0%	0.0%		
US Gov't FI (intermediate)	7.0%	2.0%	2.0%	2.0%	0.0%	16.0%	12.0%	10.0%	4.0%	0.0%		
US Gov't FI (long)	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	4.0%	4.0%	4.0%	6.0%		
US Municipal FI (short)	32.0%	24.0%	11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
US Municipal FI (intermediate)	24.0%	25.0%	22.0%	11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
US Municipal FI (long)	0.0%	8.0%	9.0%	11.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
US IG Corp Fl	6.0%	3.0%	2.0%	2.0%	0.0%	33.0%	27.0%	20.0%	13.0%	5.0%		
US HY Corp Fl	0.0%	3.0%	2.0%	2.0%	0.0%	10.0%	10.0%	9.0%	7.0%	0.0%		
Equity	17.0%	33.0%	50.0%	70.0%	87.0%	17.0%	33.0%	50.0%	70.0%	87.0%		
US Equity	14.0%	28.0%	42.0%	59.0%	74.0%	14.0%	28.0%	42.0%	59.0%	74.0%		
US Large cap growth	5.0%	10.0%	15.0%	21.0%	26.0%	5.0%	10.0%	15.0%	21.0%	26.0%		
US Large cap value	5.0%	10.0%	15.0%	21.0%	26.0%	5.0%	10.0%	15.0%	21.0%	26.0%		
US Mid cap	3.0%	5.0%	8.0%	11.0%	14.0%	3.0%	5.0%	8.0%	11.0%	14.0%		
US Small cap	1.0%	3.0%	4.0%	6.0%	8.0%	1.0%	3.0%	4.0%	6.0%	8.0%		
International Equity	3.0%	5.0%	8.0%	11.0%	13.0%	3.0%	5.0%	8.0%	11.0%	13.0%		
Int'l Developed Markets	3.0%	5.0%	8.0%	11.0%	13.0%	3.0%	5.0%	8.0%	11.0%	13.0%		
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See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

SAA: Yield-focused taxable investor					SAA: Yield-focused non-taxable investor					
Conservative	Moderately Conservative	Moderate		Aggressive	Conservative	Moderately Conservative	Moderate	Moderately Aggressive		
2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
68.0%	52.0%	34.0%	27.0%	10.0%	72.0%	56.0%	41.0%	33.0%	15.0%	
62.0%	41.0%	26.0%	21.0%	10.0%	63.0%	43.0%	26.0%	20.0%	10.0%	
7.0%	4.0%	2.0%	0.0%	0.0%	23.0%	7.0%	2.0%	0.0%	0.0%	
4.0%	4.0%	2.0%	2.0%	0.0%	13.0%	8.0%	2.0%	2.0%	0.0%	
0.0%	2.0%	2.0%	0.0%	3.0%	0.0%	4.0%	2.0%	2.0%	5.0%	
35.0%	21.0%	6.0%	6.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
10.0%	2.0%	2.0%	2.0%	0.0%	17.0%	9.0%	5.0%	2.0%	0.0%	
6.0%	8.0%	12.0%	11.0%	4.0%	10.0%	15.0%	15.0%	14.0%	5.0%	
6.0%	11.0%	8.0%	6.0%	0.0%	9.0%	13.0%	15.0%	13.0%	5.0%	
6.0%	7.0%	5.0%	4.0%	0.0%	7.0%	9.0%	10.0%	8.0%	5.0%	
0.0%	4.0%	3.0%	2.0%	0.0%	2.0%	4.0%	5.0%	5.0%	0.0%	
8.0%	16.0%	24.0%	31.0%	52.0%	8.0%	16.0%	24.0%	30.0%	50.0%	
5.0%	9.0%	13.0%	17.0%	26.0%	5.0%	9.0%	13.0%	16.0%	25.0%	
3.0%	7.0%	11.0%	14.0%	26.0%	3.0%	7.0%	11.0%	14.0%	25.0%	
22.0%	30.0%	40.0%	40.0%	36.0%	18.0%	26.0%	33.0%	35.0%	33.0%	
7.0%	7.0%	8.0%	6.0%	3.0%	6.0%	8.0%	7.0%	5.0%	4.0%	
7.0%	10.0%	12.0%	13.0%	8.0%	6.0%	9.0%	10.0%	10.0%	4.0%	
4.0%	6.0%	11.0%	13.0%	15.0%	3.0%	5.0%	11.0%	12.0%	15.0%	
4.0%	7.0%	9.0%	8.0%	10.0%	3.0%	4.0%	5.0%	8.0%	10.0%	
	Conservative       2.0%       68.0%       62.0%       7.0%       4.0%       0.0%       35.0%       10.0%       6.0%       6.0%       6.0%       5.0%       3.0%       22.0%       7.0%       7.0%       7.0%	Moderately Conservative       2.0%       2.0%       68.0%       52.0%       62.0%       4.0%       7.0%       4.0%       0.0%       2.0%       35.0%       2.0%       35.0%       2.0%       35.0%       2.0%       6.0%       8.0%       6.0%       10.0%       2.0%       6.0%       10.0%       4.0%       0.0%       3.0%       7.0%       3.0%       7.0%       3.0%       7.0%       7.0%       7.0%       7.0%       7.0%       7.0%       7.0%       7.0%       7.0%       7.0%       7.0%	Moderately Conservative     Moderately Conservative     Moderately Moderately       2.0%     2.0%     2.0%       68.0%     52.0%     34.0%       62.0%     41.0%     26.0%       7.0%     4.0%     2.0%       4.0%     2.0%     2.0%       0.0%     2.0%     2.0%       10.0%     2.0%     2.0%       10.0%     2.0%     2.0%       6.0%     2.0%     2.0%       10.0%     2.0%     2.0%       6.0%     2.0%     2.0%       6.0%     2.0%     2.0%       6.0%     2.0%     2.0%       6.0%     2.0%     3.0%       6.0%     7.0%     3.0%       6.0%     7.0%     3.0%       6.0%     11.0%     3.0%       6.0%     9.0%     13.0%       6.0%     7.0%     8.0%       7.0%     30.0%     40.0%       7.0%     7.0%     8.0%       7.0%     10.0%     12.0% <t< td=""><td>Moderately Conservative     Moderately Moderately Moderately     Moderately Aggressive       2.0%     2.0%     2.0%     2.0%       68.0%     52.0%     34.0%     27.0%       62.0%     41.0%     26.0%     21.0%       7.0%     4.0%     2.0%     0.0%       7.0%     4.0%     2.0%     0.0%       4.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       10.0%     2.0%     2.0%     0.0%       10.0%     2.0%     2.0%     0.0%       10.0%     2.0%     3.0%     2.0%       6.0%     11.0%     8.0%     6.0%       0.0%     4.0%     3.0%     2.0%       6.0%     10.0%     13.0%     14.0%       5.0%     9.0%     13.0%     40.0%       5.0%     7.0%</td><td>Moderately Conservative     Moderately Koderately Aggressive     Aggressive       2.0%     2.0%     2.0%     2.0%     2.0%       68.0%     52.0%     34.0%     27.0%     10.0%       68.0%     52.0%     34.0%     27.0%     10.0%       62.0%     41.0%     26.0%     21.0%     10.0%       7.0%     4.0%     2.0%     0.0%     0.0%       0.0%     2.0%     2.0%     0.0%     0.0%       0.0%     2.0%     2.0%     0.0%     0.0%       0.0%     2.0%     2.0%     0.0%     3.0%       0.0%     2.0%     2.0%     0.0%     3.0%       10.0%     2.0%     2.0%     0.0%     3.0%       10.0%     2.0%     2.0%     0.0%     3.0%       6.0%     11.0%     8.0%     6.0%     0.0%       6.0%     7.0%     3.0%     2.0%     0.0%       6.0%     11.0%     3.0%     2.0%     0.0%       6.0%     10.0%     3.0%</td><td>Moderately Conservative     Moderately Conservative     Moderately Aggressive     Conservative       2.0%     63.0%     72.0%     63.0%     72.0%     63.0%     72.0%     63.0%     23.0%</td><td>Moderately Conservative     Moderately Conservative     Moderately Aggressive     Aggressive Aggressive     Aggressive Conservative     Moderately Conservative       2.0%     0.0%     13.0%     8.0%     0.0%     3.0%     0.0%     3.0%     0.0%     10.0%     15.0%     10.0%     15.0%     10.0%     15.0%     10.0%     15.0%     13.0%     13.0%     13.0%     13.0%     13.0%     16.0%     2.0%     2.0%     0.0%     2.0%</td><td>Conservative     Moderately Conservative     Moderately Aggressive     Aggressive Aggressive     Aggressive Conservative     Moderately Conservative     Moderately Conservative</td><td>Moderately Conservative     Moderately Moderately Aggressive     Aggressive Aggressive     Moderately Conservative     Moderately Moderately Aggressive     Moderately Conservative     Moderately Moderately Conservative     Moderately Moderately Conservative     Moderately Moderately Conservative     Moderately Moderately Conservative     Moderately Conservative     Moderately Conservative</td></t<>	Moderately Conservative     Moderately Moderately Moderately     Moderately Aggressive       2.0%     2.0%     2.0%     2.0%       68.0%     52.0%     34.0%     27.0%       62.0%     41.0%     26.0%     21.0%       7.0%     4.0%     2.0%     0.0%       7.0%     4.0%     2.0%     0.0%       4.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       0.0%     2.0%     2.0%     0.0%       10.0%     2.0%     2.0%     0.0%       10.0%     2.0%     2.0%     0.0%       10.0%     2.0%     3.0%     2.0%       6.0%     11.0%     8.0%     6.0%       0.0%     4.0%     3.0%     2.0%       6.0%     10.0%     13.0%     14.0%       5.0%     9.0%     13.0%     40.0%       5.0%     7.0%	Moderately Conservative     Moderately Koderately Aggressive     Aggressive       2.0%     2.0%     2.0%     2.0%     2.0%       68.0%     52.0%     34.0%     27.0%     10.0%       68.0%     52.0%     34.0%     27.0%     10.0%       62.0%     41.0%     26.0%     21.0%     10.0%       7.0%     4.0%     2.0%     0.0%     0.0%       0.0%     2.0%     2.0%     0.0%     0.0%       0.0%     2.0%     2.0%     0.0%     0.0%       0.0%     2.0%     2.0%     0.0%     3.0%       0.0%     2.0%     2.0%     0.0%     3.0%       10.0%     2.0%     2.0%     0.0%     3.0%       10.0%     2.0%     2.0%     0.0%     3.0%       6.0%     11.0%     8.0%     6.0%     0.0%       6.0%     7.0%     3.0%     2.0%     0.0%       6.0%     11.0%     3.0%     2.0%     0.0%       6.0%     10.0%     3.0%	Moderately Conservative     Moderately Conservative     Moderately Aggressive     Conservative       2.0%     63.0%     72.0%     63.0%     72.0%     63.0%     72.0%     63.0%     23.0%	Moderately Conservative     Moderately Conservative     Moderately Aggressive     Aggressive Aggressive     Aggressive Conservative     Moderately Conservative       2.0%     0.0%     13.0%     8.0%     0.0%     3.0%     0.0%     3.0%     0.0%     10.0%     15.0%     10.0%     15.0%     10.0%     15.0%     10.0%     15.0%     13.0%     13.0%     13.0%     13.0%     13.0%     16.0%     2.0%     2.0%     0.0%     2.0%	Conservative     Moderately Conservative     Moderately Aggressive     Aggressive Aggressive     Aggressive Conservative     Moderately Conservative     Moderately Conservative	Moderately Conservative     Moderately Moderately Aggressive     Aggressive Aggressive     Moderately Conservative     Moderately Moderately Aggressive     Moderately Conservative     Moderately Moderately Conservative     Moderately Moderately Conservative     Moderately Moderately Conservative     Moderately Moderately Conservative     Moderately Conservative     Moderately Conservative	

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

	SAA: Ta	SAA: Taxable investor with sustainable investments						SAA: Non-taxable investor with sustainable investments						
	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	c	onservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive			
Cash	2.0%	2.0%	2.0%	2.0%	2.0%		2.0%	2.0%	2.0%	2.0%	2.0%			
Fixed Income	82.0%	60.0%	44.0%	25.0%	13.0%		82.0%	60.0%	44.0%	25.0%	13.0%			
MDB bonds	25.0%	10.0%	10.0%	8.0%	5.0%		40.0%	21.0%	13.0%	8.0%	5.0%			
Sustainable munis	40.0%	31.0%	21.0%	9.0%	5.0%		0.0%	0.0%	0.0%	0.0%	0.0%			
Green bonds	4.0%	6.0%	4.0%	2.0%	0.0%		14.0%	13.0%	10.0%	6.0%	0.0%			
ESG leaders corporate bonds	10.0%	10.0%	6.0%	3.0%	0.0%		25.0%	23.0%	18.0%	8.0%	5.0%			
ESG engagement HY bonds	3.0%	3.0%	3.0%	3.0%	3.0%		3.0%	3.0%	3.0%	3.0%	3.0%			
Equity	16.0%	38.0%	54.0%	73.0%	85.0%		16.0%	38.0%	54.0%	73.0%	85.0%			
ESG thematic equities	6.0%	12.0%	18.0%	23.0%	24.0%		6.0%	12.0%	18.0%	23.0%	24.0%			
ESG leaders equities (US)	5.0%	8.0%	11.0%	15.0%	19.0%		5.0%	8.0%	11.0%	15.0%	19.0%			
ESG leaders equities (ex-US)	5.0%	6.0%	9.0%	14.0%	17.0%		5.0%	6.0%	9.0%	14.0%	17.0%			
ESG improvers equities	0.0%	4.0%	6.0%	8.0%	9.0%		0.0%	4.0%	6.0%	8.0%	9.0%			
ESG engagement equities	0.0%	8.0%	10.0%	13.0%	16.0%		0.0%	8.0%	10.0%	13.0%	16.0%			

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

		All fixed	All fixed		
	All equity	income, taxable	income, non-taxable		
Cash	2.0%	2.0%	2.0%		
Fixed Income	0.0%	98.0%	98.0%		
US Gov't Fixed Income	0.0%	90.0%	42.0%		
US Gov't FI (short)	0.0%	6.0%	6.0%		
US Gov't FI (intermediate)	0.0%	10.0%	17.0%		
US Gov't FI (long)	0.0%	3.0%	5.0%		
US TIPS	0.0%	0.0%	6.0%		
US MBS	0.0%	0.0%	8.0%		
US Municipal FI (short)	0.0%	22.5%	0.0%		
US Municipal FI (intermediate)	0.0%	37.5%	0.0%		
US Municipal FI (long)	0.0%	11.0%	0.0%		
Credit	0.0%	8.0%	56.0%		
US IG Corp FI	0.0%	0.0%	20.0%		
US HY Corp FI	0.0%	4.0%	9.0%		
US CMBS	0.0%	0.0%	9.0%		
Preferreds	0.0%	0.0%	4.0%		
Senior Loans	0.0%	0.0%	4.0%		
EM FI (Hard)	0.0%	4.0%	7.0%		
EM FI (Local)	0.0%	0.0%	3.0%		
Equity	98.0%	0.0%	0.0%		
US Equity	55.0%	0.0%	0.0%		
US Large cap Growth	19.5%	0.0%	0.0%		
US Large cap Value	19.5%	0.0%	0.0%		
US Mid cap	10.0%	0.0%	0.0%		
US Small cap	6.0%	0.0%	0.0%		
International Equity	43.0%	0.0%	0.0%		
Int'l Developed Markets	31.0%	0.0%	0.0%		
Emerging Markets	12.0%	0.0%	0.0%		

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

Source: UBS Wealth Management USA Asset Allocation Committee, as of February 5, 2024

SAA: All	equity and all in	come, yield-fo	ocused investors
	All equity	All fixed income, taxable	All fixed income, non-taxable
Cash	2.0%	2.0%	2.0%
Fixed Income	0.0%	76.0%	78.0%
US Fixed Income	0.0%	60.0%	60.0%
US Gov't FI (short)	0.0%	4.0%	7.0%
US Gov't FI (intermediate)	0.0%	8.0%	11.0%
US Gov't FI (long)	0.0%	2.0%	6.0%
US Municipal Fl	0.0%	34.0%	0.0%
US IG Corp FI	0.0%	0.0%	12.0%
US HY Corp FI	0.0%	12.0%	16.0%
US CMBS	0.0%	0.0%	8.0%
Int'l Fixed Income	0.0%	16.0%	18.0%
EM FI (Hard)	0.0%	10.0%	12.0%
EM FI (Local)	0.0%	6.0%	6.0%
Equity	73.0%	0.0%	0.0%
US Equity (sum)	42.0%	0.0%	0.0%
US Equity	30.0%	0.0%	0.0%
US Large cap Growth	6.0%	0.0%	0.0%
US Large cap Value	6.0%	0.0%	0.0%
International Equity	31.0%	0.0%	0.0%
Yield Assets	25.0%	22.0%	20.0%
Senior Loans	0.0%	10.0%	10.0%
Preferreds	0.0%	12.0%	10.0%
MLPs	15.0%	0.0%	0.0%
US Real Estate	10.0%	0.0%	0.0%

Note: The estimated risk and returns of the allocations are provided for illustrative purposes only and are based on UBS's Capital Market Assumptions ("CMAs ") for each of the asset classes in the allocation. The CMAs are UBS's estimated risk and return assumptions for various asset classes and are based on our proprietary methodology. The CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from the results shown. Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

SAA: All	equity and all in	come sustain	able investmen
	All equity	All fixed income, taxable	All fixed income, non-taxable
Cash	2.0%	2.0%	2.0%
Fixed Income	0.0%	98.0%	98.0%
MDB bonds	0.0%	23.0%	28.0%
Sustainable munis	0.0%	45.0%	0.0%
Green bonds	0.0%	10.0%	25.0%
ESG leaders corporate bonds	0.0%	13.0%	38.0%
ESG engagement HY bonds	0.0%	7.0%	7.0%
Equity	98.0%	0.0%	0.0%
ESG thematic equities	28.0%	0.0%	0.0%
ESG leaders equities (US)	21.0%	0.0%	0.0%
ESG leaders equities (ex-US)	19.0%	0.0%	0.0%
ESG improvers equities	10.0%	0.0%	0.0%
ESG engagement equities	20.0%	0.0%	0.0%

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

Source: UBS Wealth Management USA Asset Allocation Committee, as of February 5, 2024

	SAA: All international equity investor
	All equity
Cash	2.0%
Equity	98.0%
DM Equities (total)	70.0%
DM Equities	4.0%
Eurozone	21.0%
Japan	15.5%
United Kingdom	10.0%
Canada	7.5%
Switzerland	7.0%
Australia	5.0%
EM Equities total	28.0%
EM Equities	9.0%
China	6.0%
South Korea	2.5%
Taiwan	3.5%
India	5.0%
Brazil	2.0%

Note: The estimated risk and returns of the allocations are provided for illustrative purposes only and are based on UBS's Capital Market Assumptions ("CMAs ") for each of the asset classes in the allocation. The CMAs are UBS's estimated risk and return assumptions for various asset classes and are based on our proprietary methodology. The CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from the results shown. Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

	SAA: Ultra hig	SAA: Institutional investors with non-traditional assets								
	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressiv
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fixed Income	63.0%	50.0%	35.0%	19.0%	6.0%	58.0%	41.0%	30.0%	15.0%	6.0%
US Fixed Income	63.0%	48.0%	33.0%	17.0%	6.0%	53.0%	37.0%	26.0%	13.0%	6.0%
US Gov't FI (short)	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	7.5%	3.0%	0.0%	0.0%
US Gov't FI (intermediate)	9.5%	1.5%	1.0%	2.0%	0.0%	11.0%	7.5%	6.5%	2.0%	0.0%
US Gov't FI (long)	5.5%	0.0%	0.0%	0.0%	2.5%	0.0%	3.0%	2.5%	2.0%	3.5%
US Municipal FI (short)	27.0%	18.0%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
US Municipal FI (intermediate)	18.0%	18.0%	16.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
US Municipal FI (long)	0.0%	8.0%	6.5%	7.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%
US IG Corp FI	3.0%	1.5%	0.0%	0.0%	0.0%	21.0%	15.0%	10.0%	6.5%	2.5%
US HY Corp FI	0.0%	1.0%	2.0%	1.0%	0.0%	5.0%	4.0%	4.0%	2.5%	0.0%
Int'l Fixed Income	0.0%	2.0%	2.0%	2.0%	0.0%	5.0%	4.0%	4.0%	2.0%	0.0%
EM FI (hard)	0.0%	1.0%	1.0%	1.0%	0.0%	2.5%	2.0%	2.0%	1.0%	0.0%
EM FI (local)	0.0%	1.0%	1.0%	1.0%	0.0%	2.5%	2.0%	2.0%	1.0%	0.0%
Equity	10.0%	23.0%	33.0%	49.0%	62.0%	10.0%	22.0%	33.0%	48.0%	52.0%
US Equity	7.0%	14.0%	18.5%	28.0%	34.5%	7.0%	13.5%	18.5%	27.0%	29.0%
US Large Cap Growth	2.5%	5.0%	6.5%	10.0%	12.5%	2.5%	4.5%	6.5%	9.5%	10.5%
US Large Cap Value	2.5%	5.0%	6.5%	10.0%	12.5%	2.5%	4.5%	6.5%	9.5%	10.5%
US Mid Cap	1.0%	3.0%	3.5%	5.0%	6.0%	2.0%	3.0%	3.5%	5.0%	5.0%
US Small Cap	1.0%	1.0%	2.0%	3.0%	3.5%	0.0%	1.5%	2.0%	3.0%	3.0%
International Equity	3.0%	9.0%	14.5%	21.0%	27.5%	3.0%	8.5%	14.5%	21.0%	23.0%
Int'l Developed Markets	3.0%	7.0%	10.5%	15.0%	20.0%	3.0%	6.5%	10.5%	15.5%	16.5%
Emerging Markets	0.0%	2.0%	4.0%	6.0%	7.5%	0.0%	2.0%	4.0%	5.5%	6.5%
Non-traditional	25.0%	25.0%	30.0%	30.0%	30.0%	30.0%	35.0%	35.0%	35.0%	40.0%
Hedge Funds	12.0%	9.0%	11.0%	6.0%	4.0%	14.0%	12.0%	11.0%	8.0%	4.0%
Multi-Strategy	1.5%	1.0%	1.0%	0.0%	0.0%	1.5%	1.5%	1.0%	0.0%	0.0%
Global Macro	4.5%	3.0%	2.0%	1.0%	0.0%	5.5%	3.5%	2.0%	1.0%	0.0%
Event Driven	1.5%	1.5%	2.0%	1.5%	1.5%	1.5%	2.0%	2.0%	2.0%	1.5%
Relative Value	3.0%	2.0%	3.0%	1.5%	1.0%	4.0%	2.5%	3.0%	2.0%	1.0%
Equity Hedge	1.5%	1.5%	3.0%	2.0%	1.5%	1.5%	2.5%	3.0%	3.0%	1.5%
Private Equity	2.0%	5.0%	11.0%	17.0%	21.0%	4.0%	6.5%	13.5%	19.0%	29.0%
Buyout	2.0%	3.0%	6.5%	9.0%	8.5%	2.5%	5.0%	8.5%	10.0%	13.0%
Growth Equity	0.0%	0.0%	2.5%	5.0%	7.5%	0.0%	0.0%	3.0%	6.0%	10.0%
Venture Capital	0.0%	0.0%	0.0%	2.0%	4.0%	0.0%	0.0%	0.0%	2.0%	5.0%
Secondaries	0.0%	2.0%	2.0%	1.0%	1.0%	1.5%	1.5%	2.0%	1.0%	1.0%
Private Credit	7.0%	6.0%	4.0%	5.0%	3.0%	7.0%	9.5%	5.0%	5.0%	5.0%
Direct Lending	7.0%	6.0%	3.0%	3.5%	2.0%	7.0%	9.5%	3.5%	4.0%	3.5%
Distressed Credit	0.0%	0.0%	1.0%	1.5%	1.0%	0.0%	0.0%	1.5%	1.0%	1.5%
Private Real Assets	<b>4.0%</b>	5.0%	<b>4.0%</b>	2.0%	2.0%	<u> </u>	7.0%	5.5%	3.0%	2.0%
Core / Core + Real Estate	2.0%	3.0%	2.0%	2.0%	1.0%	3.0%	5.0%	3.5%	2.0%	1.0%
Opportunistic Real Estate	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%	1.0%

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

#### Appendix

### Endnotes

- 1 Carbone, A., Scansaroli, D., Waring, J., Williams, K. (2024). Savings waterfall: Supercharge your savings. Blog. UBS.
- 2 Ibbotson et al (2007), Milevsky (2012), Blanchett and Straehl (2015), and Huggett and Kaplan (2015) explain strategies to help quantify the size and characteristics of human capital.
- 3 Marcelli, S., et al. 2024 Capital Market Assumptions Update (2024). UBS.
- 4 Kinniry, F., et al. (2022). Putting a value on your value: Quantifying Vanguard Advisor's Alpha. Vanguard Alpha Perspectives, p. 19-20.
- 5 Berkin, A., et al. (2003). Tax Management, Loss Harvesting, and HIFO Accounting. Financial Analysts Journal, p. 92.
- 6 Kinniry, F., et al. (2022). Putting a value on your value: Quantifying Vanguard Advisor's Alpha. Vanguard Alpha Perspectives, p. 21-22.
- 7 Carbone, A., Scansaroli, D., Waring, J., & Williams, K. (2024). Which assets are better to use in retirement?. Modern retirement monthly. UBS.
- 8 McDermott, C., et al. (2023). Spousal lifetime access trusts. Advanced Planning. UBS. Available at: https://www.ubs.com/ us/en/wealth-management/our-solutions/private-wealthmanagement/advanced-planning/articles/spousal-lifetimeaccess-trusts.html.
- 9 Carbone, C., Scansaroli, D., & Waring, J. (2024). Beyond RMDs: Strategies for IRA owners and beneficiaries. Modern retirement monthly. UBS.
- 10 Lowry, R. & Trayes, B. (2021). Planning with Irrevocable Life Insurance Trusts in the Current Tax Environment. Advanced Planning. UBS.
- 11 Advanced Planning Group. (2019). Using irrevocable trusts to transfer wealth. Advanced Planning. UBS.
- 12 Carbone, A., Scansaroli, D., Waring, J., & Williams, K. (2024). Which assets are best to use in retirement?. Modern retirement monthly. UBS.
- 13 Carbone, A., LeForge, J., Scansaroli, D., Waring, J., & Williams, K. (2023). Give to others, not the IRS. Blog. UBS.
- 14 Carbone, A., LeForge, J., Scansaroli, D., Waring, J., & Williams, K. (2023). Give to others, not the IRS. Blog. UBS.
- 15 Carbone, C., Scansaroli, D., & Waring, J. (2024). Beyond RMDs: Strategies for IRA owners and beneficiaries. Modern retirement monthly. UBS.
- 16 Carbone, A., Scansaroli, D., Waring, J., & Williams, K. (2024). Which assets are best to use in retirement?. Modern retirement monthly. UBS.
- 17 Barber, B. & Odean, T. (2000). Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors. Available at SSRN: https://ssrn.com/ abstract=219228.

- 18 Kinniry, F., et al. (2022). Putting a value on your value: Quantifying Vanguard Advisor's Alpha. Vanguard Alpha Perspectives, p. 17-18.
- 19 Thaler, R. H. (1990). Anomalies: Saving, Fungibility, and Mental Accounts. Journal of Economic Perspectives, 4(1), 193-205.
- 20 Kinniry, F., et al. (2022). Putting a value on your value: Quantifying Vanguard Advisor's Alpha. Vanguard Alpha Perspectives, p. 14-16.
- 21 Falconio, L., Scansaroli, D., & Waring, J. (2021). How leverage can be the best option to enhance returns and achieve your goals. UBS.
- 22 Carbone, A., LeForge, J., Scansaroli, D., & Waring, J. (2024). Beyond the 4% rule: Am I ready for retirement?. Modern retirement monthly. UBS.
- 23 Carbone, A., LeForge, J., Scansaroli, D., Waring, J., & Williams, K. (2023). Three reasons to seek annuity income. Blog. UBS.
- 24 Carbone, A., LeForge, J., Scansaroli, D., Waring, J., & Williams, K. (2024). Borrowing in retirement. Modern retirement monthly. UBS.
- 25 Draho, J., et al. (2024). Sustainable Investing (SI) Strategic Asset Allocations. UBS.
- 26 Scansaroli, D., & Waring, J. (2022). Investing in private markets with the UBS Wealth Way. Investment strategy insights. UBS.
- 27 LeForge, J., Marcell, S., Scansaroli, D., & Waring, J. (2023). Considering outcome-oriented investments. Structured Investments. UBS.
- 28 Carbone, A., Scansaroli, D., Waring, J., & Williams, K. (2024). Which assets are best to use in retirement?. Modern retirement monthly. UBS.
- 29 Carbone, A., Scansaroli, D., Waring, J., & Williams, K. (2024). Which assets are better to use in retirement?. Modern retirement monthly. UBS.
- 30 Leibell, D., et al. (2023). Charitable giving: the rules of the road. Advanced Planning. UBS. Available at: https://www.ubs.com/us/en/wealth-management/our-solutions/private-wealth-management/advanced-planning/articles/charitable-giving.html.

Appendix

# Bibliography and related reading

Babylonian Talmud: Tractate Baba Mezi'a, folio 42a.

Baredes, M., & Crook, M. (2014). Frequently Asked Questions about Liability Driven Investing. Investment Strategy Insights. UBS.

Blanchett, D., & Kaplan, P. (2013). Alpha, Beta, and Now... Gamma. The Journal of Retirement, 1(2), 29-45.

Blanchett, D., & Straehl, P. (2015). No Portfolio is an Island. Financial Analysts Journal, 71(3), 15-33.

Carbone, A., Scansaroli, D., & Waring, J. (2023). 3 strategies to improve your after-tax wealth potential. Modern retirement monthly. UBS.

Chhabra, A. B. (2005). Beyond Markowitz: A Comprehensive Wealth Allocation Framework for Individual Investors. The Journal of Wealth Management, 7(4), 8-34. Available at SSRN: http://ssrn.com/abstract=925138.

DeMiguel, V., Garlappi, L., & Uppal, R. (2008). Optimal versus naïve diversification: How inefficient is the 1/N portfolio strategy? Review of Financial Studies, 22(5), 1915-1953.

Dichev, I. (2007). What are stock investors' actual historical returns? Evidence from dollar-weighted returns. American Economic Review, 97(1), 386-401.

Graham, B., & Dodd, D. (1949). The Intelligent Investor. New York, NY: Harper & Brothers.

Huggert, M., & Kaplan, G. (2015). How large is the stock component of human capital? NBER Working Paper No. 21238.

Ibbotson, R., Milevsky, M. A., Chen, P., & Zhu, K. (2007). Lifetime Financial Advice: Human Capital, Asset Allocation and Insurance. The Research Foundation of the CFA Institute.

LeForge, J. & Scansaroli, D. (2023). Constructing and managing taxable portfolios. Investment strategy insights. UBS.

Leibowitz, M. L. (1987). Pension Asset Allocation Through Surplus Management. Financial Analysts Journal, 43(2), 29-40.

Leibowitz, M. L., & Henriksson, R. D. (1988). Portfolio Optimization Within a Surplus Framework. Financial Analysts Journal, 44(2), 43-51.

Markowitz, h. M. (1952). Portfolio selection. The Journal of Finance, 7(1), 77-91.

Merton, R. C. (1971). Optimum consumption and portfolio rules in a continuous-time model. Journal of Economic Theory, 3(4), 373-413. doi:10.1016/0022-0531(71)90038-X. hdl:1721.1/63980.

Milevsky, M. (2013). Are You a Stock or a Bond? Identify Your Own Human Capital for a Secure Financial Future (2nd ed.). Upper Saddle River, NJ: FT Press.

Pfau, W. D., & Kitces, M. E. (2014). Reducing Retirement Risk with a Rising Equity Glide Path. Journal of Financial Planning, 27(1), 38-45.

Scansaroli, D., & Waring, J. (2022). Tax loss harvesting: 3 reasons, 3 tips, and 3 strategies to help improve after-tax returns. Investment strategy insights. UBS.

Sharpe, W. F., & Tint, L. G. (1990). Liabilities: A New Approach. Journal of Portfolio Management, 16(2), 5-10.

Sharpe, W. F. (2002). Budgeting and Monitoring Pension Fund Risk. Financial Analysts Journal, 58(5), 74-86.

Thaler, R. (1999). Mental Accounting Matters. Journal of Behavioral Decision Making, 12(3), 183-206.

Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference-dependent model. The Quarterly Journal of Economics, 106(4), 1039-1061.

Waring, M. B. (2004a). Liability-Relative Investing: Be Dual-Duration Matched and on the Surplus Efficient Frontier. Journal of Portfolio Management, 30(4), 8-20.

Waring, M. B. (2004b). Liability-Relative Investing II. Journal of Portfolio Management, 31(1), 40-53.

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