INVESTMENTS
& WEALTH MONITOR

A reprinted article from July/August 2023

Building Better Portfolios with Alternative Investments: A Goals-Based Framework

By Anthony B. Davidow, CIMA®

INVESTMENTS & WEALTH INSTITUTE®

© 2023 Investments & Wealth Institute®. Reprinted with permission. All rights reserved.

Building Better Portfolios with Alternative Investments

A GOALS-BASED FRAMEWORK

By Anthony B. Davidow, CIMA®

On average, 90 percent of the variability of returns and 100 percent of the absolute level of return is explained by asset allocation.
—Roger G. Ibbotson, Professor Emeritus, Yale School of Management

As Roger Ibbotson noted—and his research supports—the asset allocation decision is a critical determinant of the long-term success of an investment strategy. We have long recognized the value of asset allocation, but too often limited the allocation to traditional investments. With the democratization of alternative investments, driven by product evolution, advisors now can expand asset allocations to include a broader array of asset classes to achieve client goals.

This article considers asset allocation and portfolio construction, and the impact of adding alternative investments to a diversified portfolio. We will use case studies to illustrate how to allocate alternative investments and show the impact they have on a traditional portfolio.

This article addresses the following:

- How do alternative investments fit within the goals-based investing process?
- What is the appeal of private markets?
- What is the value of developing an illiquidity bucket?
- How should advisors evaluate the risk–reward trade-offs?
- What does the addition of alternative investments provide to a diversified portfolio?

GOALS-BASED INVESTING

As we think about allocating to alternative investments, we should revisit the goals-based investing process, shown in figure 1 (Davidow 2021). We should begin by determining the investor's goals and type of account, and then determine whether including alternative investments improves the likelihood of achieving those goals. Note, an investor may be solving for multiple goals simultaneously, with different time horizons.

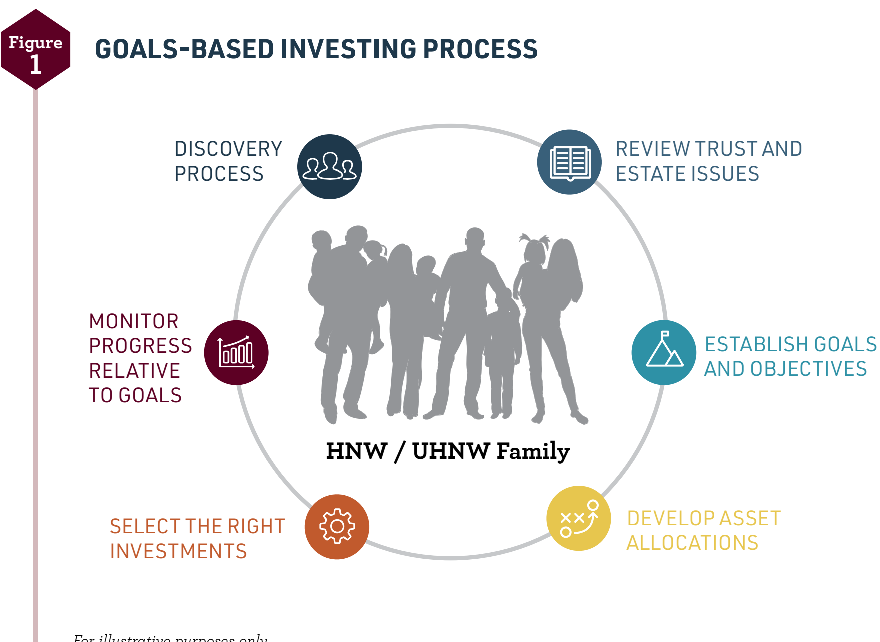
Embark on a discovery process. Understand the investor's goals, dreams, and aspirations. What is the investor's risk appetite? What are the investor's cash-flow needs? What is the investor's time horizon for each account type? There may be a need for education about alternative investments. Unfamiliar investments often feel riskier than they are.

Review trust and estate issues. If applicable, does the investor have any trust and estate issues that need to be considered? What type(s) of trust(s) have been established? What are the goals of the trust(s)?

Establish goals and objectives. What is the investor trying to accomplish with the investment capital? The investor

Figure 1

GOALS-BASED INVESTING PROCESS



For illustrative purposes only.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

may be solving for multiple goals, across multiple account types (personal, retirement, trusts, etc.), with different time horizons to achieve them.

Develop asset allocation. What is the appropriate combination of asset classes that provides the highest likelihood of achieving those goals? Are there any limitations regarding the types of allowable investments? Does one need to amend the investment policy statement to allow for the use of alternative investments?

Select the right investments. What is the right combination of investments to achieve the investor's goals? Manager and vehicle selection is very important, especially because it pertains to allocating to private markets, given the large dispersion of returns between the best- and worst-performing managers.

Monitor progress relative to goals. It's important to regularly monitor the progress relative to the investor's stated goals. Rather than trying to outperform the market or some arbitrary benchmark, it's important to reinforce the goal for each pool of capital and the progress being made in achieving the goal.

Other considerations

There also are some unique considerations for alternative investments.

Liquidity. What are the investor's cash-flow needs? Given the long-term nature of private markets, the liquidity needs of the investor are an important consideration.

Eligibility. What is the investor's eligibility for a particular fund? It is important to determine in advance which fund or account type an investor can invest in based on the accreditation threshold and the minimum investment amount.

Target allocation. What is the targeted amount of capital to allocate to alternatives broadly and per fund? Traditional private-market funds have capital calls that would require funding over time. Registered funds, i.e., interval and tender-offer funds, are continuously offered.

THE APPEAL OF PRIVATE MARKETS

As figure 2 illustrates, private markets historically have delivered attractive risk-adjusted returns relative to their public-market equivalents. Private markets historically have exhibited relatively low correlation to public markets, and private credit and real estate have delivered higher income than their public-market equivalents.

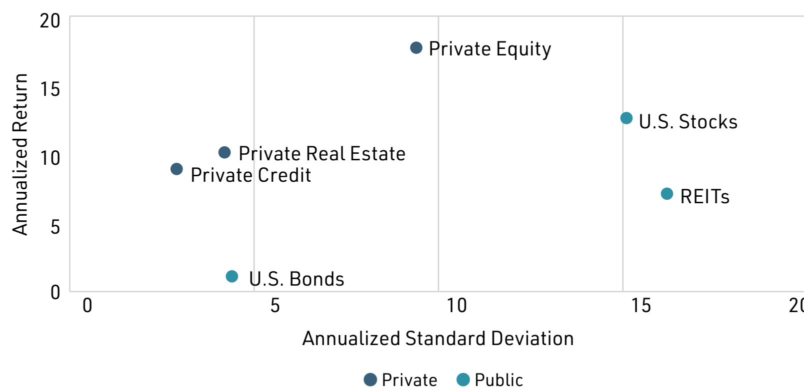
Until recently, however, these investments were available only to institutions and family offices. With the development of registered funds, these elusive investments are now available to a broader group of investors, at lower minimums, and with more flexibility. According to Cerulli Associates (2022), there is a "Goldilocks" environment for alternative investments—demand for income, inflation protection, enhanced potential returns, and volatility dampening is coinciding with an increase in the supply of products that can help lead to these respective outcomes. Registered funds have helped to democratize access to private markets.

Part of the appeal of private markets is the illiquidity premium relative to public markets. The illiquidity premium is the excess return achieved by holding these investments for an extended period (7–12 years) and allowing the managers to execute strategy and unlock value. Although registered funds offer more-flexible liquidity options, private markets should be considered long-term investments to capture the illiquidity premium.

Figure 2

PRIVATE MARKETS HAVE DELIVERED ATTRACTIVE RISK-ADJUSTED RETURNS HISTORICALLY

Historical Performance vs. Risk—10 years ending December 30, 2022, Quarterly



Source: Prepared by FT Capital Markets Insights Group. Bloomberg, Cliffwater, NCREIF, MSCI, SPDJI, Burgiss, Morningstar, Macrobond. Private Equity: U.S. Private Equity-Burgiss US Private Equity Funds Index; Private Credit: Cliffwater Direct Lending Index; Private Real Estate: NCREIF Fund ODCE, Public Stocks: S&P 500 TR USD, US Bonds: Bloomberg US Agg Bond TR USD,REITs: FTSE NAREIT All Equity REITs Index. Indexes are unmanaged and one cannot directly invest in them. They do not include fees, expenses, or sales charges. Past performance is not a guarantee of future results.

HOW MUCH SHOULD ADVISORS ALLOCATE TO ILLIQUID INVESTMENTS?

The amount of capital to allocate to illiquid investments varies by investor and underlying liquidity profile. Many investors believe that they should be 100-percent liquid, but this comes with an opportunity cost, especially in today's market environment. Based on capital market expectations (Franklin Templeton 2022), traditionally liquid market investments likely will deliver returns below their historical averages, and advisors may need to consider private markets to help investors achieve their goals.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

One way of determining the appropriate percentage to allocate to private markets is to develop an illiquidity bucket. The illiquidity bucket should represent the amount of capital that an investor is willing and able to tie up for 7–12 years. It can be determined via the discovery process above, and advisors should designate these investments as long-term in nature.

For many high-net-worth investors, a 10–20-percent illiquidity bucket may be appropriate given their wealth, income, and cash-flow needs. Once the advisor has determined the illiquidity bucket, the advisor can then define which asset classes and funds are appropriate to achieve the investor's goals.

DUE DILIGENCE AND RISK CONSIDERATIONS

As with any investment, an advisor must understand and evaluate the many dimensions of a fund before recommending structure and strategy. Because of the specialized nature of conducting due diligence on alternative investments, advisors may rely on due diligence conducted by their firms or a third-party provider.

There are several key factors to consider, often referred to as the "Four Ps," but there are nuances with alternative investments:

Performance. Has the fund manager generated attractive returns across different economic cycles? Does the fund manager have experience managing alternative funds? What are the comparable absolute and relative returns? How much risk has the manager taken to generate results?

Philosophy. Does the fund manager have a specific philosophy that has been used over time? Does it make economic sense given the current market environment or known future?

Process. How are investment ideas generated, vetted, and executed? Who makes the decisions? What resources are devoted to research and are they sufficient? Is the process applied consistently? What is the compensation philosophy?

People. Does the fund have a dedicated and experienced team of professionals? What are their professional qualifications? Have they worked together in managing comparable funds? Has there been senior management turnover? What's the depth and consistency of the investment team?

Beyond the investment considerations, advisors also should evaluate several structural issues:

- What type of fund is being considered (limited partnership, registered fund, or liquid alternative)?
- What is the investor eligibility for each fund (qualified purchaser, qualified client, accredited investor, or non-accredited investor)?
- What is the minimum investment?
- What are the liquidity features?
- Does the fund exhibit cash drag?
- Does the fund have capital calls?
- What is the tax reporting (K-1 versus 1099)?
- What is the total fee (investment management, performance fee, acquired fund fee, etc.)?

A number of unique risks associated with alternative investments should be considered before investing.

Liquidity: Many alternative investments have limited liquidity, either because of the structure or the underlying investments.

Leverage: Some alternative investments use leverage that can amplify the returns and risks.

Lack of transparency: Alternative investments typically lack the level of transparency that one gets with a mutual fund or separately managed account.

Concentration: Certain types of alternative investments can make concentrated bets on industries or sectors. These concentrated bets can magnify the returns and risks.

Complexity: Alternative investments often are complex strategies. Advisors should make sure that they understand how the fund manager generates returns and the level of risks taken on to achieve those results.

Like traditional due diligence efforts, advisors also should conduct ongoing due diligence to ensure that the fund is managing capital consistent with the stated approach.

A number of unique risks associated with alternative investments should be considered before investing.

PORTFOLIO CONSTRUCTION

Portfolio construction is assembling the portfolio to achieve a specific outcome. One way to frame this discussion is to focus on the role that various investments play in a portfolio, so we can evaluate their effectiveness (see figure 3). We consider adding private equity for growth, private credit for income, macro for defense, and real estate for inflation hedging.

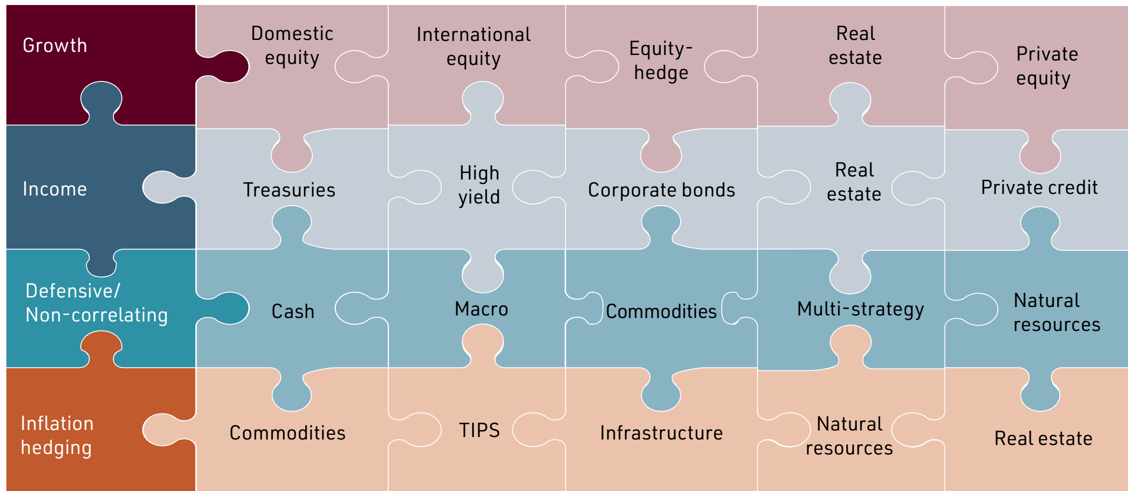
By defining roles for each investment, we can then determine if the investments are fulfilling their roles in the portfolio and move client expectations away from evaluating each investment relative to the S&P 500 Index or some other arbitrary benchmark.

One advantage of using this framework is it identifies where and how to source capital. All things remaining equal, an investor should source private equity from the growth bucket, private credit

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

Figure 3

THE ROLE OF VARIOUS ASSET CLASSES

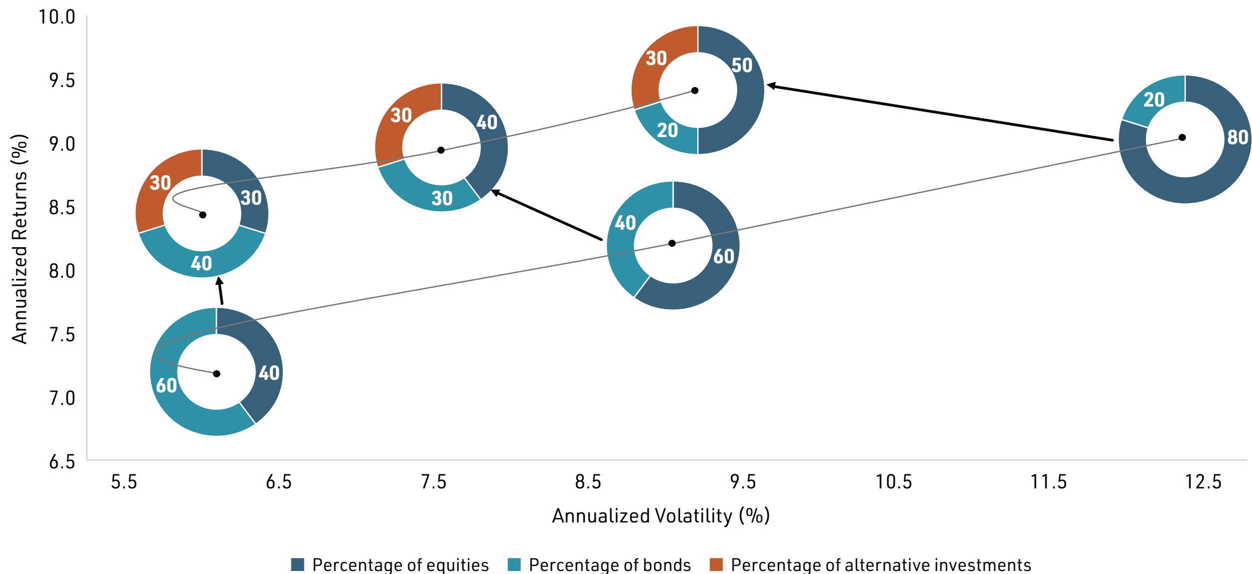


For illustrative purposes only.

Figure 4

EFFICIENT FRONTIER ANALYSIS: EQUITIES, BONDS, AND ALTERNATIVES

Annualized Volatility and Returns—January 1990–December 2022



Source: Prepared by Franklin Templeton Capital Market Insights Group. Burgiss (Private Equity), HFRI (Hedge Funds), S&P Dow Jones, NCREIF (Private Real Estate), Bloomberg; Quarterly data analysis from Q1 1990 to Q3 2022; 30-percent allocations to Alternatives split evenly among Private Real Estate, Private Equity, and Hedge Funds. Equities is represented by the S&P 500 Index and Bonds are represented by the Bloomberg Barclays US Aggregate Bond Index. Indexes are unmanaged and one cannot directly invest in them. They do not include fees, expenses, or sales charges. Past performance is not a guarantee of future results.

from the income bucket, macro from the defensive bucket, and infrastructure from the inflation bucket. Of course, certain investments such as real estate fulfill multiple roles in a portfolio.

One of the challenges with aligning asset allocation and portfolio construction is making sure that the manager or fund stays true to the stated discipline. Much like we don't want our value manager buying growth stocks, we generally want our alternative managers staying in their lane. We want managers to adhere to their disciplines so we can evaluate the overall risk and return profile of the portfolio. We want to avoid taking on unintended bets due to style drift.

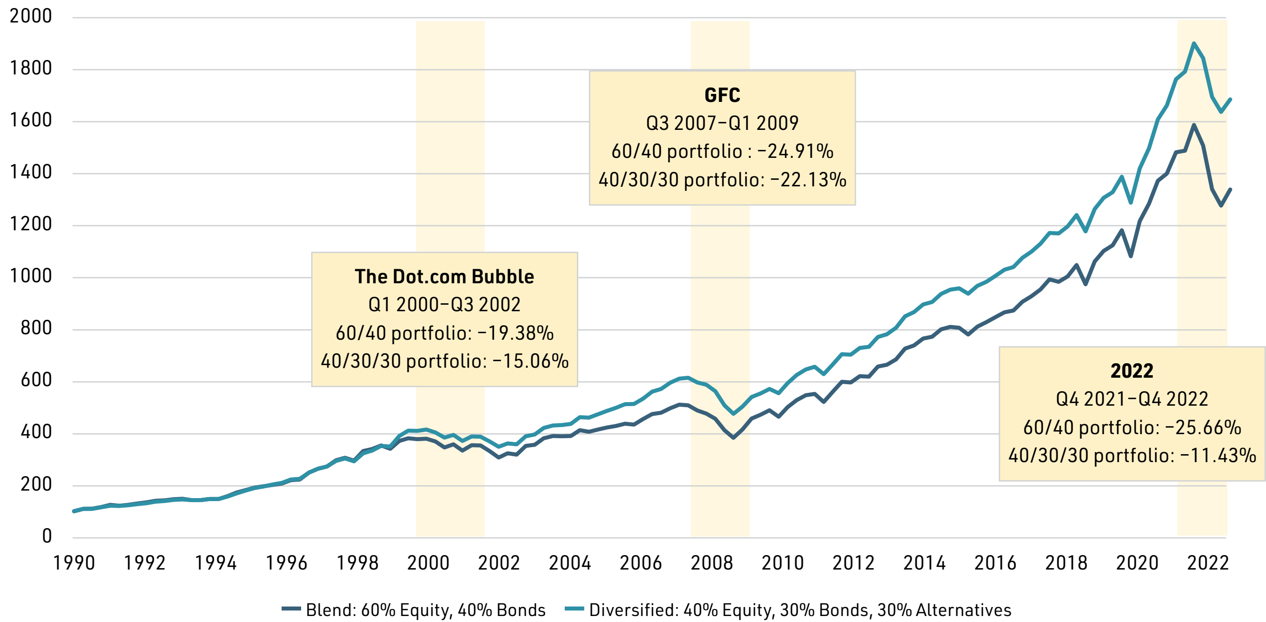
Of course, certain hedge fund managers' skill and edge comes from the freedom afforded them in seeking opportunities where they see them and exploiting

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

Figure 5

HISTORICAL RESULTS OF A DIVERSIFIED PORTFOLIO

Portfolio Drawdowns Across Market Downturns—March 1990–December 2022



Source: Prepared by Franklin Templeton Capital Market Insights Group. Equities represented by S&P 500, Bonds represented by Bloomberg Aggregate Bond Treasury TR USD, Hedge Funds represented by HFRI Fund Weighted Composite USD, Private Equity sourced from Burgiss, Real Estate represented by NCREIF Fund ODCE; 30-percent allocations to Alternatives split evenly among Private Real Estate, Private Equity, and Hedge Funds. Equity/Bond/Alt Mix in drawdown analysis made up of 40-percent equity, 30-percent bonds, and 30-percent alternatives with an equal split among private credit, private real estate, and hedge strategies. Indexes are unmanaged and one cannot directly invest in them. They do not include fees, expenses, or sales charges. Past performance is not a guarantee of future results.

market mispricing over time. Thus, some degree of freedom may be acceptable.

BENEFITS OF ADDING ALTERNATIVES

If we consider the impact of adding a diversified basket of alternative investments to a traditional portfolio, we can see that the efficient frontier moves up and to the left. As shown in figure 4, the 40/30/30 portfolio provided higher returns with lower risk than the traditional 60/40 portfolio, and the 50/20/30 portfolio provided higher returns with lower risk than the 80/20 portfolio.

Figure 4 illustrates the value of combining a diversified alternative portfolio with a traditional equity and bond allocation. The results are attributable to the attractive risk-adjusted returns of alternative investments and their relatively low correlation to traditional investments.

> *It is worth noting that a drawdown of 25 percent requires a recovery of 33 percent to get back to breakeven ...*

One primary goal of adding alternative investments to a traditional portfolio is the diversification they provide, especially in hedging against significant drawdowns. Because alternative investments historically have exhibited low-to-negative correlation to most traditional investments, they can help to dampen portfolio volatility.

As figure 5 shows, during periods of significant drawdowns, alternative investments historically have helped to mitigate the impact of drawdowns.

If we look at the drawdown analysis covering the fourth quarter of 2021 through the third quarter of 2022, we see that the 60/40 portfolio was down roughly 26 percent and the diversified alternative portfolio was down approximately 11 percent, as shown in figure 5. Minimizing the drawdown and reaping the benefits of positive compounding of returns over time means the diversified alternative portfolio generally has outperformed the traditional 60/40 portfolio over time.

It is worth noting that a drawdown of 25 percent requires a recovery of 33 percent to get back to breakeven; a loss of 40 percent requires a recovery of 67 percent; and a loss of 50 percent requires a recovery of 100 percent. Therefore, one of the priorities of advisors is trying to help investors avoid significant drawdowns, and one of the most effective tools is including alternative investments.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

CASE STUDIES

Here we include two hypothetical case studies to illustrate the impact of adding alternative investments to a diversified portfolio. We lay out pertinent facts about a family's circumstances and make assumptions in allocating assets.

Lastly, to illustrate the impact of adding alternatives, we evaluate historical risk and return data.

For more information on the methodology, fees, and assumptions used in the case studies, please refer to the appendix.

Table 1

MORGAN FAMILY BALANCE SHEET

July 2004–June 2022

		Assets	Liabilities
Residence	Home (primary)	$2,000,000	$500,000 (mortgage)
	Beach House	$500,000	$100,000 (mortgage)
Income	Annual Salary	$1,000,000	
	Board Seats	$100,000	
	Portfolio Income	$100,000	
Expenses	Outflows		$250,000
Investments	Personal Accounts	$5,000,000	
	Retirement Accounts	$2,000,000	
	Trusts	$1,000,000	
	Total	**$11,700,000**	**$850,000**

For illustrative purposes only.

Table 2

MORGAN FAMILY ASSET ALLOCATION, PERSONAL ACCOUNTS

July 2004–June 2022

Personal Accounts		Asset Allocation	
Investments	$5 million	Equity (tax-managed equities)	50%
Primary Goal	Capital Appreciation	Fixed Income	25%
Secondary Goal	Fund Charities	Alternative Investments (private equity, real estate, and equity hedge)	25%
Time Horizon	25 years	Cash	0%

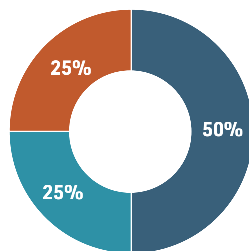
For illustrative purposes only.

Figure 6

MORGAN FAMILY HYPOTHETICAL ANALYSIS, PERSONAL ACCOUNTS

July 2004–June 2022

Distribution of Assets



- Tax-managed equities
- Fixed income
- Alternative investments (private equity, real estate, equity hedge)

	50:25:25 Equity:Bond:Alternatives	50:40 Equity:Bond
Value as of June 2022	$13,729,445	$11,420,281
Average Return	6.9%	6.0%
Alpha	0.9%	
Standard Deviation	11.0%	11.2%
Sharpe Ratio	0.37	0.29
Cumulative Excess Returns	$2,309,164	

This chart is for illustrative purposes only and does not reflect the performance of any Franklin Templeton fund. For more information on the methodology, fees, and assumptions used in the case studies, please see the appendix.

CASE STUDY ONE: WILLIAM AND MARY MORGAN

William and Mary are both 65 years old. William is an investment banker and Mary is a retired teacher. They have two children, Will Jr. (30 years old) and Sarah (25 years old). Will has three children: Holly (age 10), Maggie (age seven), and Billy (age three). Sarah recently married and has no children. Will is a sophisticated investor with a lot of experience investing in alternative investments.

For the retirement account, because William and Mary are focused on generating income, we have used private credit, real estate, and relative value to increase the income and dampen volatility.

The Morgan family balance sheet is shown in table 1.

Based on their account goal, healthy asset/liability ratio, and long time horizon, they can allocate a significant portion of this portfolio to alternative investments. To illustrate the impact of adding alternatives, and to align with the goal of capital appreciation, we have divided the alternative allocation equally among private equity, real estate, and equity hedge (see table 2).

The goal was capital appreciation. In figure 6 the historical results showed higher returns (6.9 percent versus 6.0 percent) and with slightly less risk (11.0 percent versus 11.2 percent) than the 60/40 portfolio. From 2004, the diversified alternative portfolio would have grown from $5 million to $13.7 million and the 60/40 portfolio would have grown to $11.4 million during the same time period—a difference of nearly $2.3 million.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

For the retirement account, because William and Mary are focused on generating income, we have used private credit, real estate, and relative value to increase the income and dampen volatility (see table 3). Will and Mary are healthy, and plan to be active through their retirement years, so they are comfortable committing capital to long-term investments such as private credit and real estate.

The Morgan family is moving from the accumulation to the decumulation phase and therefore needs to focus on generating income through retirement. One of the biggest risks for retirees is the sequence of return risk, i.e., the risk of having a significant drawdown during retirement. Consequently, the family should seek to minimize volatility during this phase. As shown in figure 7, although the returns lagged the 60/40 benchmark, the allocation dramatically reduced the risk (from 11.2 percent to 8.7 percent) and increased the current yield from 2.02 to 2.57. The alternative diversified portfolio generated a Sharpe ratio of 0.30 versus 0.29 for the 60/40 portfolio.

For the trusts in table 4, because these are multi-generational, we have a 30-percent allocation to alternatives, split among private equity (growth), real estate (growth and income), and multi-strategy (tactically allocating). The family is focused on accumulating wealth and is comfortable locking up capital for an extended period of time. The trust is focused on accumulating wealth across multiple generations. As shown in figure 8, the allocation generated higher returns than the 60/40 portfolio (7.6 percent versus 6.0 percent) with higher risk (12.6 percent versus 11.2 percent). During the period noted, the diversified alternative portfolio grew from $1 million to more than $2.9 million and the 60/40 portfolio grew to more than $2.2 million— a difference of approximately $700,000. The alternative diversified portfolio generated an alpha of 1.6 and Sharpe ratio of 0.38 versus 0.29 for the 60/40 portfolio.

Table 3

MORGAN FAMILY ASSET ALLOCATION, RETIREMENT ACCOUNTS

July 2004–June 2022

Retirement Assets		Asset Allocation	
Investments	$2 million	Equity (diversified equities)	40%
Primary Goal	Generating Income	Fixed Income	40%
Secondary Goal	Distribution	Alternative Investments (private credit, real estate, and relative value)	20%
Time Horizon	25 years	Cash	0%

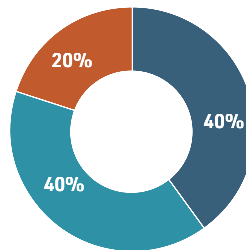
For illustrative purposes only.

Figure 7

MORGAN FAMILY HYPOTHETICAL ANALYSIS, RETIREMENT ACCOUNTS

July 2004–June 2022

Distribution of Assets



	40:40:20 Equity:Bond:Alternatives	60:40 Equity:Bond
Value as of June 2022	$4,416,998	$4,568,112
Average Return	5.4%	6.0%
Alpha	−0.6%	
Standard Deviation	8.7%	11.2%
Sharpe Ratio	0.30	0.29
Cumulative Excess Returns	−$151,115	

- Diversified equities
- Fixed income
- Alternative investments (private equity, real estate, and macro)

This chart is for illustrative purposes only and does not reflect the performance of any Franklin Templeton fund. For more information on the methodology, fees, and assumptions used in the case studies, please see the appendix.

Table 4

MORGAN FAMILY ASSET ALLOCATION, TRUST ACCOUNTS

July 2004–June 2022

Trust Accounts		Asset Allocation	
Investments	$1 million	Equity (diversified equity)	55%
Primary Goal	Accumulating Wealth	Fixed Income	15%
Secondary Goal	Provide for Heirs	Alternative Investments (private equity, real estate, and multi-strategy)	30%
Time Horizon	Multi-generation	Cash	0%

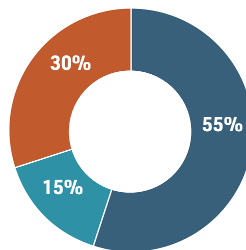
For illustrative purposes only.

Figure 8

MORGAN FAMILY HYPOTHETICAL ANALYSIS, TRUST ACCOUNTS

July 2004–June 2022

Distribution of Assets



	55:15:30 Equity:Bond:Alternatives	60:40 Equity:Bond
Value as of June 2022	$2,965,820	$2,284,056
Average Return	7.6%	6.0%
Alpha	1.6%	
Standard Deviation	12.6%	11.2%
Sharpe Ratio	0.38	0.29
Cumulative Excess Returns	$681,764	

- Diversified equities
- Fixed income
- Alternative investments (private equity, real estate, equity hedge)

This chart is for illustrative purposes only and does not reflect the performance of any Franklin Templeton fund. For more information on the methodology, fees, and assumptions used in the case studies, please see the appendix.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

CASE STUDY TWO: ALEX AND ELAINE JACKSON

Alex is 55 years old and Elaine is 45 years old. Alex and Elaine have a son Andy who is 15 years old. Alex owns a construction business and Elaine is a retired teacher. Alex is a sophisticated investor with experience investing in private equity and real estate. Alex is planning to retire in 10 years and likely will sell his construction business, which is valued at $5 million.

The Jackson family balance sheet is shown in table 5.

The Jackson family's primary goal in table 6 is accumulating wealth, with a secondary goal of funding charities, especially after Alex sells his business in 10 years. In anticipation of selling his business, his tax advisor has suggested that he set up a charitable trust. Andy will be attending college in three years. The Jackson family also can allocate a portion of the assets in table 6 to private markets and hold for the long run.

The family is focused on accumulating wealth. As figure 9 illustrates, the inclusion of alternatives would have improved the returns, with the portfolio growing from $1 million to nearly $2.8 million, with an alpha of 1.1, a slightly higher standard deviation (11.7 versus 11.2), and a much higher Sharpe ratio (0.37 versus 0.29).

Note, these cases are designed to highlight the versatility of alternative investments and illustrate the impact of adding them to a diversified portfolio. We have used index data that does not include the impact of fees. Advisors should consider the fees for all their investments carefully.

Table 5 JACKSON FAMILY BALANCE SHEET

July 2004–June 2022

		Assets	Liabilities
Residence	Home (primary)	$1,000,000	$500,000 (mortgage)
Income	Annual Salary	$100,000	
Expenses	Outflows		$100,000
Investments	Personal Accounts	$1,000,000	
	Retirement Accounts	$500,000	
	Total	**$2,600,000**	**$600,000**

For illustrative purposes only.

Table 6 JACKSON FAMILY ASSET ALLOCATION, PERSONAL ACCOUNTS

July 2004–June 2022

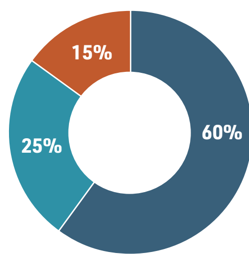
Personal Accounts		Asset Allocation	
Investments	$1 million	Equity (diversified equity)	60%
Primary Goal	Accumulating Wealth	Fixed Income	25%
Secondary Goal	Fund Charity	Alternative Investments (private equity, real estate, and equity hedge)	15%
Time Horizon	20 years	Cash	0%

For illustrative purposes only.

Figure 9 JACKSON FAMILY HYPOTHETICAL ANALYSIS, PERSONAL ACCOUNTS

July 2004–June 2022

Distribution of Assets



■ Tax-managed equities
■ Fixed income
■ Alternative investments (private equity, private credit, real estate)

	60:25:15 Equity:Bond:Alternatives	60:40 Equity:Bond
Value as of June 2022	$2,768,121	$2,284,056
Average Return	7.1%	6.0%
Alpha	1.1%	
Standard Deviation	11.7%	11.2%
Sharpe Ratio	0.37	0.29
Cumulative Excess Returns	$484,064	

This chart is for illustrative purposes only and does not reflect the performance of any Franklin Templeton fund. For more information on the methodology, fees, and assumptions used in the case studies, please see the appendix.

KEY TAKEAWAYS

In this article, we have revisited the asset allocation and portfolio construction process and focused on incorporating alternative investments. We examined the role and value of adding these versatile and valuable tools to client portfolios and evaluated some of the unique due diligence considerations. We discussed the merits of developing an illiquidity bucket and how it can benefit investors.

With product innovation making alternatives more accessible to a broader group of investors at lower minimums and with more-flexible features, more investors can now access these unique investments. In fact, depending upon the investor's wealth, liquidity needs, and appetite for risk, an investor can diversify the exposure to alternative investments.

Lastly, we used case studies to illustrate the impact of adding alternative investments to a diversified portfolio. The cases help illustrate the versatility of alternative investments in increasing returns, increasing income, decreasing volatility, and improving the likelihood of achieving specific investor goals.[1]

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

Anthony B. Davidow, CIMA®, is senior alternatives investment strategist with Franklin Templeton Institute. He is chair of the Investments & Wealth Monitor *editorial advisory board. He earned a BBA in finance and investments from Bernard M. Baruch College. Contact him at tony.davidow@franklintempleton.com.*

APPENDIX
CASE STUDIES: INDEXES AND METHODOLOGY

Methodology

- Portfolio's asset allocation is assumed to have constant weights.
- Portfolio values are calculated using the constant weights and the index returns.
- The indexes are total returns and are in USD terms.
- The portfolios are valued on a quarterly basis (in line with the frequency of the index data), using

Table A1

INDEXES USED

Asset Class	Index
Equity	MSCI ACWI Total Return Index
Fixed Income	Bloomberg Global Aggregate Total Return Index Value Unhedged USD
Alternative Investments	
Private Equity*	Burgiss–US Private Equity (all categories)
Private Credit	Cliffwater Direct Lending Index**
Real Estate	NCREIF Fund Index Open End Diversified Core (ODCE) Total Index
Equity Hedge	HFR Equity Hedge Index
Relative Value	HFR Relative Value Arbitrage Index
Multi-Strategy	HFR Global Hedge Fund Index
Cash	J.P. Morgan Cash Traded Index, 1 Month, Total Return

** Generic U.S. private equity return series for all equity categories (buyout/growth/venture capital, etc.)*
*** Index starts from June 2004*

All returns and yields are in USD terms.

Calculations are for illustrative purposes only. Past performance is not an indicator or a guarantee of future returns.

Source: MSCI Indexes, Burgiss, Cliffwater, NCREIF, HFR, JP Morgan, Bloomberg, Macrobond. Indexes are unmanaged and one cannot directly invest in them. They do not include fees, expenses, or sales charges. See www.franklintempletondatasources.com for additional data provider information.

Table A2

CASE STUDY DATA

Asset Class	Index	Fees	Methodology for Net Returns
Equity	MSCI ACWI Total Return Index	Net	A fee of 1.46% p.a. is subtracted from the quarterly returns
Fixed Income	Bloomberg Global Aggregate Total Return Index Value Unhedged USD	Net	A fee of 0.43% p.a. is subtracted from the quarterly returns
Alternative Investments			
Private Equity*	Burgiss–US Private Equity (all categories)	Net	The returns are based on P/E fund returns that are net of fees
Private Credit	Cliffwater Direct Lending Index*	Net	A fee of 1.342% p.a. is subtracted from the quarterly returns. Additionally, a carried interest percentage of 16.844% is charged on positive returns. This fee and carried interest is average for private credit funds during 2014 to 2022 (data from PitchBook). In case of a negative quarterly return, carried interest is not charged until losses are reversed. The hurdle rate to charge the carried interest is 6% p.a., based on data provided on this link: https://icapital.com/ insights/private-equity/understanding-private-market-fund-distribution-waterfalls/. For details on fees and carried interest, see tab 'Pvt Credit_Avg & Median Fees'.
Real Estate	NCREIF Fund Index Open End Diversified Core (ODCE) Total Index	Net	Net returns provided by the website: https://www.usq.com/insights/ncreif-fund-index-open-end-diversified-core-equity. Refer to the 'Real Estate Net Returns' tab in this file.
Equity Hedge	HFR Equity Hedge Index	Net	The returns are net of fees. See: https://www.hfr.com/faq/hfr- indices-faq-do-the-hfri-monthly-indices-include-funds-running-sidepockets
Relative Value	HFR Relative Value Arbitrage Index	Net	The returns are net of fees. See: https://www.hfr.com/faq/hfr- indices-faq-do-the-hfri-monthly-indices-include-funds-running-sidepockets
Multi-Strategy	HFR Global Hedge Fund Index	Net	The returns are net of fees. See: https://www.hfr.com/faq/hfr- indices-faq-do-the-hfri-monthly-indices-include-funds-running-sidepockets
Cash	J.P. Morgan Cash Traded Index, 1 Month, Total Return	Net	Used average expense ratio of the funds provided on this link: https://www.forbes.com/advisor/investing/the-best-money-market-mutual-funds

** Generic U.S. private equity return series for all equity categories (buyout/growth/venture capital, etc.)*

*** Index starts from June 2004.*

All returns and yields are in USD terms. Calculations are for illustrative purposes only. Past performance does not guarantee future returns. Source: MSCI Indices, Burgiss, Cliffwater, NCREIF, HFR, JP Morgan, Bloomberg, Macrobond, PitchBook (for the average fees for Private Credit).

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

the quarterly returns for the indexes and the constant weights of the portfolio.

- Standard deviation is calculated based on the rolling annual returns of the portfolio.
- The average 10-year U.S. Treasury yield over the period is considered as a risk-free rate in the calculation for Sharpe ratio.
- Maximum drawdowns also are evaluated on a quarterly basis, using the calculated portfolio values.
- The portfolio yield is the weighted yield assuming the yields for the asset classes.

Yields assumed across asset classes

- Equity: 1.9 percent
- Fixed Income: 2.2 percent
- Private Credit: 9.5 percent
- Real Estate: 4.5 percent

CASE STUDIES: ADDITIONAL INFORMATION

Assumptions

- Assumed yields, fees, and portfolio allocation are the only fields that can be changed.
- The assumed fee rates for equity and fixed income are based on Morningstar's report titled "Global Investor Experience Study: Fees and Expenses," dated March 30, 2022.

Calculation methodology

- Portfolio's asset allocation is assumed to have constant weights and be rebalanced quarterly.
- Portfolio value is calculated using the constant weights and the index returns.
- The indexes are total returns and are in USD terms.
- The portfolios are valued on a quarterly basis (in line with the frequency of the index data), using the quarterly returns for the indexes and the constant weights of the portfolio.
- Standard deviation is calculated based on the rolling annual returns of the portfolio.
- The average 10-year U.S. Treasury yield over the period is considered as a risk-free rate in the calculation for Sharpe ratio.
- Maximum drawdowns also are evaluated on a quarterly basis, using the calculated portfolio values.

ENDNOTE

1. For additional information on alternatives, visit https://www.franklintempleton.com/investments/capabilities/alternatives.

REFERENCES

Cerulli Associates. 2022. Alternative Investments in 2022: Capitalizing on Markets in Turmoil. https://www.cerulli.com/knowledge/white-paper-alternative-investments-in-2022.

Davidow, A. 2021. *Goals-Based Investing: A Visionary Framework for Wealth Management*. New York: McGraw Hill.

Franklin Templeton Investment Solutions. 2022. 2023 Capital Market Expectation. https://www.franklintempleton.com/insights/franklin-templeton-institute/capital-market-outlook.

WHAT ARE THE RISKS?

All investments involve risks, including the possible loss of principal. The value of investments can go down as well as up, and investors may not get back the full amount invested.

This material is intended to be of general interest only and should not be construed as individual investment advice or a recommendation or solicitation to buy, sell or hold any security or to adopt any investment strategy. It does not constitute legal or tax advice. This material may not be reproduced, distributed or published without prior written permission from Franklin Templeton.

The views expressed are those of the investment manager and the comments, opinions and analyses are rendered as at publication date and may change without notice. The underlying assumptions and these views are subject to change based on market and other conditions and may differ from other portfolio managers or of the firm as a whole. The information provided in this material is not intended as a complete analysis of every material fact regarding any country, region or market. There is no assurance that any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets will be realized. The value of investments and the income from them can go down as well as up and you may not get back the full amount that you invested. Past performance is not necessarily indicative nor a guarantee of future performance.

Investments in alternative investment strategies are complex and speculative investments, entail significant risk and should not be considered a complete investment program. Depending on the product invested in, an investment in alternative investments may provide for only limited liquidity and is suitable only for persons who can afford to lose the entire amount of their investment. An investment strategy focused primarily on privately held companies presents certain challenges and involves incremental risks as opposed to investments in public companies, such as dealing with the lack of available information about these companies as well as their general lack of liquidity.

Private equity investments involve a high degree of risk and is suitable only for investors who can afford to risk the loss of all or substantially all of such investment. Private equity investments may hold illiquid investments and its performance may be volatile. The risks associated with a real estate strategy include, but are not limited to various risks inherent in the ownership of real estate property, such as fluctuations in lease occupancy rates and operating expenses, variations in rental schedules, which in turn may be adversely affected by general and local economic conditions, the supply and demand for real estate properties, zoning laws, rent control laws, real property taxes, the availability and costs of financing, environmental laws, and uninsured losses (generally from catastrophic events such as earthquakes, floods and wars). The value of most bond funds and credit instruments are impacted by changes in interest rates; bond prices generally move in the opposite direction of interest rates. Investing in lower-rated or high yield debt securities ("junk bonds") involve greater credit risk, including the possibility of default, which could result in loss of principal—a risk that may be heightened in a slowing economy. Investments in derivatives involve costs and create economic leverage, which may result in significant volatility and cause the fund to participate in losses (as well as gains) that significantly exceed the fund's initial investment in such derivative. An investment in alternative securities or vehicles which invest in them, should be viewed as illiquid and may require a long-term commitment with no certainty of return. The value of and return on such investments will vary due to, among other things, changes in market rates of interest, general economic conditions, economic conditions in particular industries, the condition of financial markets and the financial condition of the issuers of the investments. There also can be no assurance that companies will list their securities on a securities exchange, as such, the lack of an established, liquid secondary market for some investments may have an adverse effect on the market value of those investments and on an investor's ability to dispose of them at a favorable time or price.

Hypothetical scenarios provided are not based on the performance of actual portfolios and the interpretation of the results should take into consideration the limitations inherent in the results of the models, some of which are listed below. The hypothetical models are based on historical performance of the market sectors reflected in the models, current market conditions, the amount of risk to be assumed by the portfolios, as applicable, and certain subjective assumptions relating to the respective investment strategies. Such model scenarios assume investment through the entire timeframe referenced. Hypothetical information is presented to establish a benchmark to assist in assessing the anticipated risk and reward characteristics of an investment or a strategy and to facilitate comparisons with other investments. In general, the higher modeled return is for an investment or strategy, the greater the amount of risk that is associated with that investment. Any modeled data or other forecasts contained herein are based upon estimates and assumptions about circumstances and events that may not occur or may change over time. For instance, the hypothetical models may assume a certain rate of increase in the value of the investment over a particular time period. If any of the assumptions used do not prove to be true, actual results may be lower than modeled returns or outcomes. The modeled outcomes are subject to change at any time and are current only as of the date herein. Hypothetical outcomes are subjective and should not be construed as providing any assurance as to the results that may be realized.

Any research and analysis contained in this material has been procured by Franklin Templeton for its own purposes and may be acted upon in that connection and, as such, is provided to you incidentally. Data from third party sources may have been used in the preparation of this material and Franklin Templeton ("FT") has not independently verified, validated or audited such data. Although information has been obtained from sources that Franklin Templeton believes to be reliable, no guarantee can be given as to its accuracy and such information may be incomplete or condensed and may be subject to change at any time without notice. The mention of any individual securities should neither constitute nor be construed as a recommendation to purchase, hold or sell any securities, and the information provided regarding such individual securities (if any) is not a sufficient basis upon which to make an investment decision. FT accepts no liability whatsoever for any loss arising from use of this information and reliance upon the comments, opinions and analyses in the material is at the sole discretion of the user.

Products, services and information may not be available in all jurisdictions and are offered outside the U.S. by other FT affiliates and/or their distributors as local laws and regulation permits. Please consult your own financial professional or Franklin Templeton institutional contact for further information on availability of products and services in your jurisdiction.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

IMPORTANT LEGAL INFORMATION

This material is intended to be of general interest only and should not be construed as individual investment advice or a recommendation or solicitation to buy, sell or hold any security or to adopt any investment strategy. It does not constitute legal or tax advice. This material may not be reproduced, distributed or published without prior written permission from Franklin Templeton.

The views expressed are those of the investment manager and the comments, opinions and analyses are rendered as of the publication date and may change without notice. The underlying assumptions and these views are subject to change based on market and other conditions and may differ from other portfolio managers or of the firm as a whole. The information provided in this material is not intended as a complete analysis of every material fact regarding any country, region or market. There is no assurance that any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets will be realized. The value of investments and the income from them can go down as well as up and you may not get back the full amount that you invested. Past performance is not necessarily indicative nor a guarantee of future performance. All investments involve risks, including possible loss of principal.

Any research and analysis contained in this material has been procured by Franklin Templeton for its own purposes and may be acted upon in that connection and, as such, is provided to you incidentally. Data from third party sources may have been used in the preparation of this material and Franklin Templeton ("FT") has not independently verified, validated or audited such data. Although information has been obtained from sources that Franklin Templeton believes to be reliable, no guarantee can be given as to its accuracy and such information may be incomplete or condensed and may be subject to change at any time without notice. The mention of any individual securities should neither constitute nor be construed as a recommendation to purchase, hold or sell any securities, and the information provided regarding such individual securities (if any) is not a sufficient basis upon which to make an investment decision. FT accepts no liability whatsoever for any loss arising from use of this information and reliance upon the comments, opinions and analyses in the material is at the sole discretion of the user.

Products, services and information may not be available in all jurisdictions and are offered outside the U.S. by other FT affiliates and/or their distributors as local laws and regulation permits. Please consult your own financial professional or Franklin Templeton institutional contact for further information on availability of products and services in your jurisdiction.

Issued in the U.S. by Franklin Distributors, LLC, One Franklin Parkway, San Mateo, California 94403-1906, (800) DIAL BEN/342-5236, franklintempleton.com - Franklin Distributors, LLC, member FINRA/SIPC, is the principal distributor of Franklin Templeton U.S. registered products, which are not FDIC insured; may lose value; and are not bank guaranteed and are available only in jurisdictions where an offer or solicitation of such products is permitted under applicable laws and regulation.

Canada: Issued by Franklin Templeton Investments Corp., 200 King Street West, Suite 1500 Toronto, ON, M5H3T4, Fax: (416) 364-1163, (800) 387-0830, www.franklintempleton.ca.

Offshore Americas: In the U.S., this publication is made available only to financial intermediaries by Franklin Distributors, LLC, member FINRA/SIPC, 100 Fountain Parkway, St. Petersburg, Florida 33716. Tel: (800) 239-3894 (USA Toll-Free), (877) 389-0076 (Canada Toll-Free), and Fax: (727) 299-8736. Investments are not FDIC insured; may lose value; and are not bank guaranteed. Distribution outside the U.S. may be made by Franklin Templeton International Services, S.à r.l. (FTIS) or other sub-distributors, intermediaries, dealers or professional investors that have been engaged by FTIS to distribute shares of Franklin Templeton funds in certain jurisdictions. This is not an offer to sell or a solicitation of an offer to purchase securities in any jurisdiction where it would be illegal to do so.

Issued in Europe by: Franklin Templeton International Services S.à r.l.– Supervised by the Commission de Surveillance du Secteur Financier– 8A, rue Albert Borschette, L-1246 Luxembourg. Tel: +352-46 66 67-1 Fax: +352-46 66 76. Poland: Issued by Templeton Asset Management (Poland) TFI S.A.; Rondo ONZ 1; 00-124 Warsaw. South Africa: Issued by Franklin Templeton Investments SA (PTY) Ltd, which is an authorised Financial Services Provider. Tel: +27 (21) 831 7400 Fax: +27 (21) 831 7422. Switzerland: Issued by Franklin Templeton Switzerland Ltd, Stockerstrasse 38, CH-8002 Zurich. United Arab Emirates: Issued by Franklin Templeton Investments (ME) Limited, authorized and regulated by the Dubai Financial Services Authority. Dubai office: Franklin Templeton, The Gate, East Wing,Level 2, Dubai International Financial Centre, P.O. Box 506613, Dubai, U.A.E. Tel: +9714-4284100 Fax: +9714-4284140. UK: Issued by Franklin Templeton Investment Management Limited (FTIML), registered office: Cannon Place, 78 Cannon Street, London EC4N 6HL. Tel: +44 (0)20 7073 8500. Authorized and regulated in the United Kingdom by the Financial Conduct Authority. Australia: Issued by Franklin Templeton Australia Limited (ABN 76 004 835 849) (Australian Financial Services License Holder No. 240827), Level 47, 120 Collins Street, Mellbourne, Victoria 3000. Hong Kong: Issued by Franklin Templeton Investments (Asia) Limited, 17/F, Chater House, 8 Connaught Road Central, Hong Kong. Japan: Issued by Franklin Templeton Investments Japan Limited. Korea: Issued by Franklin Templeton Investment Trust Management Co., Ltd., 3rd fl., CCMM Building, 12 Youido-Dong, Youngdungpo-Gu, Seoul, Korea 150-968. Malaysia: Issued by Franklin Templeton Asset Management (Malaysia) Sdn. Bhd. & Franklin Templeton GSC Asset Management Sdn. Bhd. This document has not been reviewed by Securities Commission Malaysia. Singapore: Issued by Templeton Asset Management Ltd. Registration No. (UEN) 199205211E, 7 Temasek Boulevard, #38-03 Suntec Tower One, 038987, Singapore.

Please visit www.franklinresources.com to be directed to your local Franklin Templeton website.

The views and opinions expressed are not necessarily those of the broker/dealer; or any affiliates. Nothing discussed or suggested should be construed as permission to supersede or circumvent any broker/dealer policies, procedures, rules, and guidelines.

© 2023 Investments & Wealth Institute. Reprinted with permission. All rights reserved.

INVESTMENTS & WEALTH INSTITUTE®

5619 DTC Parkway, Suite 600
Greenwood Village, CO 80111
Phone: +1 303-770-3377
Fax: +1 303-770-1812
www.investmentsandwealth.org

© 2023 Investments & Wealth Institute®. Reprinted with permission. All rights reserved.

INVESTMENTS & WEALTH INSTITUTE® is a registered mark of Investment Management Consultants Association Inc. doing business as Investments & Wealth Institute. CIMA®, CERTIFIED INVESTMENT MANAGEMENT ANALYST®, CIMC®, CPWA®, CERTIFIED PRIVATE WEALTH ADVISOR®, RMA®, and RETIREMENT MANAGEMENT ADVISOR® are registered certification marks of Investment Management Consultants Association Inc. doing business as Investments & Wealth Institute.