

Retirement Plan Investment Seminar

JUNE 13, 2023



INVESTMENT ADVISORS

spectruminvestor.com



Welcome Remarks

Manuel Rosado, MBA
President | Partner
Spectrum Investment Advisors, Inc.

Manuel Rosado, MBA

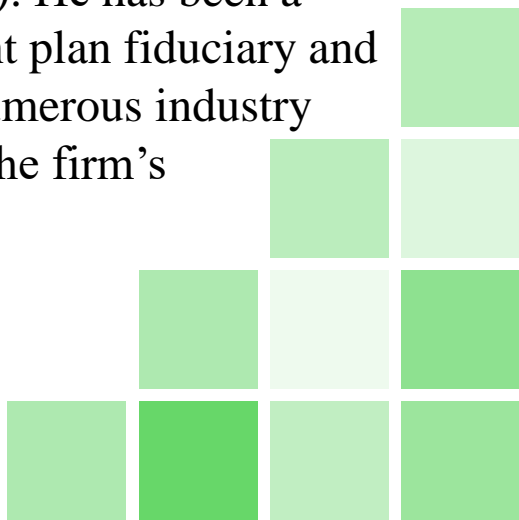


Manuel Rosado, MBA

President | Partner

Spectrum Investment Advisors, Inc.

Manuel is the president and a partner at Spectrum and is responsible for the general operations of the firm. He has been in the retirement plan and investment management industry since 1999, he presently holds the Investment Adviser Representative license (Series 65). He has been a speaker and panelist on retirement plan fiduciary and investment education topics at numerous industry conferences and is a member of the firm's investment committee.

A decorative graphic in the bottom right corner consisting of a grid of green squares in various shades, arranged in a pattern that tapers to the right.

Seminar Agenda

- *Welcome | SECURE Act 2.0 Overview*
Manuel Rosado, MBA
President, Spectrum Investment Advisors

- *8,000 Days: Envisioning Retirement in a New Way*
Mike Lynch
Managing Director Applied Insights - Hartford Funds

- **15 MINUTE BREAK**

- *Speaker Introduction*
Jonathan Marshall, MBA
CIO & Partner, Spectrum Investment Advisors

- *Economic & Financial Markets Review*
Emily Roland, CIMA
Co-Chief Investment Strategist, John Hancock Investment Management

- **15 MINUTE BREAK**

- *Tough Choices in Challenging Times*
Captain Charlie Plumb
Retired Captain US Navy; 6-year Prisoner of War; Decorated War Veteran

- *Closing Remarks*





18th Annual Retirement Plan Seminar



**Wisconsin Institute
of Certified Public Accountants**

Objectives for Today



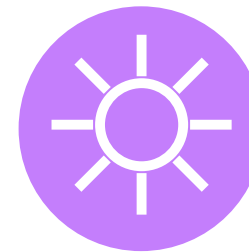
Information

Provide timely and actionable information to help you make informed decisions regarding investments and managing your retirement plans



Ideas

Offer ideas that will change the way you communicate with your clients and employees for more impactful relationships.



Hope

Insights on how to deal with change and solutions to reduce stress, eliminate fear, and increase performance.

About Spectrum Investment Advisors

- Dedicated team
- Specialized services
- Empowering education
- 1 on 1 support
- ** \$3.4 billion in assets as of 3/31/2023*



Industry certifications held by members of our team:

CFP® · CFA® · AIF® · CEBS · CPFA · CPFC® · CRC® · GFS® · NQPA · Series 65

Industry Recognition & Awards



Disclosures (from top left to right):

- Spectrum was named a 2023 Best Places to work for Financial Advisers by InvestmentNews February 8, 2023 and was also recognized for this on achievement on April 27, 2020 & 2022. These awards were based on data from 2021 and 2022 respectively. Spectrum paid a licensing fee for use of this designation and logo.
- Spectrum was named a 2022 Top DC Advisor Team by the National Association of Plan Advisors (NAPA) on March 1, 2023. The award is based on self reported assets under advisement as of December 31, 2022.
- Spectrum was named a 2023 Top Retirement Planning Services Provider in February 2023. These awards were based on data from 2022 respectively. Spectrum paid a licensing fee for use of this designation and logo.
- Spectrum was named a winner by the National Association for Business Resources for the 2023 Milwaukee's Best and Brightest Companies to Work For® on January 20, 2023. Responses to the survey were based on the time period of June 11, 2022 through December 20, 2022. Spectrum paid a licensing fee for use of this logo.
- Spectrum Investment Advisors was chosen as a finalist for 401(k) Specialist's 2017 Top Advisors by Participant Outcomes (TAPO) for the month of July. Spectrum was recognized on July 27, 2017.
- On September 24, 2021 Spectrum was given honorable mention for the Metropolitan Milwaukee Association of Commerce's 2021 Focus on the Future Awards in the Talent category. The rating was based on the previous 12 months.



SPECTRUM SERVICES

Retirement Plans



Plan Design Consulting




Fiduciary Training



Investment Monitoring



401(k) – 403(b) - 457



Corporate – Non-Profit

Financial Wellness



Targeted Education



Individual Advice



Employee Engagement



Color Coded System



Customized Action Plans

Wealth Management



Holistic Planning



Asset Management



Income Strategies

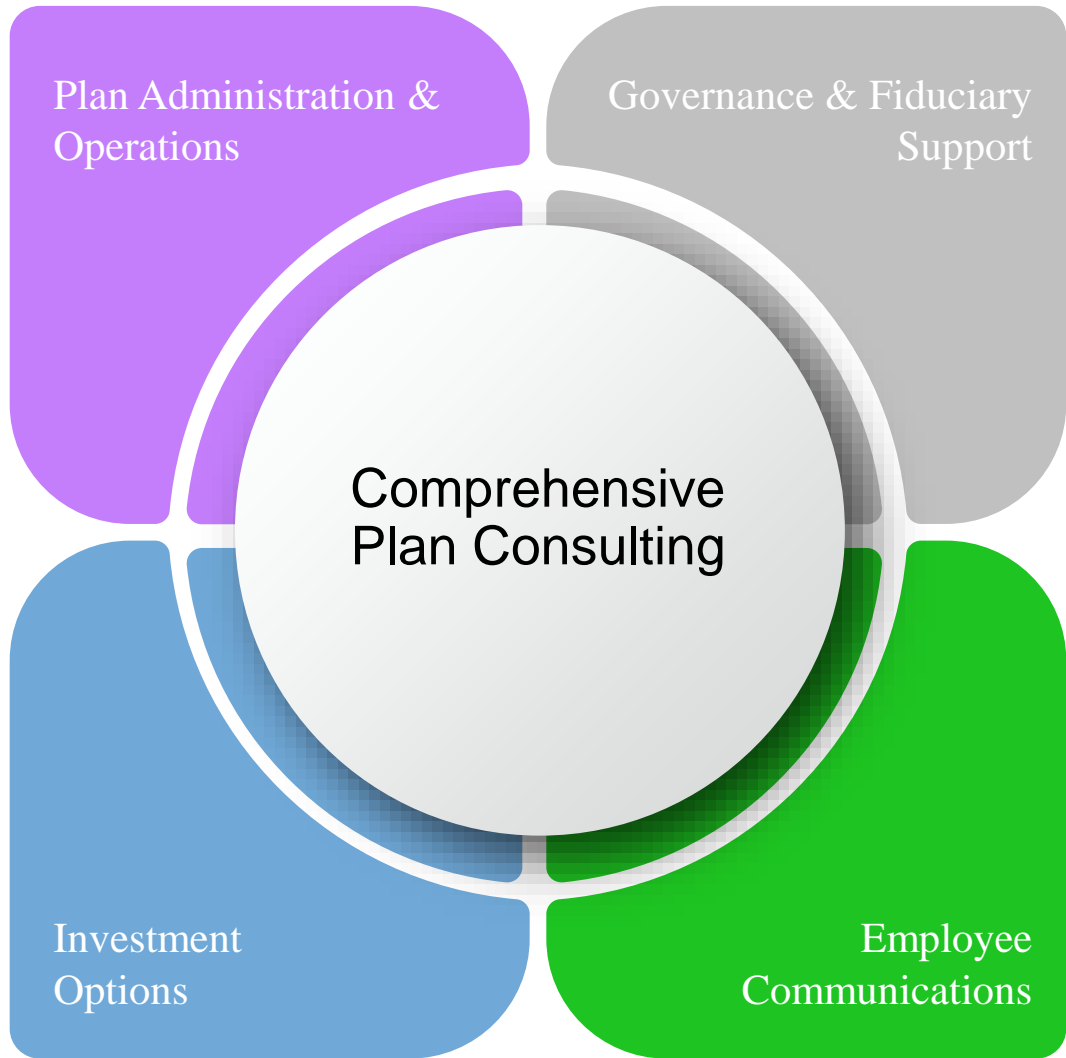


Rollovers – IRAs



Individual – Family - Trust

Retirement Plan Services



Colored Investment Data Display System and Method

US Patent No.: 7,961,190 B2 (Method); June 14, 2011

US Patent No.: 8,289,330 B2 (System); October 16, 2012

SECURE Act 2.0

Keeping Plan Sponsors Informed *SECURE Act 2.0 Summary*

- Signed into law December 29, 2022
- Expands Coverage and Increase Retirement Savings
- Improve Retirement Outcomes
- Ease of Administration
- Over 90 Provisions

SECURE Act 2.0

What Employers Need to Know

With much anticipation, Congress finally passed the Consolidated Appropriations Act which included several new pieces of retirement plan legislation. SECURE 2.0 and other provisions strive to expand access to retirement plans, increase retirement savings, help Americans preserve income, and streamline retirement plan rules.

With over 92 different retirement plan provisions, we want to make it easier for employers, fiduciaries, and administrators to digest. In this summary, we focus on the sections that are likely to impact your plan.



Effective Immediately | 2023

Roth Employer Contributions

Employers may now choose to allow matching or nonmatching contributions as Roth contributions. Applicable only to vested contributions.

Small Incentive for Contribution to a Plan

To help boost participation, employers can now offer low-dollar amount incentives, such as gift cards, as long as they are not paid from plan assets.

Tax Credits

For new retirement plans, companies with up to 50 employees can claim up to 100% of the start-up administration costs (max \$5,000). And for the employees who make less than \$100,000, employers can claim an additional \$1,000 per person, in which employers could apply the credit toward a matching contribution (max \$50,000).

Age Increases for Requirement Minimum Distributions

Individuals can wait until age 73 (previously 72) to take a mandatory retirement savings withdrawal. Starting 2033, the RMD age is increased to 75 years old.

Self-Certify for Hardship Distribution

Employees may self-certify they are going through a hardship to access their retirement funds.

SECURE Act 2.0

Effective Immediately | 2023

- **Age Increases for Requirement Minimum Distributions**
 - Individuals can wait until age 73 (previously 72) to take a mandatory retirement savings withdrawal. Starting 2033, the RMD age is increased to 75 years old.
- **Small Incentive for Contribution to a Plan**
 - Employers can now offer low-dollar amount incentives, such as gift cards, as long as they are not paid from plan assets.
- **Roth Employer Contributions (Optional)**
 - Employers may now choose to allow matching or nonelective contributions as Roth contributions. Applicable only to vested contributions. Additional guidance expected for tax implications.
- **Self-Certify for Hardship Distribution (Optional)**
 - Employees may self-certify they are going through a hardship to access their retirement funds.
- **Tax Credits**
 - For new retirement plans, companies with up to 50 employees can claim up to 100% of the start-up administration costs (max \$5,000).

SECURE Act 2.0

Effective 2024

- **Roth-Required Catch-Up Contributions**
 - For participants over age 50, earning more than \$145,000, catch-up contributions need to be made as Roth contribution.
- **Force-Out Rollover Limit**
 - Increase force out limit from \$5,000 to \$7,000
- **RMDs for Roth Accounts**
 - Roth accounts within 401(k) plans, 403(b) plans, and 457 plans are no longer subject to required minimum distribution (RMD) rules.
- **Emergency Withdrawals (Optional)**
 - Up to \$1,000 penalty-free with the option to repay it within three years.
- **Matching Student Loans (Optional)**
 - Option to apply the matching formula to the student loan repayment amount and deposit the match into the workplace retirement savings plan.
- **Automatic Portability (Optional)**
 - Permits retirement plan service providers to offer plan sponsors automatic portability services, by transferring an employee's low balance retirement accounts to a new plan when they change jobs.
- **“Side Car” Emergency Savings Account (Optional)**
 - Payroll deduction account outside the retirement plan for short-term emergencies. Non-highly compensated employees could be automatically enrolled at 3% and can save up to \$2,500.

SECURE Act 2.0

Effective 2025

- **Improving Retirement Plan Access for Part-Time Workers**
 - Long-term, part-time employees who meet the eligibility requirements will be allowed to save through the company's retirement plan. For part-time employees, it is important to have a good time tracking system in place because eligibility rules are retroactive. The stated eligibility rules are for employees who work for two consecutive 12-month periods during each of which they have at least 500 hours of service. Employers are not required to match contributions.
- **Automatic Enrollment and Escalation | Retirement Savings on Autopilot**
 - All new 401(k) and 403(b) plans are required to automatically enroll participants and auto-escalate savings. The employer will set the introductory deferral amount between 3 – 10% and the deferral amount increases by 1% up to 10 – 15% retirement savings per year.
- **Higher Catch-Ups for 60 – 63 Year-Old Employees**
 - Employees between the ages 60 - 63 years will be allowed to increase their catch-up contribution to \$10,000 in 401(k), 403(b), and governmental plans. For individuals who make more than \$145,000, the catch-up must be a Roth contribution.

SECURE Act 2.0

Additional Provisions

- **Expand Self-Correction Program (Effective 2023)**
 - Allows for easier plan corrections of loans through the Employee Plans Compliance Resolution System (“EPCRS”).
- **Retirement Lost and Found (Effective 2024)**
 - A new national online searchable database to locate retirement accounts.
- **Penalty-Free Withdrawals for Victims of Domestic Abuse (Effective 2024)**
 - Domestic abuse survivors may withdraw the lesser of \$10,000 or 50% of their retirement account. Effective 2024.
- **Starter 401(k) Plans (Effective 2024)**
 - Eligible employees are auto enrolled, and the maximum savings amount is \$6,000. The plan only allows employee deferrals similar to State IRA plans.
- **Enhance and Promote Saver's Match (Effective 2027)**
 - Must be 18 years or older and make up to \$41,000 but not more than \$71,000. The Department of Treasury will match 50% of their retirement plan contribution up to \$2,000.



GuideSteps

FINANCIAL WELLNESS

Powered by **SPECTRUM**
INVESTMENT ADVISORS

GuideSteps is an exclusive financial wellness program that provides employees with a guided approach to help **identify, prioritize, and take steps** to improve their financial picture.

www.guidesteps.com



How it works:

1. Company chooses to adopt the GuideSteps program.
2. Spectrum communicates with plan sponsors to schedule one-on-one consultations with employees.
3. Each employee that engages with a Spectrum Advisor will receive a Financial Wellness Report and ongoing reviews.
4. Program updates and engagement reports will be provided to help track success.

EMERGENCY SAVINGS

WORKPLACE RETIREMENT PLAN

DEBT REDUCTION

HEALTHCARE SAVINGS

EDUCATION SAVINGS

INSURANCE & PROTECTION NEEDS

LEGACY & ESTATE PLANNING

ADDITIONAL INVESTMENTS & SAVINGS

Financial Wellness Program

Personalized Advice

- 1-1 Meeting
- Call Center
- Onsite & Virtual

Holistic Planning

- 8 Financial Wellness Topics
- Action Plan Report

Group Training

- Enrollment
- Webinars
- Custom Presentations

Tools & Resources

- Calculators
- Articles
- Dedicated Website

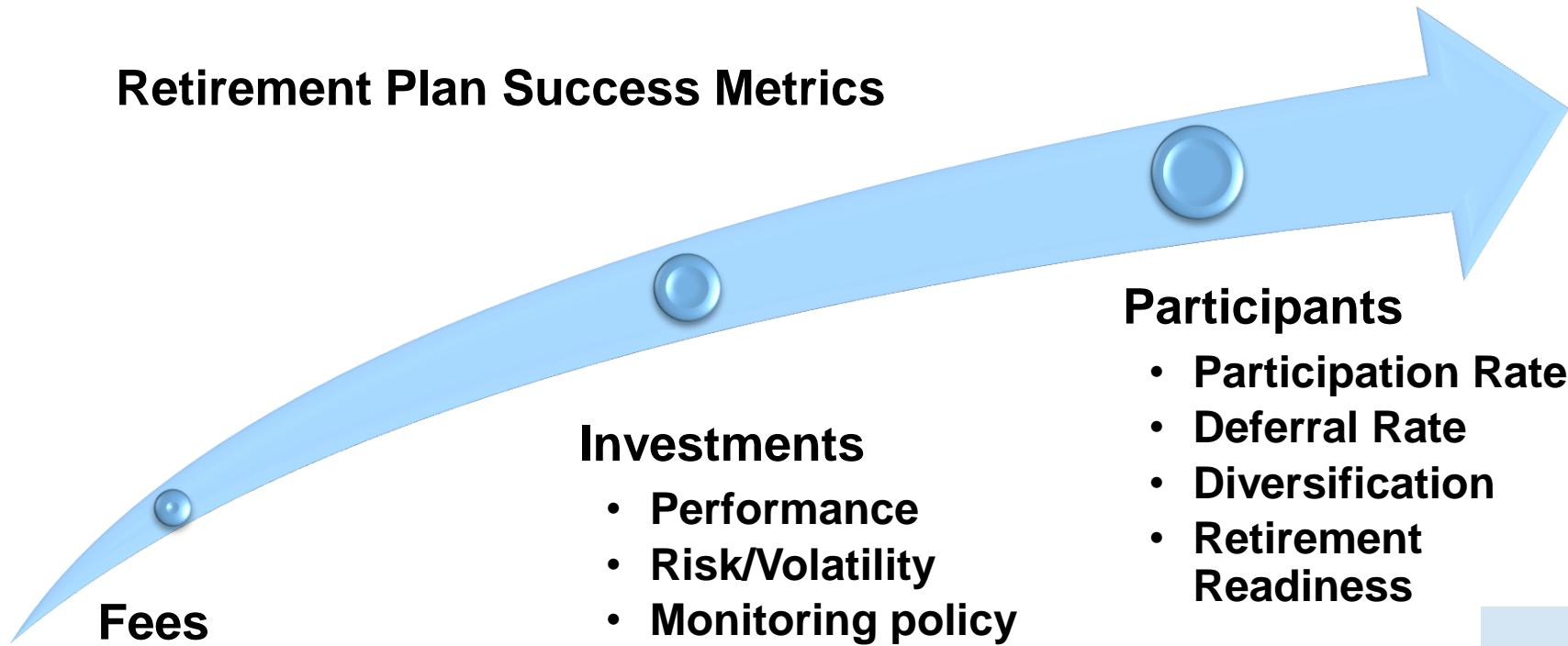


GuideSteps

FINANCIAL WELLNESS

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Retirement Plan Success Metrics



Fees

- Benchmarking
- Disclosures

Investments

- Performance
- Risk/Volatility
- Monitoring policy

Participants

- Participation Rate
- Deferral Rate
- Diversification
- Retirement Readiness



Mike Lynch



Mike Lynch is a managing director of applied insights for Hartford Funds. In his current role, Mike is responsible for engaging and educating both financial professionals and their clients about current and emerging opportunities in the financial-services marketplace. These opportunities range from tactical strategies in areas such as retirement-income planning, investment planning, and charitable planning, to anticipating and preparing for long-term demographic and lifestyle changes.

Mike earned his bachelor's degree in business administration from Eastern Connecticut State University. He is a registered representative of Hartford Funds Distributors and is FINRA Series 6, 63, and 26 registered and holds a life, health, and variable insurance license.



Life Tomorrow

HARTFORDFUNDS

Our benchmark is the investor.SM

8,000 Days



Life Tomorrow

- Challenges and opportunities of longevity
- Consumer behavior and decision-making
- Trends in demographics, technology, and lifestyles
- The future of retirement





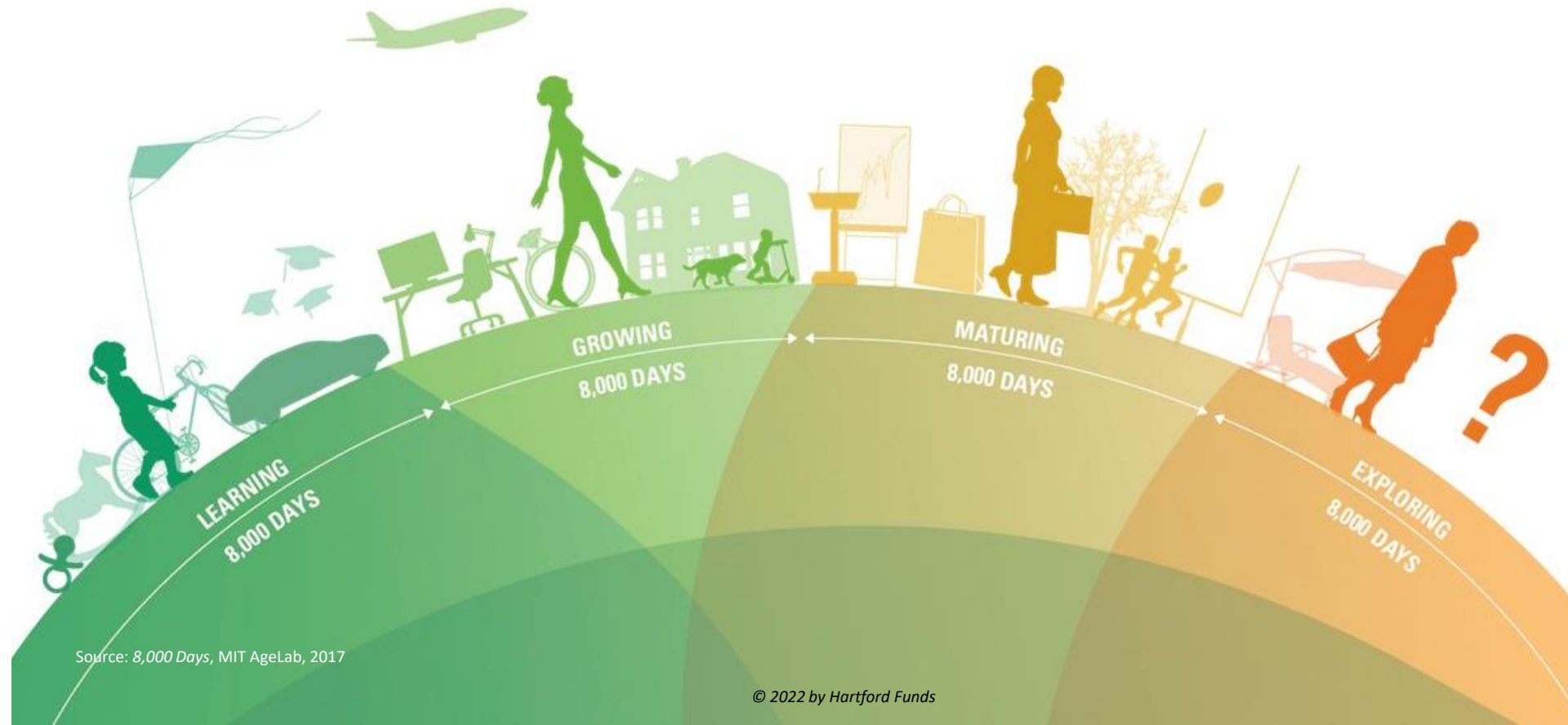
“We have a longevity paradox. Now that we have achieved what humankind has tried to achieve since it has walked—living longer—we really don’t have a good idea of what to do with all that additional time.”

— Dr. Joe Coughlin,
Director of the MIT AgeLab



- 
- 8,000 Days
 - Four Phases of Retirement
 - Preparing for Your 8,000 Day Retirement

Life in 8,000 Day Segments



Source: *8,000 Days*, MIT AgeLab, 2017



Lucile Randon 118
(as of 4/27/22)



Kathrine Switzer 75



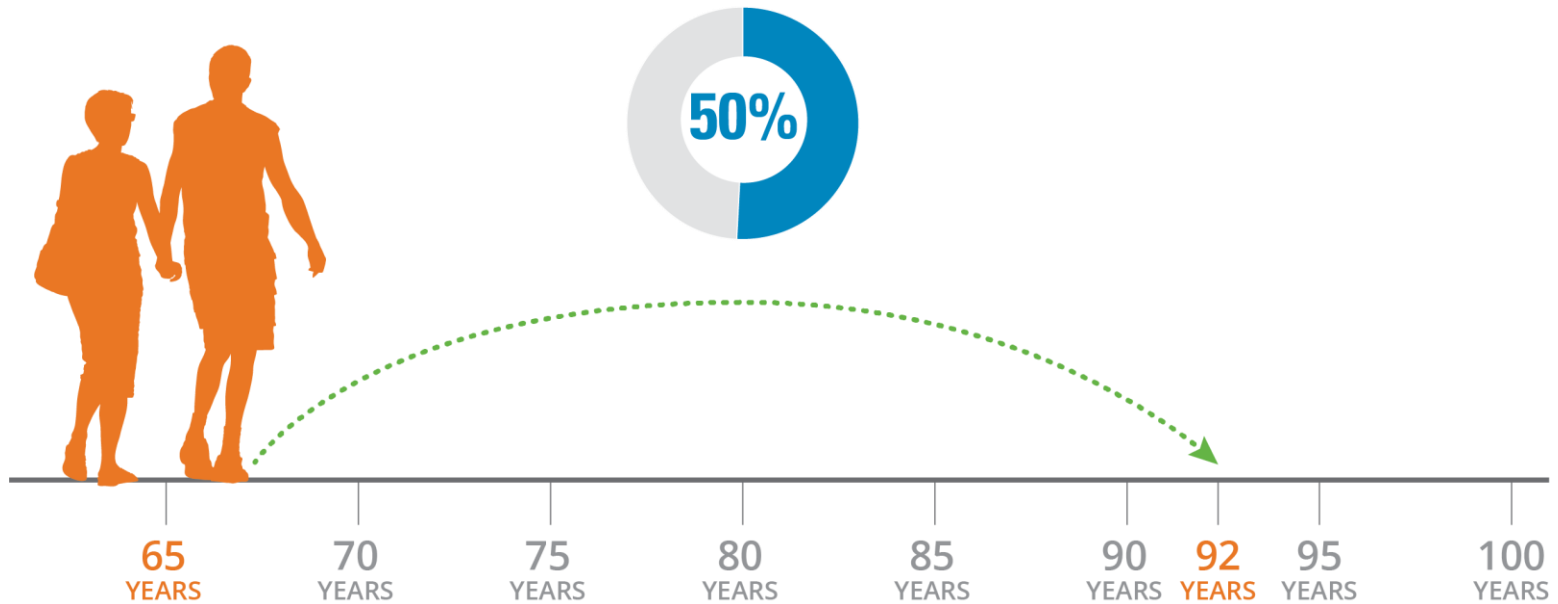
Jeanne Calment 122



Julia 'Hurricane' Hawkins 106

Longevity

Likelihood that one or both partners age 65 will survive to at least age 92

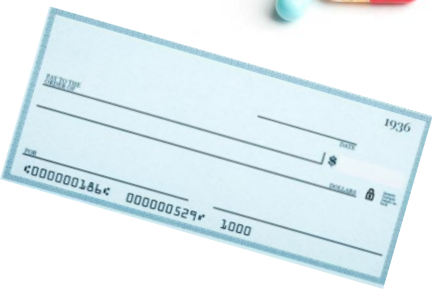
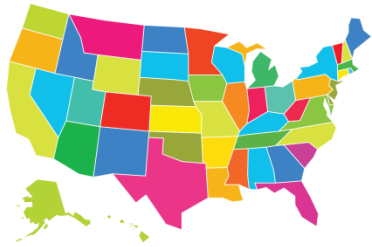


Source: How Much Do You Need for Retirement if You Live to Be 100?, newretirement.com, 6/20

The Traditional Retirement Story



The New Retirement Story





Four Phases of Retirement

Four Phases of Retirement



1.
The
Honeymoon
Phase

2.
The Big
Decision
Phase

3.
Navigating
Longevity
Phase

4.
The Solo
Journey
Phase

1. The Honeymoon Phase

Managing ambiguity

- The role of work
- Income
- Family dynamics

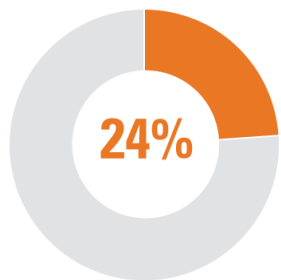


1. The Honeymoon Phase

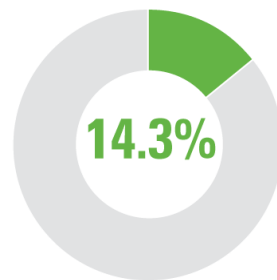


The Gig Economy

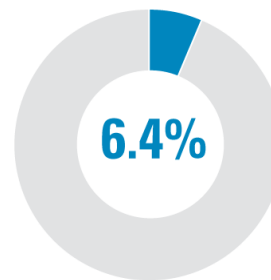
% working Gig Jobs



Workers 55-74



Workers 25-54



Workers 16-24

Source: Retirees are working in more hipster fields thanks to the gig economy, MarketWatch, 11/29/16. Most recent data available.

1. The Honeymoon Phase

Remote Work May Actually Favor Older Workers

“With companies embracing remote work and flexible hours...it’s easier for many older people to remain employed.”

Jack Rowe, professor of public health at Columbia University.



61%

of the 35-and-younger group felt remote work made their jobs more challenging...



while just

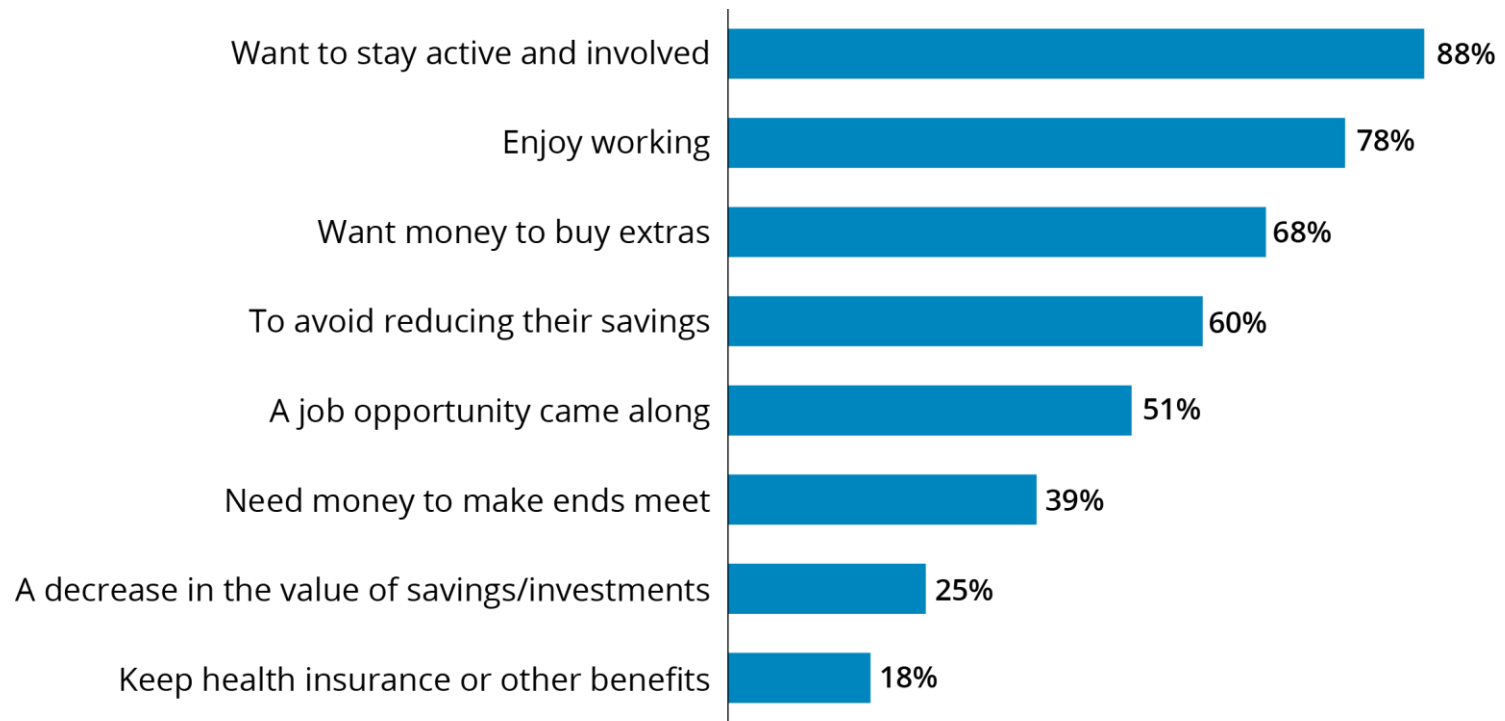
36%

of 55-plus workers felt the same way.

Source: Remote Work Generation Gap May Actually Favor Older Workers, BISNOW, 2/15/21

1. The Honeymoon Phase

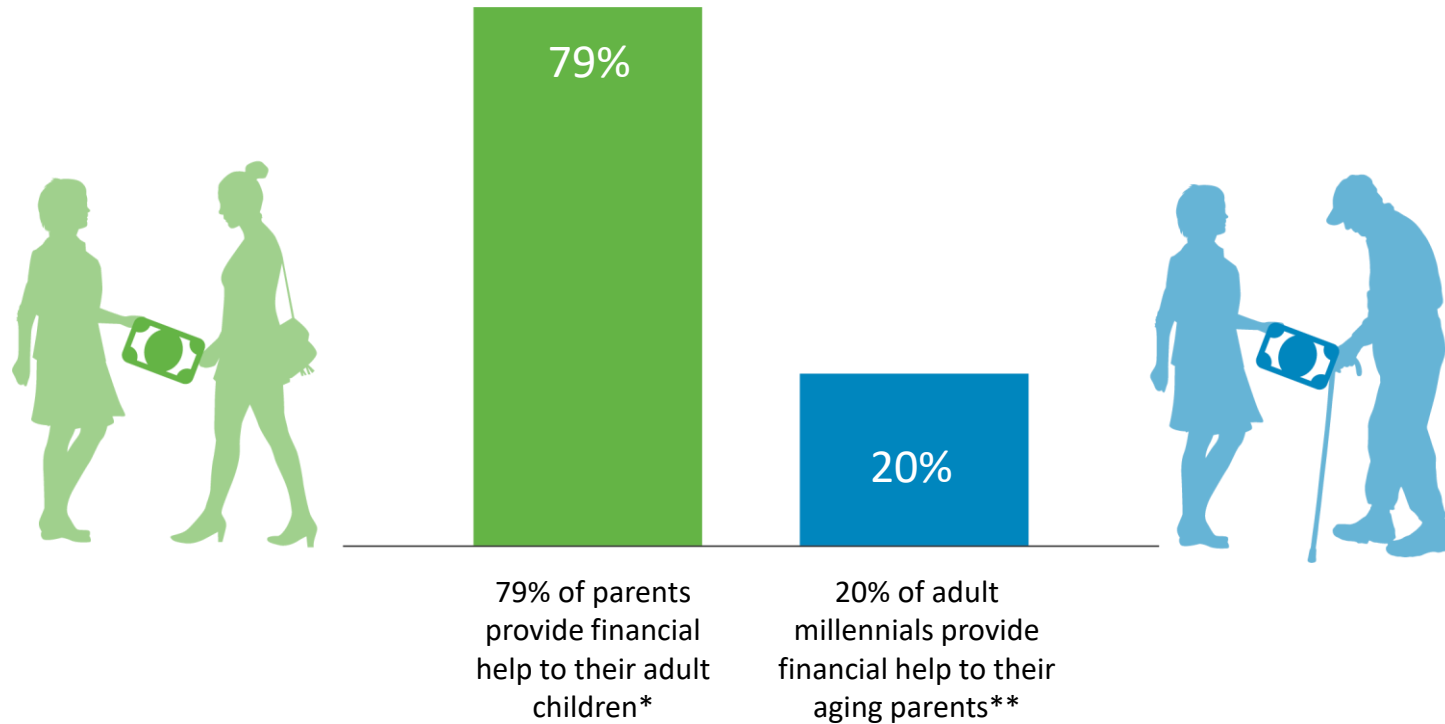
Reasons for Working in Retirement, Among Retirees Who Worked in Retirement



Source: 2022 RCS Fact Sheet #2: Expectations About Retirement, EBRI/Greenwald Retirement Confidence Survey, 2022

1. The Honeymoon Phase

More Financial Help from Parents to Adult Children than from Children to Aging Parents

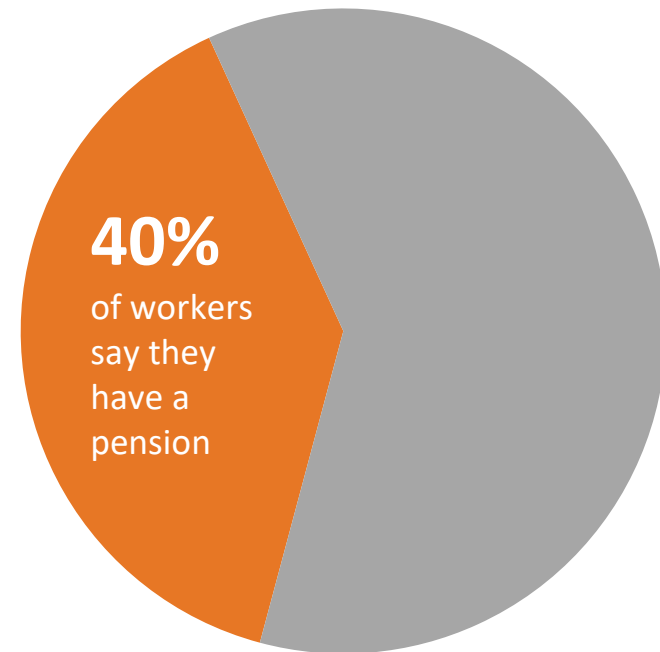
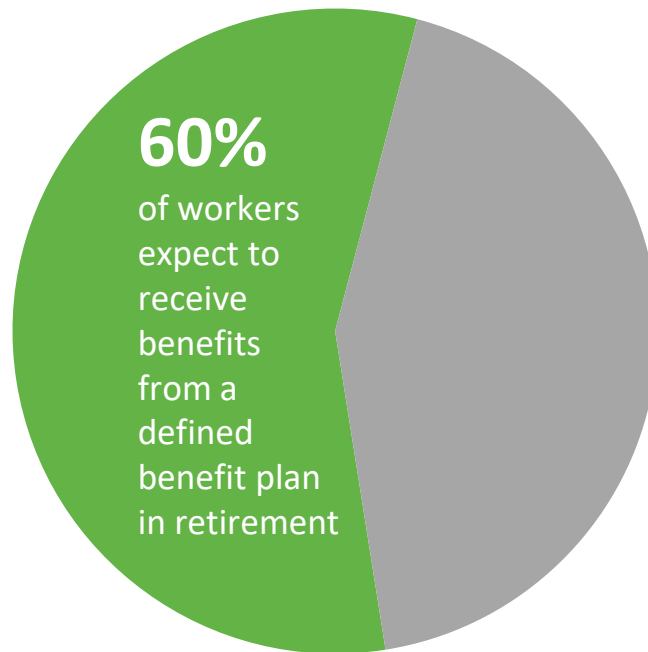


*Source: How to stop financially supporting your adult kids — and feel OK about it, NBC News, 2/26/19

**Source: Why So Many Millennials Are Financially Supporting Their Parents, HuffPost, 12/6/17. Most recent data available.

1. The Honeymoon Phase

Pension Expectation vs. Pension Reality*



*Source: *The 2021 Retirement Confidence Survey: Summary Report*, Employee Benefit Research Institute, 2021

2. The Big Decision Phase

- Where will you live?
- Finding your purpose
- Maintaining access to the things you enjoy



2. The Big Decision Phase



2. The Big Decision Phase



Stay in my home



Move in with family member



Upsize or downsize



50+ community



Assisted living



Continuing Care Retirement Community (CCRC)

2. The Big Decision Phase



**Who will
change my
light bulbs?**



**How will I
get an ice
cream cone?**



**Who will
I have
lunch with?**

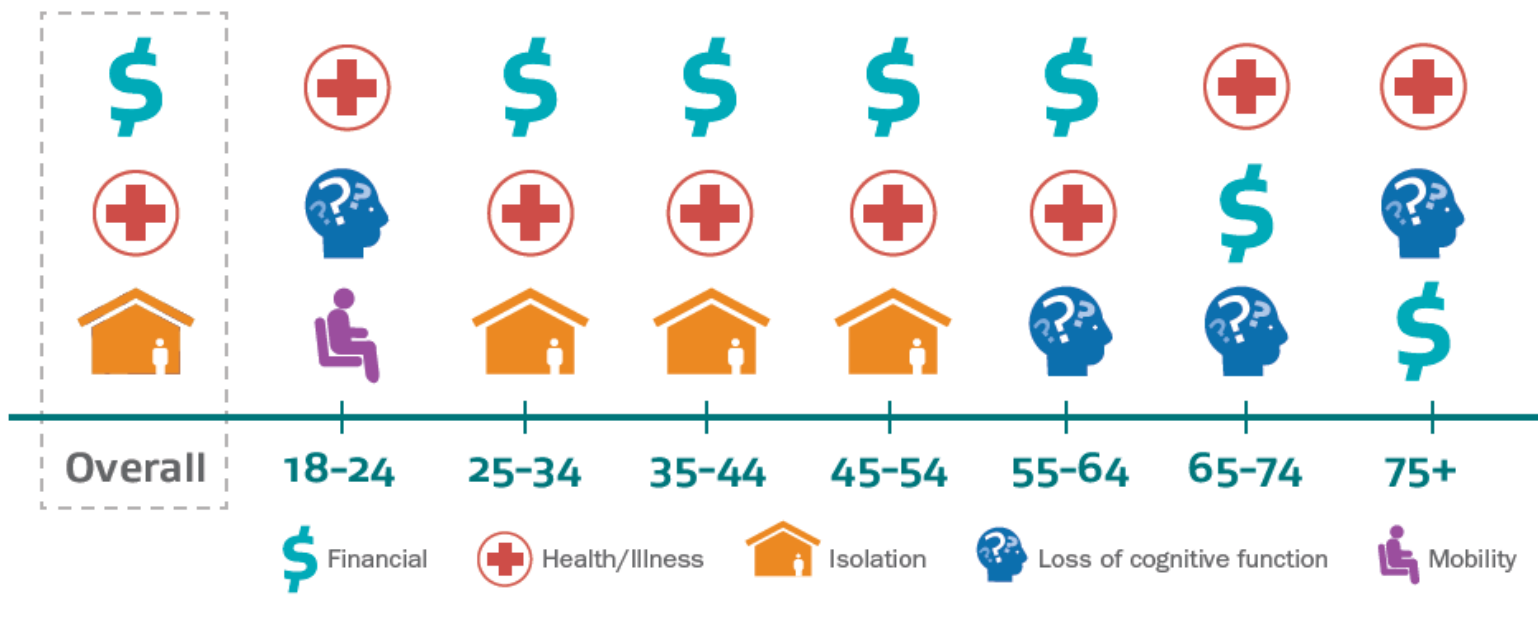
3. Navigating Longevity Phase

- Managing health
- Administrivia
- Caregiving



3. Navigating Longevity Phase

What concerns people most about retirement? (by age)

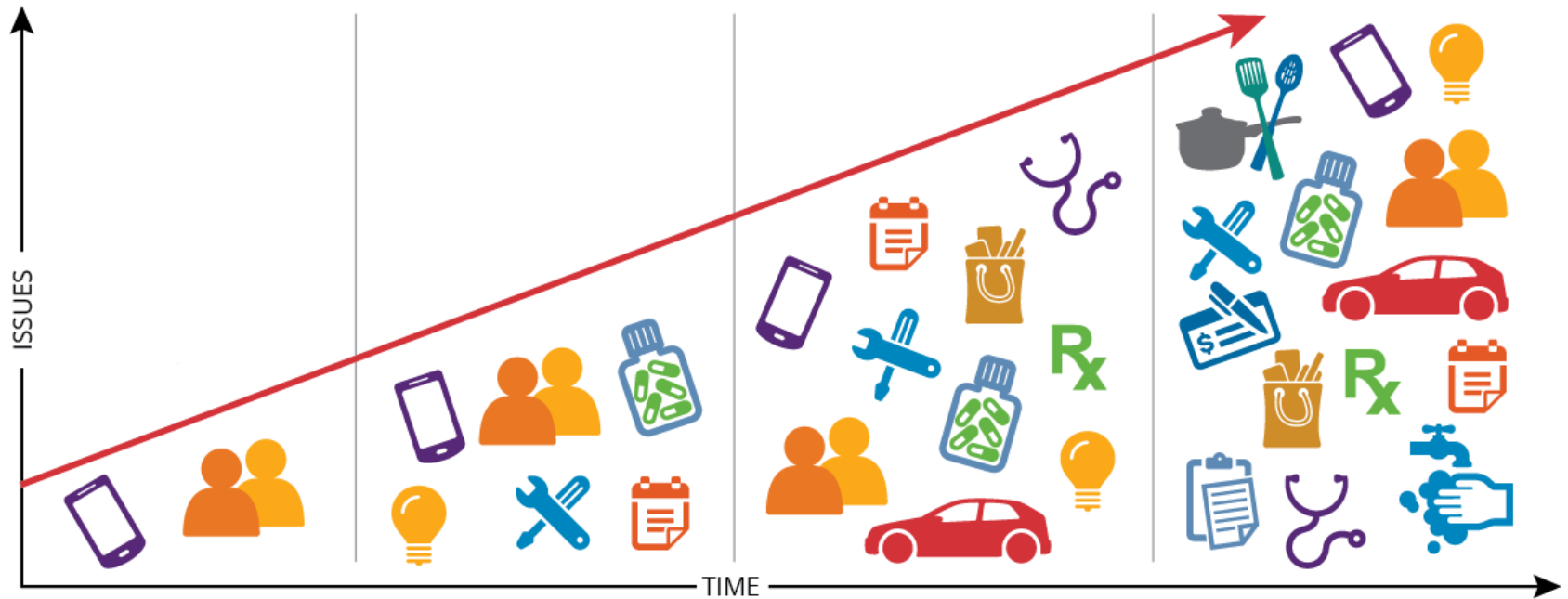


Source: Joseph Coughlin, "A Cross-Generational Look at Worries in Old Age," MIT AgeLab Working Paper, March 2014

Most recent data available.

3. Navigating Longevity Phase

Administrivia



3. Navigating Longevity Phase

Caregiver Responsibilities



Help to shop and buy groceries



Prepare meals, clean house or do laundry



Aid with transferring the recipient in and out of bed



Help with activities of daily living such as dressing, bathing, administering medications



Assist with physical therapy, injections, feeding tubes or other medical processes



Arrange the medical appointments and transportation to the doctor or clinic



Order and pick up medications at the drugstore



Discuss the care plan and needs with the doctors and care managers



Handle a crisis or medical emergency



Fill the designated “on-call” position for the family member

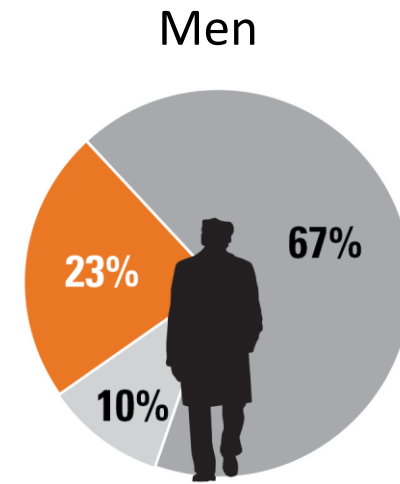
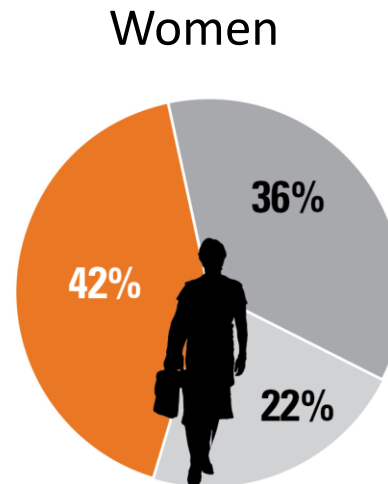
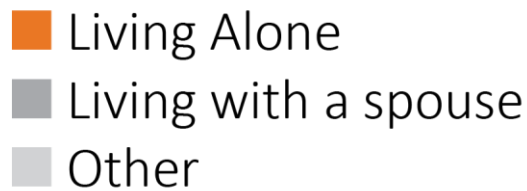
4. The Solo Journey

- Living alone
- Revisiting the first three phases
- Maintain social network



4. The Solo Journey

Over 75 and living alone¹



The average age of widowhood is 59 years old²

Since 1990s, divorce rate of 50+ has doubled³

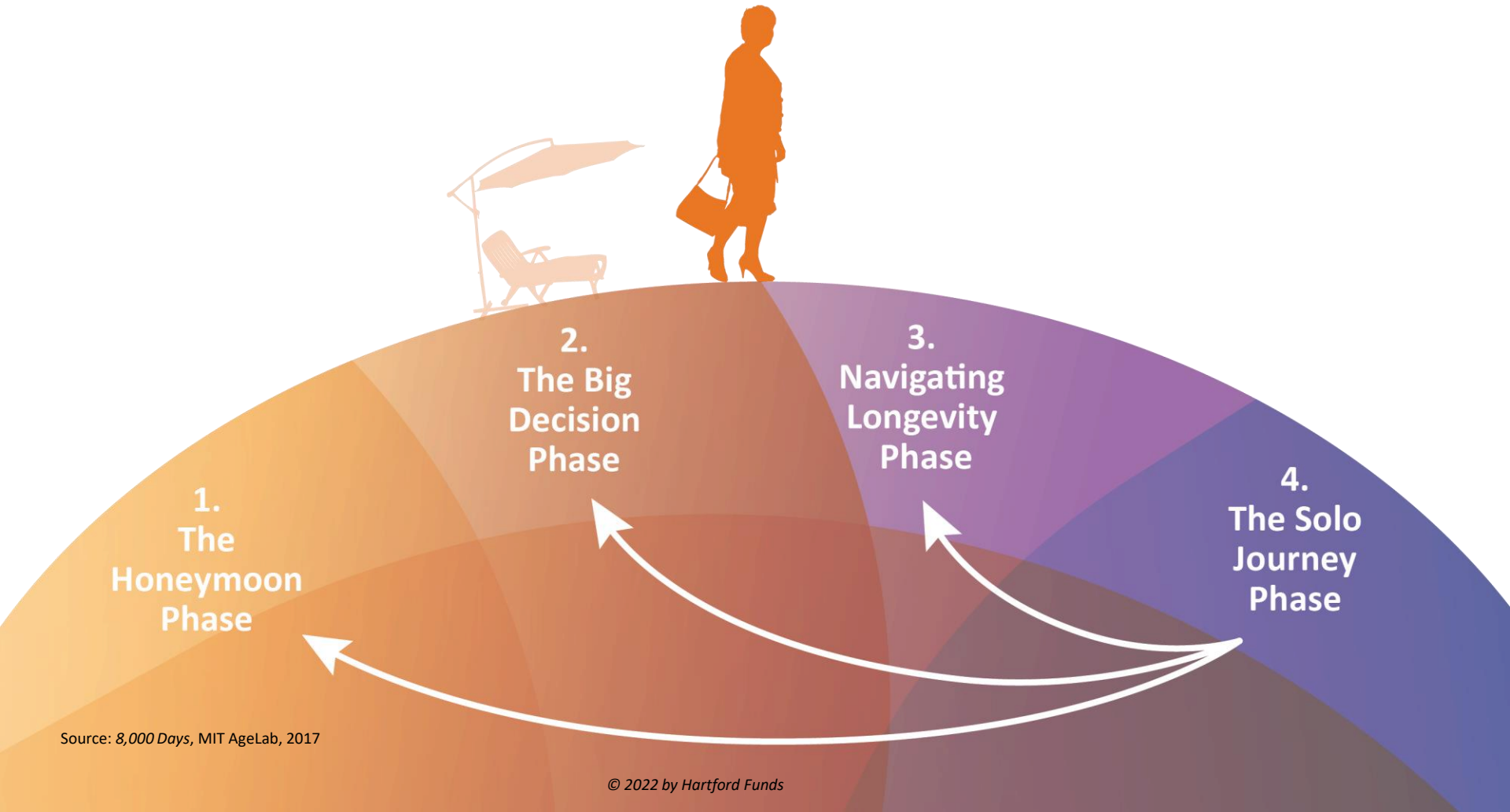
¹Source: *Historical Living Arrangements of Adults*, US Census Bureau, 12/20

²Source: You just got married. It's time to prepare for divorce and death (sorry), USA Today, 3/19/19. Most recent data available.

³Source: *'Gray Divorce' Rates Are Exploding Due to This Perfect Storm*, Kiplinger, 4/12/21

4. The Solo Journey

Revisiting the First Three Phases



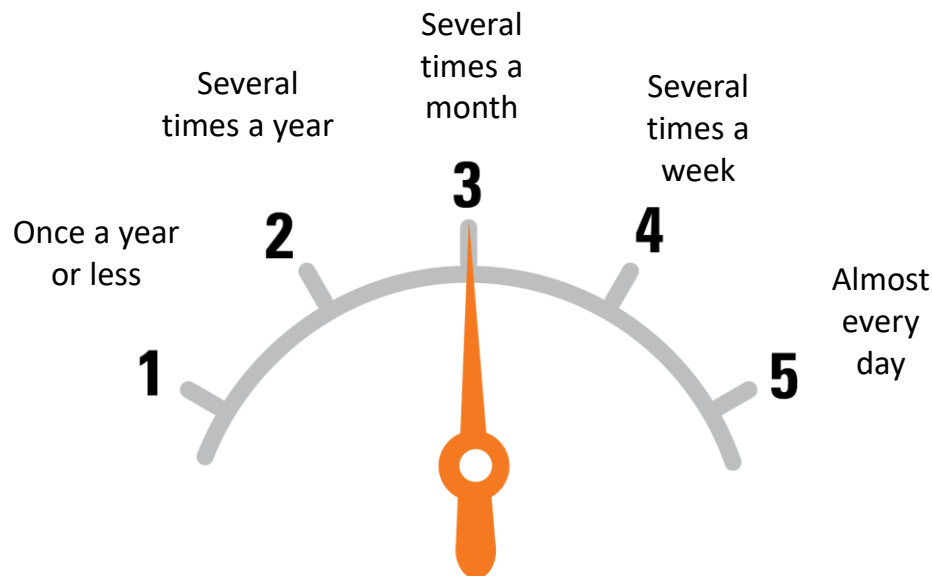
Source: *8,000 Days*, MIT AgeLab, 2017

4. The Solo Journey

Social Activity Can Protect Against Age Related Decline

Rush University Medical Center study of 906 seniors, average age 80

Those surveyed were asked how often they participated in social activities

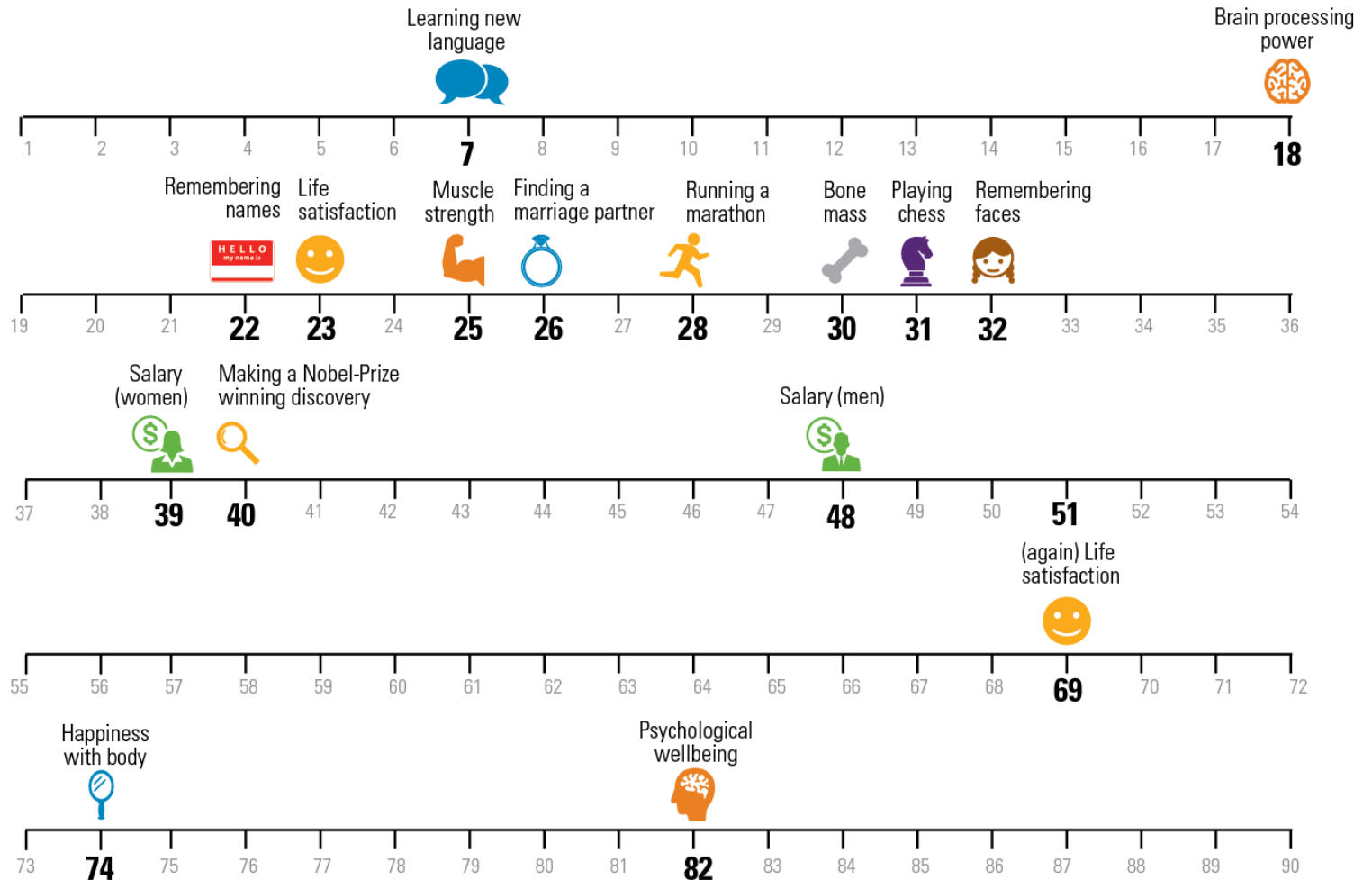


A one-point difference in social activity corresponded to a five-year difference in motor function

(including walking in a straight line, standing one-legged and on tiptoes, turning full circle without falling, and placing pegs on a board)

Source: *In Old Age, Friends Can Keep You Young. Really.* Time, 6/24/09. Most recent data available.

The Age You Peak at Everything



Source: *Here are the ages you peak at everything throughout life*, Business Insider, 3/16/17. Most recent data available.

Preparing for Your 8,000 Day Retirement



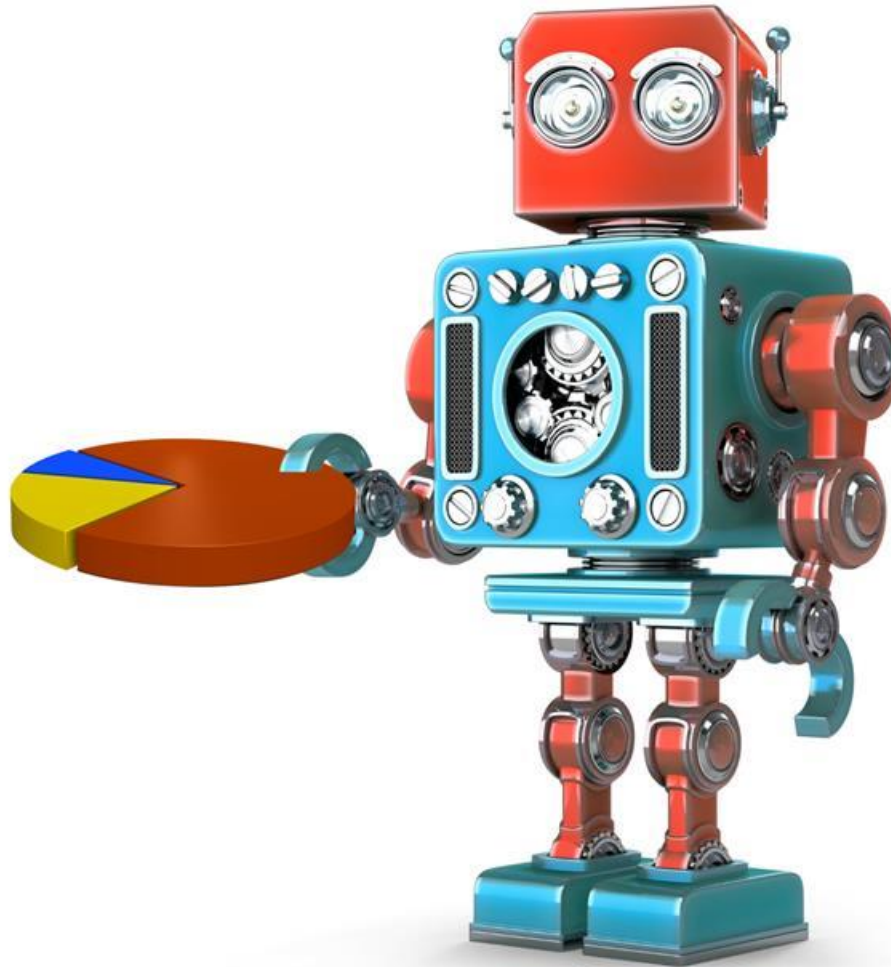
How Much Will Retirement Cost?



Vs.

What Will I Do in Retirement?





8,000 Days

A life stage waiting to be invented

Four Phases of Retirement

A new framework

Preparing for Your 8,000 Day Retirement

What will I do in retirement?



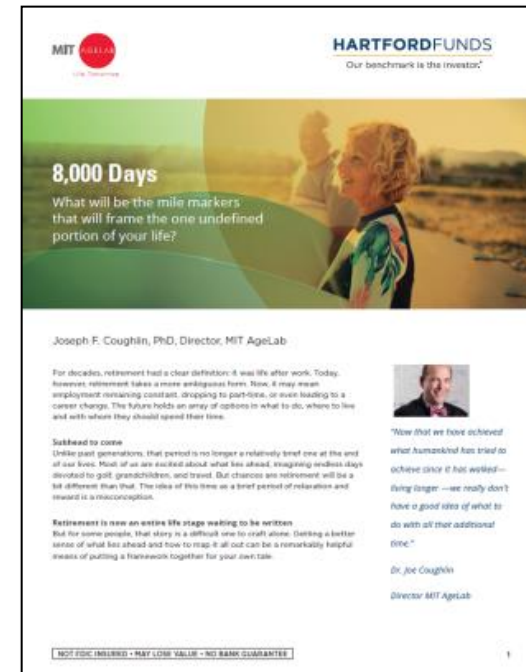
“The four phases of retirement enable a clear vision to plan and to anticipate what is likely to come. Effective preparation can thereby reduce the stress of uncertainty and boost prolonged independence and control in the life so many wish to lead tomorrow.”

—Dr. Joe Coughlin,
Director of the MIT AgeLab



Next Steps

1. Get a copy of our client white paper
2. If you're retired, consider which of the four phases of retirement you're in. If you're helping a friend or family member as they age, decide what phase they're in.
3. Talk to your financial professional about how to plan for the four phases of retirement



Client white paper MAI083

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The MIT AgeLab is not an affiliate or subsidiary of Hartford Funds.

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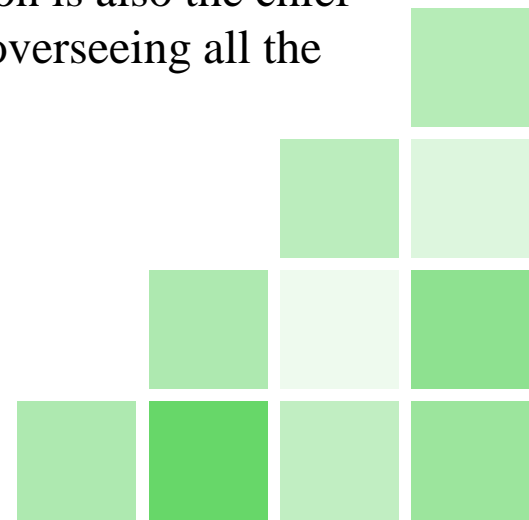
Market & Economic Update

Jonathan Marshall, MBA



Jonathan Marshall, MBA
CIO | Partner
Spectrum Investment Advisors, Inc.

Jon is a partner and the chief investment officer of the firm, as well as the lead designer of the retirement plan educational materials. He is responsible for the analytical research of investments, which includes underlying research for the firm's model portfolios. Jon is also the chief compliance officer in charge of overseeing all the firm's regulatory responsibilities.



Education Series

Keeping Plan Sponsors Informed *Quarterly Newsletters*

- Market Insights
- Financial Tips
- Weathering Market Volatility
- The Importance of Rebalancing
- Financial Tips for Navigating COVID-19

Newsletters available at
www.spectruminvestor.com





Newsletter Summary

- Inflation Cools, Remains Well Above Average
- Stocks and Bonds Advance Off of 2022 Lows
- Key for 2023: Can U.S. Control Inflation Without Recession?

Jonathan Marshall, MBA
Chief Investment Officer

Thomas Shide, CFA
Senior Investment Analyst

Stock and bond markets posted positive returns in the first quarter of 2023. High inflation continues to come down, giving markets a tune of optimism even as risks of recession remain elevated.

Total Returns Through 3/31/23	1st Qtr 2023	1 Yr	3 Yr*
U.S. Bonds	3.0%	-4.8%	-2.8%
U.S. Stocks	7.5%	-7.8%	18.4%
International Stocks	8.5%	-1.4%	13.0%
Sample 40/60 Portfolio*	5.9%	-6.6%	9.3%

U.S. Bonds: Bloomberg US Aggregate Bond Index; U.S. Stocks: S&P 500 Index; Int'l Bonds: MSCI EAFE; Int'l Stk: "A" just return is annualized. *Portfolio 40% stocks (70% 40% S&P 500; 30% EAFE) 60% Bloomberg US Aggregate Bond.

Inflation vs Interest Rates



CPI: Consumer Price Index. Source: Bureau of Labor Statistics, VCharts

Inflation is cooling, but still too high:

It took time to get through the pandemic. Likewise, it is taking time to cool off inflation.

The chart above shows inflation started to surge in spring of 2021 during the reopening from COVID. The black line shows that the Federal Reserve raised interest rates ten times in an attempt to bring down inflation, taking the Federal Funds rate from near 0% to 5% in the past 14 months. As you can see, inflation (orange line) has come down, but it is still well above the Fed's 2% target for inflation.

Nevertheless, inflation is cooling and many now expect the Fed is done raising interest rates following the most recent hike on May 3, 2023. This expectation has helped stocks and bonds rally for two consecutive quarters.

Long-term perspectives:

There is an important lesson in the table above: short-term uncertainty can create long-term opportunity.

The three year return looks so strong in part because of the starting point: April 1, 2020. That was a very challenging moment for stock markets and really the world overall. It was just days after stay-at-home orders were issued by many countries during the onset of COVID-19. The S&P 500 had fallen 20% in the first quarter of 2020, making it very difficult to stay the course and stay invested in stocks. The three-year returns above shows the reward for those who did.

Spectrum Investor® Historical Analysis

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25 ANNUAL RETURNS for key indices (1997-2022) ranked in order of performance (Best to Worst)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	4/30/2023
BEST	Large Cap Growth	Large Cap Growth	Small Cap Growth	Real Estate	Small Cap Value	Int.-Term Bonds	Small Cap Growth	Real Estate	Natural Resources	Real Estate	Natural Resources	Int.-Term Bonds	Natural Resources	Small Cap Growth	Real Estate	Small Cap Value	Small Cap Growth	Real Estate	Large Cap Growth	Small Cap Value	Large Cap Growth	Int.-Term Bonds	Large Cap Value	Small Cap Growth	Real Estate	Natural Resources	International
	36.53%	42.16%	43.09%	31.04%	14.02%	10.25%	48.54%	33.16%	36.61%	35.97%	34.44%	5.24%	37.54%	29.03%	9.37%	18.05%	43.30%	32.00%	5.52%	31.74%	27.44%	0.01%	31.93%	34.63%	45.91%	34.07%	11.53%
	Large Cap Blend	Large Cap Blend	Large Cap Growth	Small Cap Value	Real Estate	Real Estate	Small Cap Blend	Natural Resources	Real Estate	International	International	Small Cap Value	Mid Cap Blend	Real Estate	Int.-Term Bonds	Mid Cap Blend	Small Cap Blend	Large Cap Growth	Real Estate	Natural Resources	International	Large Cap Growth	Large Cap Blend	Large Cap Growth	Natural Resources	Large Cap Value	Large Cap Growth
	33.36%	28.58%	28.25%	22.83%	12.35%	3.58%	47.25%	24.59%	13.82%	26.34%	11.17%	-28.92%	37.38%	28.07%	7.84%	17.88%	38.82%	14.89%	4.48%	30.87%	25.03%	-0.01%	31.49%	33.47%	39.94%	-5.22%	11.20%
	Mid Cap Blend	International	Natural Resources	Mid Cap Blend	Int.-Term Bonds	Small Cap Value	Small Cap Value	Small Cap Value	International	Small Cap Value	Large Cap Growth	Small Cap Blend	Small Cap Growth	Small Cap Blend	Large Cap Growth	Large Cap Value	Small Cap Value	Large Cap Blend	Large Cap Blend	Small Cap Blend	Small Cap Growth	Real Estate	Large Cap Growth	Small Cap Blend	Large Cap Growth	Int.-Term Bonds	Large Cap Blend
	32.25%	20.00%	27.23%	17.51%	8.44%	-11.43%	46.03%	22.25%	13.54%	23.48%	9.13%	-33.79%	34.47%	26.85%	4.65%	17.68%	34.52%	13.69%	1.38%	21.31%	22.47%	-4.22%	31.13%	19.96%	32.01%	-13.01%	9.17%
	Small Cap Value	Mid Cap Blend	International	Natural Resources	Small Cap Blend	Natural Resources	International	International	Mid Cap Blend	Large Cap Value	Mid Cap Blend	Large Cap Growth	International	Mid Cap Blend	Large Cap Blend	International	Mid Cap Blend	Large Cap Value	Int.-Term Bonds	Mid Cap Blend	Large Cap Blend	Large Cap Blend	Small Cap Growth	Large Cap Blend	Large Cap Blend	Mid Cap Blend	Large Cap Value
	31.78%	19.12%	26.97%	15.79%	2.49%	-12.99%	38.59%	20.25%	12.56%	20.80%	7.98%	-34.92%	31.78%	26.64%	2.11%	17.32%	33.50%	12.36%	0.55%	20.74%	21.83%	-4.38%	28.48%	18.40%	28.71%	-13.06%	6.97%
	Large Cap Value	Large Cap Value	Small Cap Blend	Int.-Term Bonds	Mid Cap Blend	Mid Cap Blend	Real Estate	Small Cap Blend	Large Cap Value	Small Cap Blend	Small Cap Growth	Mid Cap Blend	Large Cap Growth	Small Cap Value	Large Cap Value	Real Estate	Large Cap Growth	Mid Cap Blend	International	Large Cap Value	Mid Cap Blend	Large Cap Value	Mid Cap Blend	Mid Cap Blend	Small Cap Value	International	Small Cap Growth
	29.98%	14.67%	21.26%	11.63%	-0.61%	-14.53%	36.18%	18.33%	6.33%	18.37%	7.05%	-36.23%	31.57%	24.50%	-0.48%	17.12%	32.75%	9.77%	-0.81%	17.40%	16.24%	-8.95%	26.20%	13.66%	28.27%	-14.45%	4.84%
Small Cap Blend	Int.-Term Bonds	Large Cap Blend	Large Cap Value	Small Cap Growth	International	Mid Cap Blend	Mid Cap Blend	Large Cap Blend	Natural Resources	Int.-Term Bonds	Large Cap Blend	Large Cap Growth	Real Estate	Natural Resources	Mid Cap Blend	Small Cap Blend	Large Cap Blend	Int.-Term Bonds	Small Cap Growth	Large Cap Blend	Large Cap Value	Small Cap Growth	Small Cap Blend	International	Large Cap Value	Small Cap Value	Int.-Term Bonds
22.36%	8.69%	21.04%	6.08%	-9.23%	-15.94%	35.62%	16.48%	4.91%	16.85%	6.97%	-37.00%	28.46%	23.88%	-1.73%	16.35%	32.39%	5.97%	-1.38%	11.96%	15.38%	-9.31%	25.52%	7.82%	24.90%	-14.48%	3.59%	
Real Estate	Small Cap Growth	Mid Cap Blend	Small Cap Blend	Large Cap Value	Small Cap Value	Small Cap Value	Natural Resources	Large Cap Value	Small Cap Value	Large Cap Blend	Large Cap Value	Small Cap Growth	Small Cap Blend	Large Cap Value	Small Cap Growth	Large Cap Blend	Large Cap Value	Small Cap Growth	Mid Cap Blend	Small Cap Growth	Small Cap Blend	Small Cap Blend	Real Estate	Int.-Term Bonds	Mid Cap Blend	Large Cap Blend	Real Estate
19.66%	1.23%	14.72%	-3.02%	-11.71%	-20.48%	34.40%	15.71%	4.71%	15.79%	5.49%	-38.54%	27.17%	15.10%	-2.91%	16.00%	31.99%	5.60%	-2.18%	11.32%	14.65%	-11.01%	23.10%	7.51%	24.76%	-18.11%	3.48%	
Natural Resources	Small Cap Blend	Large Cap Value	Large Cap Blend	Large Cap Blend	Large Cap Value	Large Cap Value	Small Cap Growth	Small Cap Blend	Small Cap Growth	Small Cap Growth	Large Cap Value	Real Estate	Large Cap Blend	Large Cap Blend	Small Cap Blend	Large Cap Growth	International	Small Cap Blend	Large Cap Value	Large Cap Growth	Small Cap Value	Mid Cap Blend	Small Cap Value	Small Cap Blend	Small Cap Blend	Small Cap Blend	Mid Cap Blend
16.94%	-2.55%	12.72%	-9.10%	-11.89%	-20.85%	31.79%	14.31%	4.55%	13.35%	1.99%	-39.20%	26.46%	15.06%	-4.18%	14.61%	22.78%	4.89%	-3.13%	6.89%	7.84%	-11.08%	22.39%	4.63%	14.82%	-20.44%	2.99%	
Small Cap Growth	Small Cap Value	Int.-Term Bonds	International	Large Cap Growth	Large Cap Blend	Large Cap Blend	Large Cap Blend	Small Cap Growth	Large Cap Growth	Small Cap Blend	Large Cap Value	Large Cap Value	Large Cap Growth	Small Cap Value	Small Cap Growth	Natural Resources	Small Cap Value	Small Cap Blend	Real Estate	Real Estate	Small Cap Value	International	Large Cap Value	International	Real Estate	Small Cap Blend	Small Cap Growth
12.95%	-6.45%	-0.82%	-14.17%	-12.73%	-22.10%	28.68%	10.88%	4.15%	11.01%	-1.57%	-39.22%	21.18%	15.05%	-5.50%	14.59%	16.49%	4.22%	-4.41%	6.68%	3.76%	-12.86%	22.01%	1.36%	11.26%	-25.96%	2.99%	
Int.-Term Bonds	Natural Resources	Small Cap Value	Large Cap Growth	Natural Resources	Large Cap Growth	Large Cap Growth	Large Cap Growth	Large Cap Growth	Large Cap Growth	Mid Cap Blend	Small Cap Value	Natural Resources	Small Cap Value	International	Natural Resources	Int.-Term Bonds	Real Estate	International	Small Cap Value	Int.-Term Bonds	Int.-Term Bonds	International	Natural Resources	Real Estate	Small Cap Growth	Small Cap Growth	Natural Resources
9.65%	-14.19%	-1.49%	-22.08%	-15.59%	-23.59%	25.66%	6.13%	3.46%	10.32%	-9.78%	-42.55%	20.58%	7.75%	-7.35%	4.21%	1.22%	-4.90%	-7.47%	2.65%	3.54%	-13.79%	17.63%	-11.20%	2.83%	-26.36%	-1.08%	
WORST	International	Real Estate	Real Estate	Small Cap Growth	International	Small Cap Growth	Int.-Term Bonds	Int.-Term Bonds	Int.-Term Bonds	Int.-Term Bonds	Real Estate	International	Int.-Term Bonds	Int.-Term Bonds	International	Natural Resources	Int.-Term Bonds	Natural Resources	Natural Resources	International	Natural Resources	Natural Resources	Int.-Term Bonds	Natural Resources	Int.-Term Bonds	Large Cap Growth	Small Cap Value
1.78%	-17.01%	-2.58%	-22.43%	-21.44%	-30.26%	4.10%	4.34%	2.43%	4.33%	-17.56%	-43.38%	5.93%	6.54%	-12.14%	2.20%	-2.02%	-9.77%	-24.28%	1.00%	1.23%	-21.07%	8.72%	-19.01%	-1.54%	-29.41%	-3.13%	

Currency Impact of USD on International Equity Returns

USD Imp.	▲	▼	▲	▲	▲	▼	▼	▼	▼	▲	▼	▼	▼	▼	▼	▲	▲	▲	▲	▼	▲	▼	▼	▼	▲	▲	▼
	-11.7%	7.7%	-6.5%	-6.8%	-5.2%	10.1%	18.3%	7.6%	-15.5%	9.9%	7.6%	-3.1%	7.1%	2.9%	0.01%	0.01%	-4.2%	-10.8%	-6.1%	-4.3%	9.8%	-2.8%	0.3%	7.0%	-7.4%	-7.5%	1.6%

Source: Morningstar. The impact of the US Dollar on international returns is calculated by subtracting the annual return of the MSCI EAFE in local currency from the return of the MSCI EAFE in US Dollars. When the US dollar weakens vs other currencies (red arrows), currency changes add to international equity returns (positive percentages) When the US dollar strengthens vs other currencies (green arrows), currency changes subtract from international equity returns (negative percentages)

Investment Style	Intermediate-Term Bonds	Large Cap Value	Large Cap Blend	Large Cap Growth	Mid Cap Blend	Small Cap Value	Small Cap Blend	Small Cap Growth	International	Real Estate	Natural Resources
Representative Index	Barclays US Agg Bond Index	S&P 500 Value Index	S&P 500 Index	S&P 500 Growth Index	S&P MidCap 400 Index	Russell 2000 Value Index	Russell 2000 Index	Russell 2000 Growth Index	MSCI EAFE NR Index	DJ US Select REIT Index	S&P North American Natural Resources
Correlation to S&P	0.26	0.94	-	0.96	0.93	0.85	0.88	0.86	0.86	0.71	0.71

Past Performance is not necessarily an indication of future results. You cannot invest directly in an index. Source Fidelity Investments/Morningstar
 *Correlation is based on the past 120 monthly returns from 1-1-13 to 12-31-22 and provides a measurement of diversification by indicating whether or not two different investments have moved in the same direction in the past. A correlation of 1.0 means the returns move in the same direction. A correlation of -1.0 indicates the returns move in opposite directions. A correlation of 0.0 suggests that the investment returns of two different investments are completely independent of one another.

The returns on this page represent returns of indices and do not represent the results of any model or actual performance results derived from SIA, Inc. services.
 SIA, Inc. does not manage models or actual accounts, except for those clients who have elected to use SIA, Inc.'s management by entering into a separate service agreement with the firm.

	<u>Fund Name</u>	<u>Category</u>	<u>3 Month</u> <u>3/31/2023</u>	<u>YTD</u> <u>3/31/2023</u>	<u>2022</u> <u>Return</u>	<u>1 Year</u> <u>Return</u>	<u>3 Year</u> <u>Return</u>	<u>5 Year</u> <u>Return</u>	<u>10 Year</u> <u>Return</u>	<u>Beta</u>	<u>Net Expense</u> <u>Ratio</u>	<u>Comments/Manager</u>
1	Stable Value	Stable Value	0.74%	0.74%	2.49%	2.71%	2.31%	2.54%	2.51%	-	0.61%	Management Team
2	Intermediate Core-Plus Bond	Intermediate Core Bond	3.06%	3.06%	-13.03%	-4.78%	-2.91%	0.89%	1.32%	1.00	0.03%	Management Team
3	Inflation-Protected Bond	Intermediate-Core Plus Bond	3.13%	3.13%	-10.86%	-3.03%	0.13%	1.93%	2.35%	1.00	0.41%	Management Team
4	Nontraditional Bond	Global Bond-USD Hedged	3.14%	3.14%	-15.45%	-8.85%	1.41%	1.06%	2.24%	0.96	0.49%	Kenneth A. Orchard
5	Allocation - 50% to 70% Equity	Allocation--50% to 70% Equity	5.59%	5.59%	-16.90%	-7.05%	9.69%	6.84%	7.68%	1.03	0.07%	Management Team
6	Allocation - 50% to 70% Equity	Allocation--50% to 70% Equity	3.95%	3.95%	-14.38%	-6.69%	10.40%	6.51%	7.39%	1.03	0.65%	Management Team
7	World Allocation	Global Allocation	5.36%	5.36%	-18.44%	-7.88%	8.79%	3.53%	5.43%	1.05	0.66%	Management Team
8	Large Value	Large Value	-2.22%	-2.22%	-1.64%	-4.05%	18.16%	9.19%	10.59%	0.78	0.45%	Management Team
9	Mid-Cap Value	Mid-Cap Value	-0.36%	-0.36%	-7.90%	-8.26%	20.86%	6.61%	9.46%	0.91	0.07%	Management Team
10	Large Blend	Large Blend	7.50%	7.50%	-18.13%	-7.74%	18.59%	11.18%	12.23%	1.00	0.02%	Management Team
11	Large Growth	Large Growth	17.24%	17.24%	-33.14%	-12.62%	17.47%	12.89%	13.59%	1.20	0.05%	Management Team
12	Small Value	Small Value	0.63%	0.63%	-9.31%	-7.63%	23.85%	6.37%	8.98%	0.98	0.07%	Management Team
13	Mid-Cap Blend	Mid-Cap Blend	4.05%	4.05%	-17.28%	-8.74%	19.19%	8.06%	10.05%	1.01	0.03%	Management Team
14	Mid-Cap Growth	Mid-Cap Growth	11.23%	11.23%	-30.68%	-10.09%	17.79%	11.93%	11.56%	1.17	1.04%	Management Team
15	Foreign Large Blend	Foreign Large Blend	7.72%	7.72%	-15.32%	-2.91%	13.85%	3.42%	5.24%	1.09	0.07%	Management Team
16	Foreign Large Blend	Foreign Large Blend	6.93%	6.93%	-15.38%	-3.39%	13.91%	3.15%	5.29%	1.07	0.67%	Raymond A. Mills
17	Diversified Emerging Markets	Diversified Emerging Markets	6.67%	6.67%	-21.75%	-6.90%	12.18%	4.10%	5.50%	1.01	0.57%	Management Team
18	Real Estate	Real Estate	3.27%	3.27%	-25.20%	-18.52%	10.54%	6.66%	7.37%	0.93	0.86%	Management Team
19	Natural Resources	Natural Resources	-2.52%	-2.52%	34.60%	-2.53%	44.62%	13.79%	8.31%	1.04	0.91%	Management Team

Source: Morningstar Principia. The information presented has been obtained from sources which we believe to be reliable; however, we do not guarantee the accuracy, completeness or timeliness of the information or data obtained from outside sources.

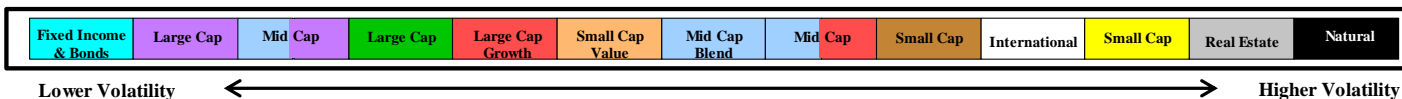
The Net Expense Ratio is the percentage of fund assets paid for operating expenses and management fees. It typically includes the following types of fees: accounting, administrator, advisor, auditor, board of directors, custodial distribution (12b-1), legal, professional, registration, sub-advisor, and transfer agency. It does not reflect the fund's brokerage costs or any investor sales charges. It does reflect fee waivers in effect during the time period, if applicable. Additional plan administration, recordkeeping and investment advisor fees may apply. Various funds, including some shown above, may impose a charge when the fund's shares are sold within a short period after being purchased. For a description of such charges and the time periods they apply to, please review the prospectus of the fund whose shares you are considering purchasing. Past performance is no guarantee of future results. Beta: Measure of risk. The fund's representative benchmark index is defined to have a Beta of 1.00. Therefore, funds with a Beta of less than 1.00 are considered to be less volatile than the benchmark index and vice versa. Beta is based on a rolling 36 month period. Marshall's Spectrum Investing Concept® uses colors to communicate investments by helping identify asset classes and market cycles. It does not guarantee against loss.



Spectrum Investor® Model Portfolios

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ABC Company	Conservative Est. 25/75	Conservative Moderate Est. 40/60	Moderate Est. 50/50	Moderate Est. 60/40	Moderately Aggressive Est. 70/30	Moderately Aggressive Est. 80/20	Aggressive Est. 95/5
Stable Value	26%	17%	12%	6%	4%	-	-
Intermediate-Core Plus Bond	26%	22%	19%	17%	15%	9%	-
Inflation-Protected Bond	6%	5%	4%	3%	-	-	-
Multisector Bond	6%	5%	4%	3%	-	-	-
Allocation--30% to 50% Equity	10%	10%	10%	10%	10%	10%	5%
Allocation--50% to 70% Equity	10%	10%	10%	10%	10%	10%	5%
World Allocation	10%	10%	10%	10%	10%	10%	5%
Large Value	-	2%	3%	3%	3%	4%	6%
Mid-Cap Value	-	2%	2%	3%	3%	4%	5%
Large Blend	3%	5%	6%	8%	10%	11%	17%
Large Growth	-	4%	7%	9%	9%	11%	16%
Small Value	-	-	2%	3%	3%	3%	5%
Mid-Cap Blend	-	-	-	2%	3%	4%	5%
Mid-Cap Growth	-	-	-	-	-	-	-
Foreign Large Value	-	4%	4%	5%	6%	7%	9%
Foreign Large Blend	3%	4%	5%	6%	7%	8%	10%
Diversified Emerging Markets	-	-	2%	2%	3%	3%	4%
Real Estate	-	-	-	-	2%	3%	4%
Equity Energy	-	-	-	-	2%	3%	4%
	100%	100%	100%	100%	100%	100%	100%



Model Portfolio illustrations are estimated and may not reflect the actual allocation of any specific model. For illustrative purposes only.

Example: 60/40=60% Stocks and 40% Bonds + Cash This is an investor example to be used as a guideline only and is not intended to be a recommendation by Spectrum Investment Advisors or the Plan Sponsor. Past Performance is not an indication of future results. Please read your prospectus carefully before investing.

Fund Name	Historical Performance						Category Rank %			Spectrum SIRR Score®	Replacement Score Quarters*	Beta	Net Expense Ratio**	Mgr Tenure (Yrs.)***		
	YTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return	# of Funds @ 5 years	1 = Best	100 = Worst	3 Yr.						5 Yr.	10 Yr.
	3/31/2023															
Stable Value	0.74%	2.71%	2.31%	2.54%	2.51%	NR	NR	NR	NR	-	-	-	0.61%	23.8		
<i>90 Day U.S. Treasury Bill</i>	1.14%	3.09%	1.09%	1.43%	0.89%								-			
Intermediate Core-Plus Bond	3.06%	-4.78%	-2.91%	0.89%	1.32%	378	80	38	39	53	1	1.00	0.03%	8.9		
<i>Average Intermediate Core Bond</i>	2.99%	-5.07%	-2.26%	0.75%	1.19%							0.99	0.59%			
Inflation-Protected Bond	3.13%	-3.03%	0.13%	1.93%	2.35%	508	14	7	7	3	-	1.00	0.41%	34.3		
<i>Average Intermediate Core-Plus Bond</i>	3.02%	-5.36%	-1.14%	0.93%	1.47%							1.02	0.74%			
Nontraditional Bond	3.14%	-8.85%	1.41%	1.06%	2.24%	99	3	8	14	21	-	0.96	0.49%	5.3		
<i>Average Global Bond-USD Hedged</i>	2.80%	-5.31%	-1.52%	0.30%	1.21%							0.85	0.73%			
50% to 70% Equity	5.59%	-7.05%	9.69%	6.84%	7.68%	651	53	18	14	19	-	1.03	0.07%	10.2		
50% to 70% Equity	3.95%	-6.69%	10.40%	6.51%	7.39%	651	36	24	22	29	-	1.03	0.65%	7.1		
<i>Average Allocation--50% to 70% Equity</i>	3.78%	-6.50%	9.83%	5.22%	6.08%							0.97	1.03%			
World Allocation	5.36%	-7.88%	8.79%	3.53%	5.43%	348	55	41	15	32	-	1.05	0.66%	11.9		
<i>Average Global Allocation</i>	3.40%	-6.47%	9.44%	3.13%	4.04%							0.97	1.14%			
Large Value	-2.22%	-4.05%	18.16%	9.19%	10.59%	1103	58	25	13	5	-	0.78	0.45%	18.7		
<i>Average Large Value</i>	0.87%	-5.10%	18.93%	7.78%	9.12%							0.85	0.90%			
Mid-Cap Value	-0.36%	-8.26%	20.86%	6.61%	9.46%	364	66	52	19	24	1	0.91	0.07%	16.7		
<i>Average Mid-Cap Value</i>	1.42%	-6.31%	22.61%	6.72%	8.37%							0.93	0.98%			
Large Blend	7.50%	-7.74%	18.59%	11.18%	12.23%	1123	29	19	10	17	-	1.00	0.02%	14.3		
<i>Average Large Blend</i>	5.67%	-7.36%	17.68%	9.68%	10.85%							0.96	0.79%			
Large Growth	17.24%	-12.62%	17.47%	12.89%	13.59%	1052	28	15	21	26	-	1.20	0.05%	28.3		
<i>Average Large Growth</i>	11.65%	-12.67%	14.80%	10.21%	12.07%							1.11	0.95%			
Small Value	0.63%	-7.63%	23.85%	6.37%	8.98%	428	54	33	18	25	-	0.98	0.07%	7.0		
<i>Average Small Value</i>	1.66%	-6.65%	25.45%	5.72%	7.58%							0.96	1.14%			
Mid-Cap Blend	4.05%	-8.74%	19.19%	8.06%	10.05%	351	58	31	19	28	-	1.01	0.03%	11.6		
<i>Average Mid-Cap Blend</i>	3.37%	-6.85%	19.55%	7.13%	9.01%							0.96	0.91%			
Mid-Cap Growth	11.23%	-10.09%	17.79%	11.93%	11.56%	498	24	6	21	28	-	1.17	1.04%	22.2		
<i>Average Mid-Cap Growth</i>	7.65%	-11.95%	14.85%	8.12%	10.34%							1.07	1.08%			
Foreign Large Blend	7.72%	-2.91%	13.85%	3.42%	5.24%	623	25	34	23	31	-	1.09	0.07%	10.2		
Foreign Large Blend	6.93%	-3.39%	13.91%	3.15%	5.29%	623	24	42	21	35	-	1.07	0.67%	16.3		
<i>Average Foreign Large Blend</i>	7.79%	-2.32%	12.54%	2.86%	4.67%							1.02	0.92%			
Diversified Emerging Markets	6.67%	-6.90%	12.18%	4.10%	5.50%	654	22	3	1	2	-	1.01	0.57%	23.8		
<i>Average Diversified Emerging Mkts</i>	4.83%	-9.39%	9.29%	-0.80%	1.93%							0.96	1.15%			
Real Estate	3.27%	-18.52%	10.54%	6.66%	7.37%	209	46	19	4	11	-	0.93	0.86%	22.3		
<i>Average Real Estate</i>	2.31%	-19.94%	10.47%	4.87%	5.26%							0.99	1.05%			
Natural Resources	-2.52%	-2.53%	44.62%	13.79%	8.31%	101	12	1	21	8	-	1.04	0.91%	3.5		
<i>Average Natural Resources</i>	2.56%	-8.53%	30.22%	8.03%	4.95%							1.13	0.99%			

Target Score - 35 or under for both 3 Yr. and 5 Yr., 25 or under for 10 Yr.; SIRR 35 or under
 Replacement Score - Over 50 for both 3 Yr. and 5 Yr. and/or a SIRR score over 50 for two consecutive years with few exceptions
 *Number of consecutive quarters where both 3 Yr. and 5 Yr. and/or SIRR scores were over 50

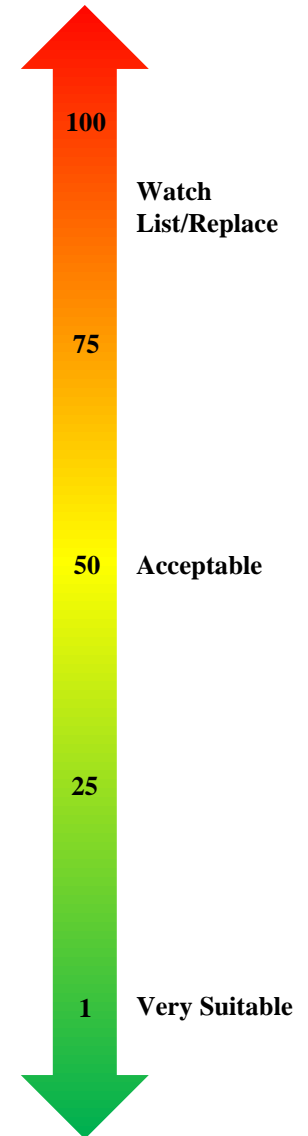
Watch List Score - 60 or over for either 3 Yr. or 5 Yr. and/or a SIRR of 60 or over
 **Net Expense Ratio - May include 12b-1 fee
 ***Portfolio Manager Target - Min. 3 Yr. Tenure with few exceptions

Cannot invest directly into an index. Source: Morningstar. The information presented has been obtained from sources which we believe to be reliable; however, we do not guarantee the accuracy, completeness or timeliness of the information or data obtained from outside sources. Please consult your quarterly statement for detailed information. Beta is a measure of risk. The fund's representative benchmark index is defined as 1.00. Therefore, funds with a Beta of less than 1.00 are considered less volatile than the benchmark index and vice versa. Please see the attached disclosure page for additional important disclosures. Marshall's Spectrum Investing Concept® uses colors to communicate investments by helping identify asset classes and market cycles. It does not guarantee against loss.

Please see important disclosures at the end of this review and refer to Spectrum Investor® Historical Analysis for explanation of colors.

Spectrum Investor[®] Relative Risk and Performance (SIRRP) Score[®]

	Factor	Weight in SIRRP [®]	How it is measured
Risk Factors (50%)	Standard Deviation	16.7% <small>(5% →3-yr, 5% →5-yr, 6.7% →10-yr)</small>	Measures the fund's ability to mitigate volatility. Funds with lower standard deviations rank more favorably.
	Beta	16.7% <small>(5% →3-yr, 5% →5-yr, 6.7% →10-yr)</small>	Measures volatility relative to the market. Funds with lower beta (volatility) rank more favorably.
	Up-Less-Down Capture	16.7% <small>(5% →3-yr, 5% →5-yr, 6.7% →10-yr)</small>	Funds that are able to capture gains in an up-market and mitigate losses in a down-market will rank more favorably.
Performance (30%)	Total Return	30% <small>(9% →3 Yr, 9% →5-yr, 12% →10-yr)</small>	Funds with higher returns over 3, 5, and 10 year periods will rank more favorably.
Qualitative Factors (20%)	Information Ratio	4% <small>(1.2% →3-yr, 1.2% →5-yr, 1.6% →10-yr)</small>	Managers with the ability to add excess return, relative to the fund's category benchmark, will rank more favorably.
	R-Squared	4% <small>(1.2% →3-yr, 1.2% →5-yr, 1.6% →10-yr)</small>	Funds with consistent style and market capitalization will rank more favorably.
	Alpha	4% <small>(1.2% →3-yr, 1.2% →5-yr, 1.6% →10-yr)</small>	Managers with the ability to add excess return, relative to the market, will rank more favorably.
	Manager Tenure	4%	Managers with longer tenures will rank more favorably.
	Net Expense Ratio	4%	Funds with lower expense ratio rank more favorably.
	TOTAL	100%	The factor scores are summed up to give a final score which is placed on a scale of 1 to 100, 1 is the best, 100 the worst.



Emily Roland, CIMA



Emily leads the investment research function for John Hancock Investment Management. She and her team are responsible for leveraging capital markets and industry research to help set the firm's product and business strategy. Emily joined the company's investments division in 2004 and has held a number of positions in product management, marketing, and competitive intelligence over the past decade. Prior to joining the firm, she held roles at GMO and the Boston Stock Exchange. Emily earned an M.B.A. from Boston College and a B.B.A. in Marketing from James Madison University and holds the Certified Investment Management Analyst designation.

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Midquarter 2023 Outlook

Market *Intelligence*

The latest thinking from our network

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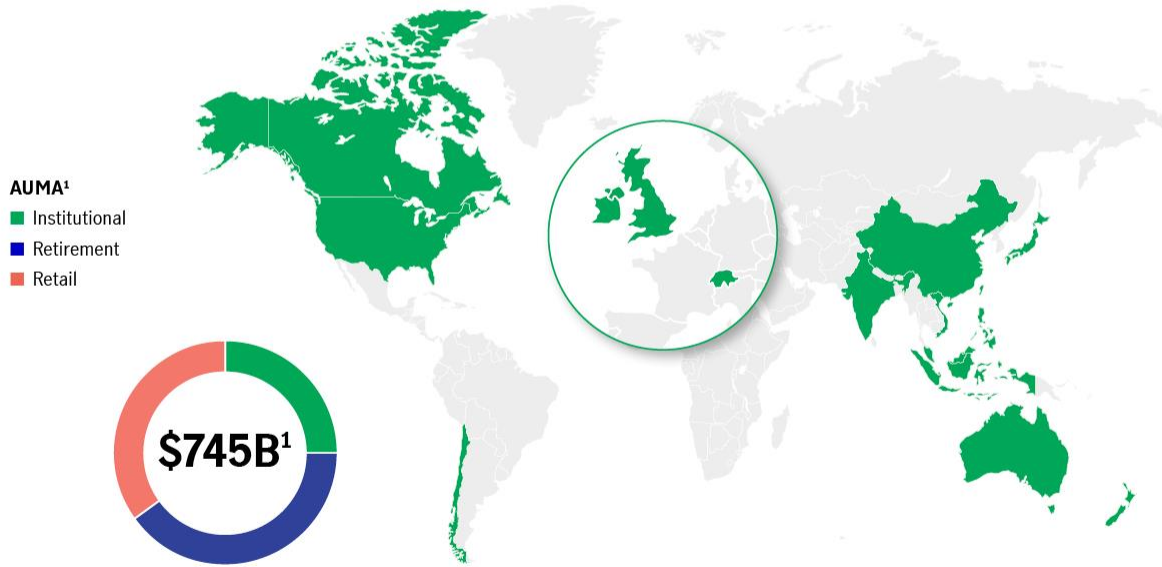
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Combining local insight with global scale

As part of Manulife Investment Management, we draw on more than a century of financial stewardship and the full resources of our parent company to serve individuals, institutions, and retirement plan members worldwide. Our leading capabilities in public and private markets are strengthened by an investment footprint that spans five continents. We're committed to investing responsibly across our businesses, and we believe in supporting financial well-being through our workplace retirement plans.

 **Manulife** Investment Management



¹ MFC statistical package, assets under management and administration (AUMA), as of 12/31/22. ² Manulife Investment Management, as of 12/31/22.

At a glance

Manulife's global wealth and asset management business²

600+
investment professionals

5
continents

120+
years operating in Asia and North America

264K
retirement plans globally

16M
customers globally

 Signatory of: STEWARDSHIP CODE | 2021

2021 signatory

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Complementing in-house capabilities with specialized expertise

While our in-house asset management teams offer a range of world-class capabilities, leveraging those talents is just the beginning of the story. We scour the world for specialized expertise at unaffiliated managers whose skill sets we can tap to complement our own. The result is that we're able to offer investors a variety of options in each category, a unique approach that we believe truly serves the best interests of our investors.

Equity	Fixed income	Liquid alts	ESG focused	ESG integrated
			Asset allocation	Private assets

Mutual funds | SMAs | ETFs | Model portfolios | Private assets | 529 plans | CITs | UCITS

Representative sampling of subadvisors. All logos are the property of their respective owners. Manulife Investment Management is an affiliated asset manager. Not all strategies incorporate environmental, social, and governance (ESG) factors to the same degree.

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Insight that leverages the best thinking from across our network

A natural by-product of our manager research is timely investment insight from across the industry. Leveraging the intellectual capital from our in-house asset management teams at Manulife Investment Management along with our network of unaffiliated asset managers allows us to uncover real-time opportunities and risks. We then combine that bottom-up input with top-down perspective from global macro research firms to deliver a focused collection of actionable investment ideas.

How we formulate our 12- to 18-month outlook



We conduct a quantitative assessment of asset manager, broker-dealer, and asset allocation and macro research provider views across 17 distinct asset classes.

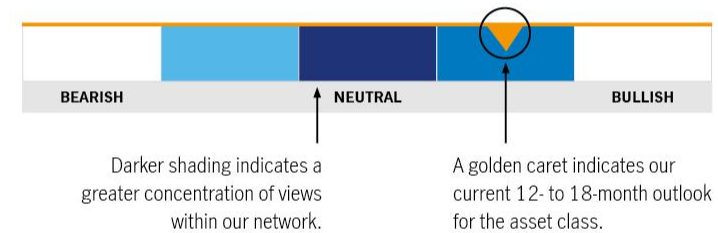


We analyze, evaluate, and weight these views in light of manager biases, market fundamentals, and global macroeconomic factors.



We develop our asset class views in the context of a global multi-asset portfolio, highlighting our most compelling ideas for clients while focusing on risk management.

How to read our views



Darker shading indicates a greater concentration of views within our network.

A golden caret indicates our current 12- to 18-month outlook for the asset class.

Looking for *more*?

Visit our *Market Intelligence* page for weekly video updates, related blog posts, and more from our investment strategists.

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U.S. equity: positioning for a late-cycle environment

A decelerating economic backdrop calls for an emphasis on quality and defense.

Our 12–18 month view: SLIGHTLY BULLISH

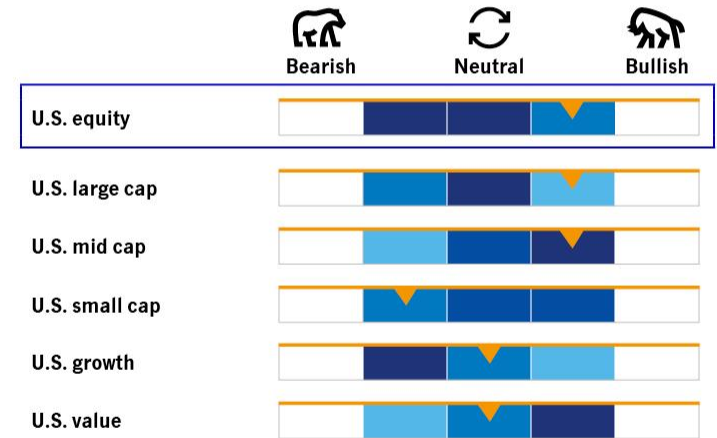
We've been slightly bullish on U.S. large- and mid-cap equities since mid-2019 and currently see mid-cap stocks as the best opportunity for offense within U.S. equities. We've been bullish on quality since Q3 2018 and began pairing that stance with the value factor in Q1 2021. In mid-2022, we added defense to our positioning.

What's inside

- ⌚ The LEI continues to fall, suggesting that a recession could be imminent
- ⌚ U.S. earnings growth estimates continue their choppy downtrend
- ⌚ Overweight quality, value, and defense by emphasizing targeted sectors
- ⌚ Mid caps offer some of the most attractive valuations in the U.S. equity market
- ⌚ Bear markets can be painful, but they often create opportunities

Range of views from our network

Darker shading indicates a greater concentration of views within our network.



Changes to network views: The first quarter saw the consensus shift from neutral to slightly negative on U.S. equities. Within the United States, our network still favors value over growth and tilts toward smaller companies. Mid-cap stocks remain the largest overweight within global equities.

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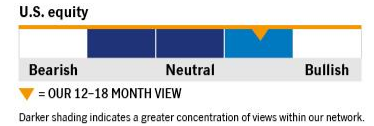


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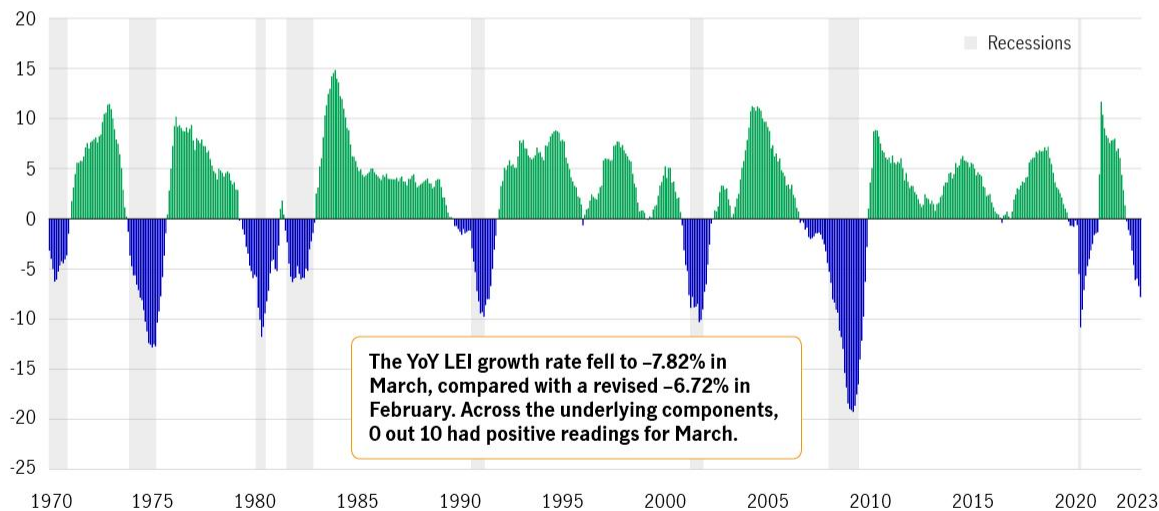
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The LEI continues to fall, suggesting that a recession could be imminent

"Economic weakness will intensify and spread more widely throughout the U.S. economy over the coming months, leading to a recession starting in mid-2023."



YoY change in the Leading Economic Indicators (%)



LEI (ranked by weighting in the index)

Weekly manufacturing hours worked	24%	—
ISM index of new orders	17%	▼
Consumer expectations	16%	▼
Yield spread	12%	▼
Leading credit index	9%	▼
New orders of consumer goods and materials	8%	—
New orders of nondefense capital goods	5%	—
Stock prices	4%	▼
Building permits	3%	▼
Weekly unemployment claims (inverted)	2%	▼

Source: The Conference Board, as of 3/31/23. The Composite Index of Leading Indicators (LEI) is published monthly by The Conference Board and tracks 10 economic components whose changes tend to precede changes in the overall economy. It is not possible to invest directly in an index. YoY refers to year over year. Past performance does not guarantee future results.

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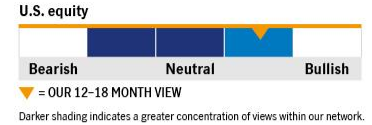


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U.S. earnings growth estimates continue their choppy downtrend

"Equities have been de-rated aggressively this year and further de-rating is possible, but the key test will be the extent to which earnings get further downgraded."



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Independent Investment Strategy

Stock prices and earnings estimates tend to move together over time



EPS growth estimates YoY (%)

	2023
Consumer discretionary	27.70
Communication services	18.54
Industrials	11.67
Financials	9.91
Utilities	6.94
Consumer staples	2.90
S&P 500 Index	1.13
Real estate	0.16
Information technology	-0.69
Healthcare	-9.60
Materials	-16.55
Energy	-23.89

Source: FactSet, as of 4/30/23. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. Earnings per share (EPS) is a measure of how much profit a company has generated calculated by dividing the company's net income by its total number of outstanding shares. YoY refers to year over year. Past performance does not guarantee future results.

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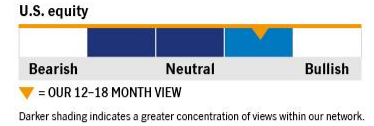


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Overweight quality, value, and defense by emphasizing targeted sectors

“Until we see a bottom in leading economic indicators, focus on strong ROE, strong cash flow, and strong balance sheets.”



PIPER | SANDLER

We favor tilting toward the technology, healthcare, and utilities sectors

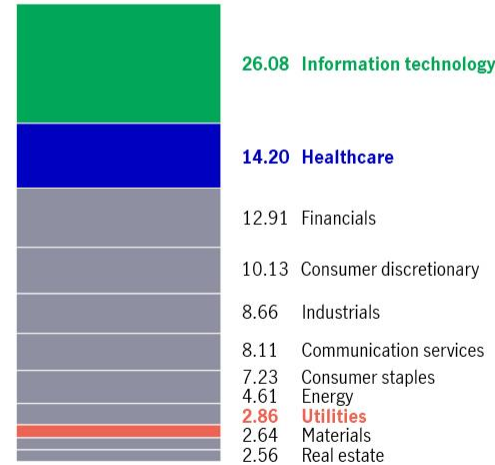
Favorite factors

Quality—Strong balance sheets, more durable profitability, higher ROE, and less need for capital in a period in which borrowing costs are rising

Value—Screening stocks based on valuations such as P/B or P/E, minimizing exposure to nonprofitable expensive stocks

Defense—Businesses that are less tied to the economic cycle and see less cyclical earnings

S&P 500 Index sectors, by weighting %



Favorite sectors

Information technology—Leading quality sector based on solid profit margins, high ROE, and strong balance sheets

Healthcare—Leading value sector, strong earnings growth potential among defensive areas, relatively cheap, high quality, and less earnings variability

Utilities—Leading defensive sector, well positioned for an environment in which consumers emphasize what they need vs. what they want

Source: FactSet, as of 4/30/23. Return on equity (ROE) is a measure of profitability that calculates how many dollars of profit a company generates with each dollar of shareholders' equity. Price/book (P/B) is the ratio of a stock's price to its book value per share. Price to earnings (P/E) is a valuation measure comparing the ratio of a stock's price with its earnings per share. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index.

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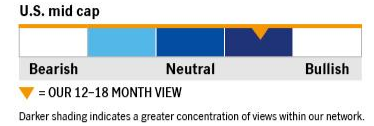


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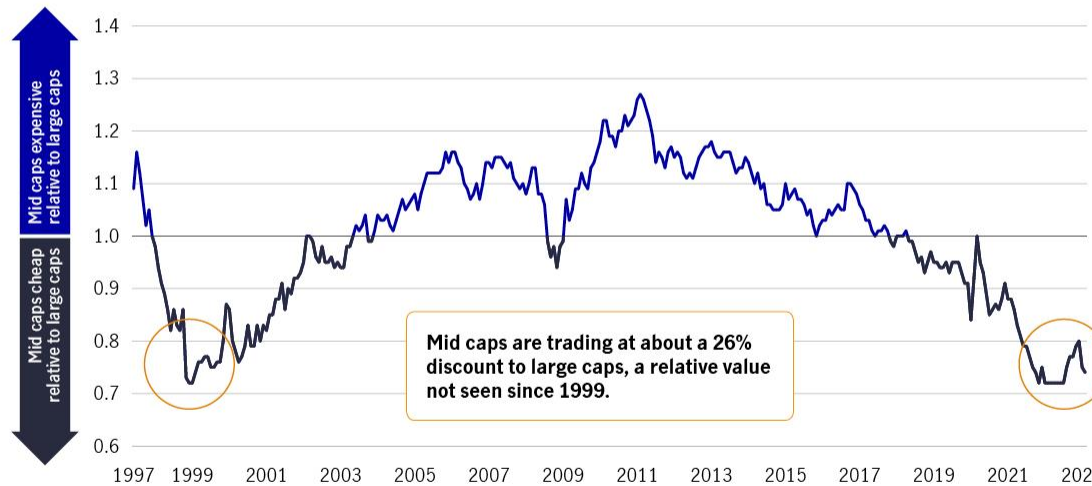
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Mid caps offer some of the most attractive valuations in the U.S. equity market

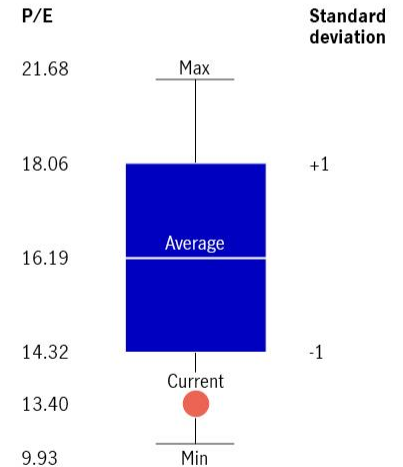
"Mid-cap stocks often combine the growth potential of a young firm with the financial stability of a company that has survived beyond its early years."



S&P 400 Index P/E ratio relative to S&P 500 Index P/E ratio



Mid caps are trading nearly two standard deviations below their average valuation



Source: FactSet, as of 4/30/23. The S&P 400 Index tracks the performance of 400 of the largest publicly traded companies in the United States. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. The forward price-to-earnings (P/E) ratio is a stock valuation measure comparing the current share price of a stock with the underlying company's estimated earnings per share over the next 12 months. Standard deviation is a statistical measure of the historic volatility of a portfolio. It measures the fluctuation of a fund's periodic returns from the mean or average. The larger the deviation, the larger the standard deviation and the higher the risk. Past performance does not guarantee future results.

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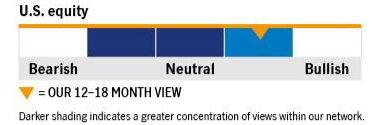


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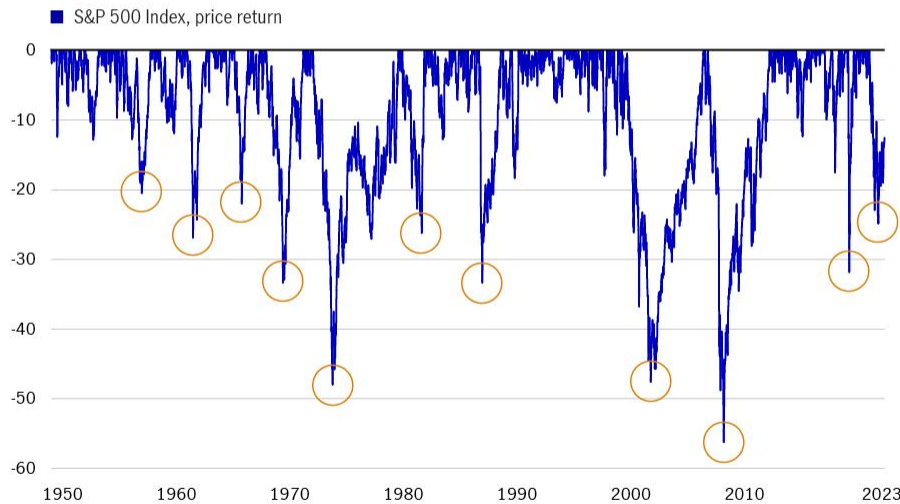
Bear markets can be painful, but they often create opportunities

"History suggests that investors can improve their returns by embracing risk at a time when others are selling."



Manulife Investment Management

The S&P 500 Index has declined by 20% or more 11 times since 1950



Source: FactSet, as of 4/30/23. Drawdown is a measure of market declines from a peak to a subsequent trough. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. Past performance does not guarantee future results.

Using a bear market as an entry point has historically paid off

S&P 500 Index bear markets (declines of 20% or more) since 1950

Market peak	Peak-to-trough decline	1 year from trough	3 years from trough (annualized)
8/3/56	-20.47%	36.96%	13.15%
12/8/61	-26.87%	33.35%	17.45%
2/11/66	-21.97%	32.87%	8.38%
11/29/68	-33.33%	39.79%	12.86%
1/5/73	-47.99%	37.87%	15.69%
11/28/80	-22.19%	40.54%	18.78%
8/21/87	-33.34%	21.39%	12.90%
3/24/00	-47.59%	28.64%	15.35%
10/12/07	-56.24%	66.63%	26.08%
2/14/20	-31.81%	53.97%	20.76%
1/3/22	?	?	?
Average	-34.18%	39.20%	16.14%

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International equity: emphasizing quality and defense

Slowdowns in manufacturing and earnings estimates suggest a late-cycle environment.

Our 12–18 month view: SLIGHTLY NEGATIVE

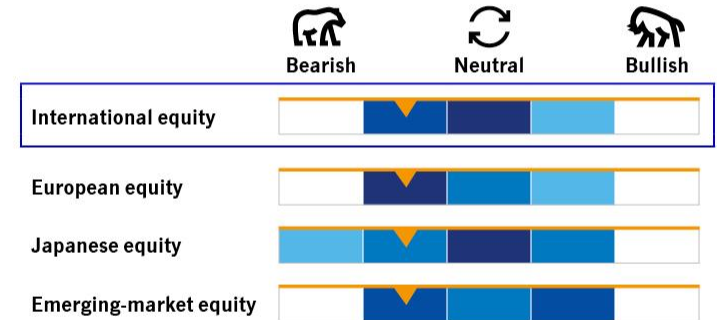
In mid-2022, we downgraded Europe to slightly negative to reduce our exposure to highly cyclical markets; we followed suit by reducing exposure to emerging-market equities in Q4. We've been underweight in Japan since mid-2018 due to structurally slow growth.

What's inside

- ⌚ Manufacturing PMIs abroad are decelerating, a signpost of a late-cycle environment
- ⌚ The non-U.S. developed-market earnings outlook appears overly optimistic
- ⌚ The downtrend in emerging-market earnings may be pausing for now
- ⌚ Overweight quality and defense for a late-cycle environment
- ⌚ The U.S. dollar's direction can have a meaningful impact on relative performance

Range of views from our network

Darker shading indicates a greater concentration of views within our network.



Changes to network views: During the first quarter, our network became more constructive on non-U.S. equities in general, as the consensus view moved from slightly negative to neutral. The shift was primarily driven from a more positive view on emerging-market equities as investors responded to China reopening.

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Manufacturing PMIs abroad are decelerating, a signpost of a late-cycle environment

"The eurozone economy is still headed for contraction, but bottoming surveys point to a shallow recession."

International equity

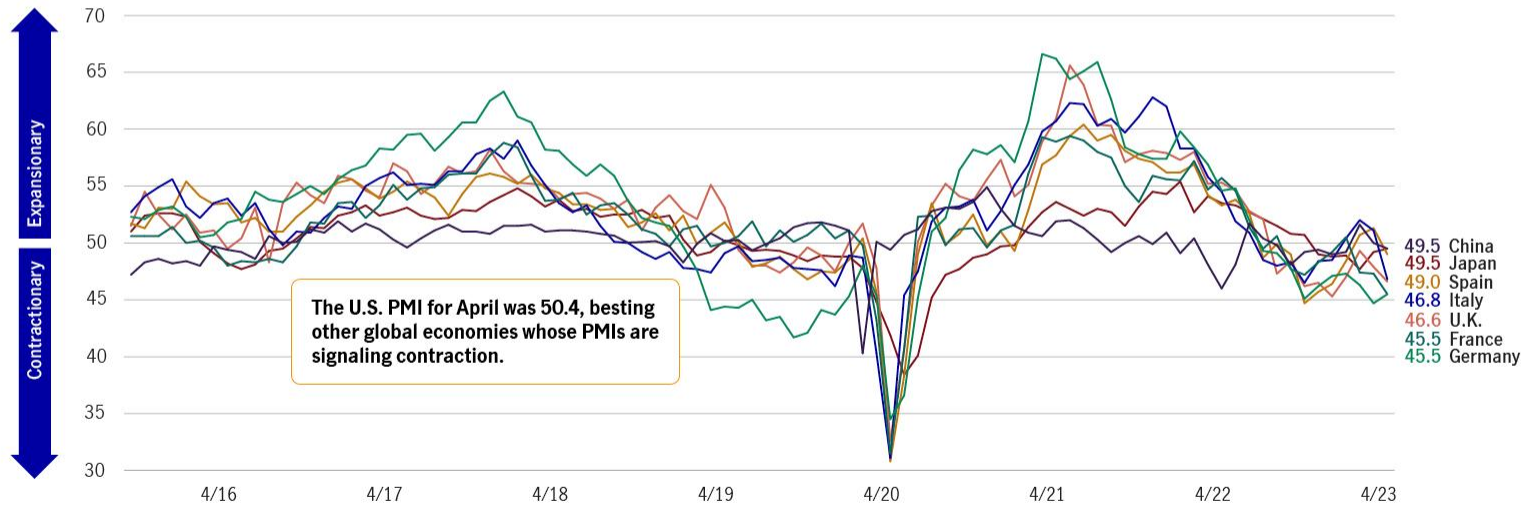


▼ = OUR 12-18 MONTH VIEW

Darkier shading indicates a greater concentration of views within our network.



Eurozone PMIs have stabilized, but remain in contraction territory



Source: Markit, World Bank, FactSet, as of 4/30/23. The Purchasing Managers' Index (PMI) tracks the economic activity of the manufacturing sector in the United States. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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The non-U.S. developed-market earnings outlook appears overly optimistic

“Cyclical assets, including stocks, are vulnerable to the confluence of weaker growth and tighter monetary policy in Europe.”

International equity



▼ = OUR 12-18 MONTH VIEW

Darkier shading indicates a greater concentration of views within our network.



MSCI EAFE Index prices have followed earnings over time



EPS growth estimates YoY (%)

	2023
Financials	22.08
Communication services	17.82
Information technology	8.56
Consumer discretionary	4.74
Healthcare	2.89
Consumer staples	1.80
MSCI EAFE Index	-2.20
Utilities	-2.68
Real estate	-3.79
Industrials	-8.86
Materials	-24.57
Energy	-27.97

Source: FactSet, as of 4/30/23. Earnings per share (EPS) is a measure of how much profit a company has generated calculated by dividing the company's net income by its total number of outstanding shares. YoY refers to year over year. The MSCI Europe, Australasia, and Far East (EAFE) Index tracks the performance of publicly traded large- and mid-cap stocks of companies in those regions. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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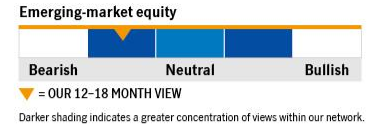


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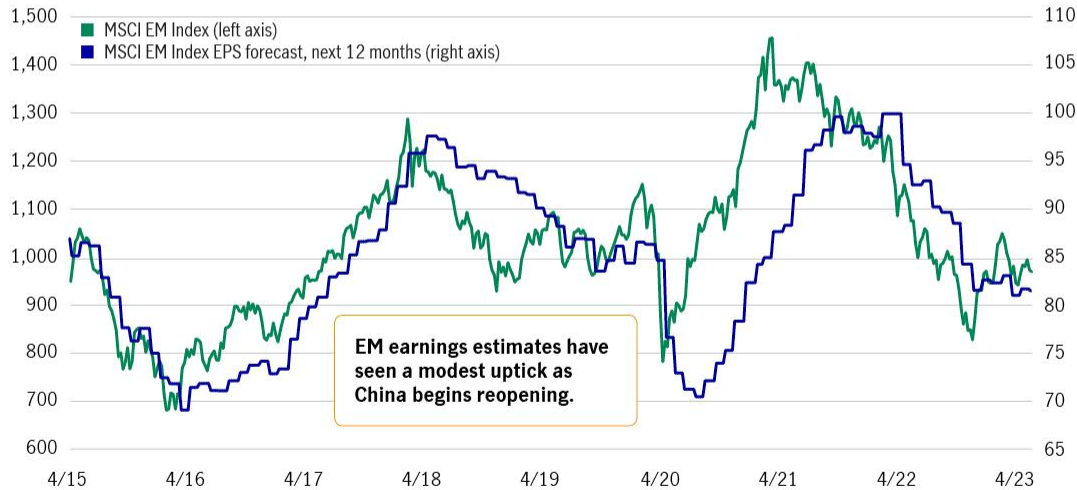
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The downtrend in emerging-market earnings may be pausing for now

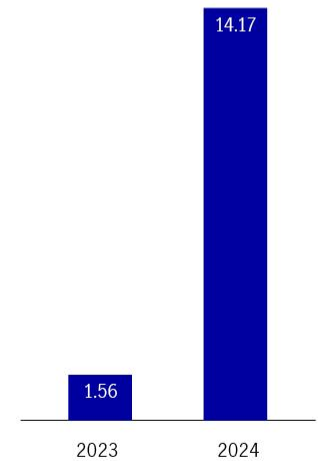
“The current parlous state of earnings expectations in the EM world vindicates the steady underperformance of stock prices.”



EM earnings estimates began to decline meaningfully in early 2022



MSCI EM Index—earnings growth estimates YoY (%)



Source: FactSet, as of 4/30/23. Earnings per share (EPS) is a measure of how much profit a company has generated calculated by dividing the company's net income by its total number of outstanding shares. YoY refers to year over year. The MSCI Emerging Markets (EM) Index tracks the performance of publicly traded large- and mid-cap EM stocks. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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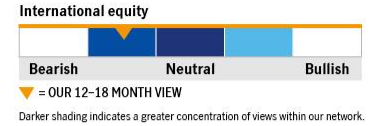


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Overweight quality and defense for a late-cycle environment

“Given higher inflation and interest rates, as well as a reduction in monetary support from central banks, we believe the rate of global growth is likely to slow and are emphasizing the quality factor.”



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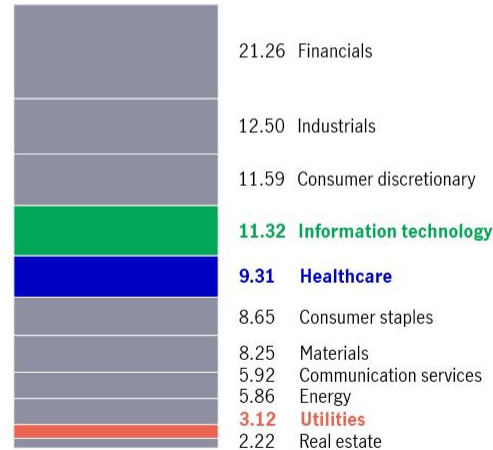
We favor tilting toward the technology, healthcare, and utilities sectors

Favorite factors

Quality—Strong balance sheets, more durable profitability, higher ROE, and less need for capital in a period in which borrowing costs are rising

Defense—Businesses that are less tied to the economic cycle and see less cyclical earnings

MSCI ACWI ex USA Index sectors, by weighting (%)



Favorite sectors

Information technology—Second-highest ROE across non-U.S. equity sectors, forecast to see double-digit earnings growth

Healthcare—Has the highest ROE across non-U.S. equity market sectors, less economically cyclical

Utilities—Of the least economically sensitive, businesses tied to what people need instead of what they want

Source: FactSet, as of 4/30/23. Return on equity (ROE) is a measure of profitability that calculates how many dollars of profit a company generates with each dollar of shareholders' equity. The MSCI All Country World Index (ACWI) ex USA Index tracks the performance of publicly traded large- and mid-cap stocks of companies in both developed and emerging markets, excluding the United States. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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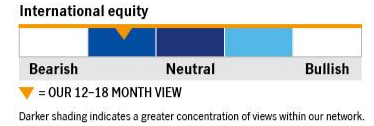


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The U.S. dollar's direction can have a meaningful impact on relative performance

"There is an almost decade-by-decade pattern of U.S. outperformance alternating with U.S. underperformance. Except for the late 1980s, this has also neatly corresponded to multi-year U.S. dollar fluctuations."



International stocks have been comparatively weak when the USD rises—and comparatively strong when it falls



Source: FactSet, as of 4/30/23. The U.S. Dollar Index (DXY) tracks the performance of the U.S. dollar (USD) relative to the value of a basket of world currencies. International equities are represented by the MSCI Europe, Australasia, and Far East (EAFE) Index, which tracks the performance of publicly traded large- and mid-cap stocks of companies in those regions. U.S. equities are represented by the S&P 500 Index, which tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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Fixed income: emphasizing high-quality bonds over credit

Late-cycle dynamics call for a targeted approach.

Our 12–18 month view: SLIGHTLY POSITIVE

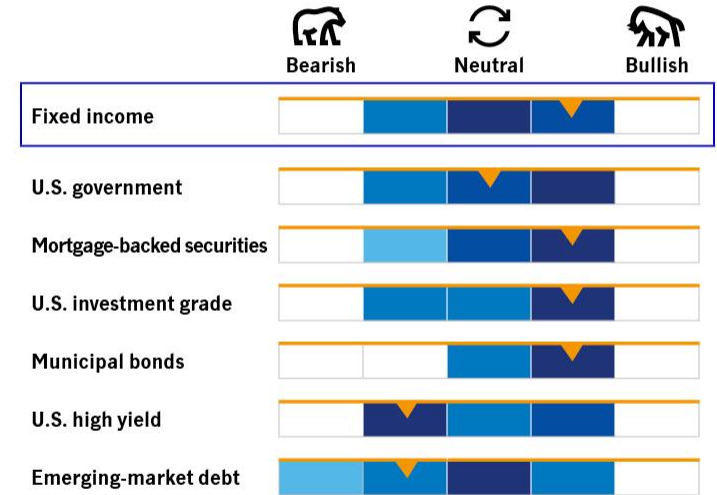
In Q1 2023, we moved to a slightly positive view on fixed income from neutral. Within fixed income, we downgraded our view on high-yield bonds and bank loans and upgraded our view on municipal bonds and mortgage-backed securities (MBS). We continue to maintain an overweight in investment-grade corporate bonds.

What's inside

- ⌚ We're likely near—or even past—a peak in the 10-year U.S. Treasury yield for the cycle
- ⌚ The dispersion of returns following yield curve inversions calls for a focus on quality
- ⌚ Starting yield has historically been a major driver of bonds' 5-year total returns
- ⌚ Investment-grade corporates are trading at prices and yields not seen since the global financial crisis
- ⌚ Muni yields are the highest they've been in a decade, with opportunities across the credit spectrum
- ⌚ While there is extra income potential, EM debt can have greater duration and currency risk
- ⌚ Cash balances are increasing despite underwhelming yields relative to bonds
- ⌚ Adding alternatives in a late-cycle environment can help reduce portfolio risk in multiple ways

Range of views from our network

Darker shading indicates a greater concentration of views within our network.



Changes to network views: During the first quarter, our network became incrementally more positive on bonds overall. Within fixed income, the consensus view on MBS shifted from neutral to slightly positive, and we saw increased conviction across investment-grade corporates, municipals, and U.S. Treasuries. The view on high-yield bonds and bank loans became more negative.

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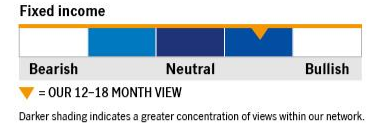
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We're likely near—or even past—a peak in the 10-year U.S. Treasury yield for the cycle



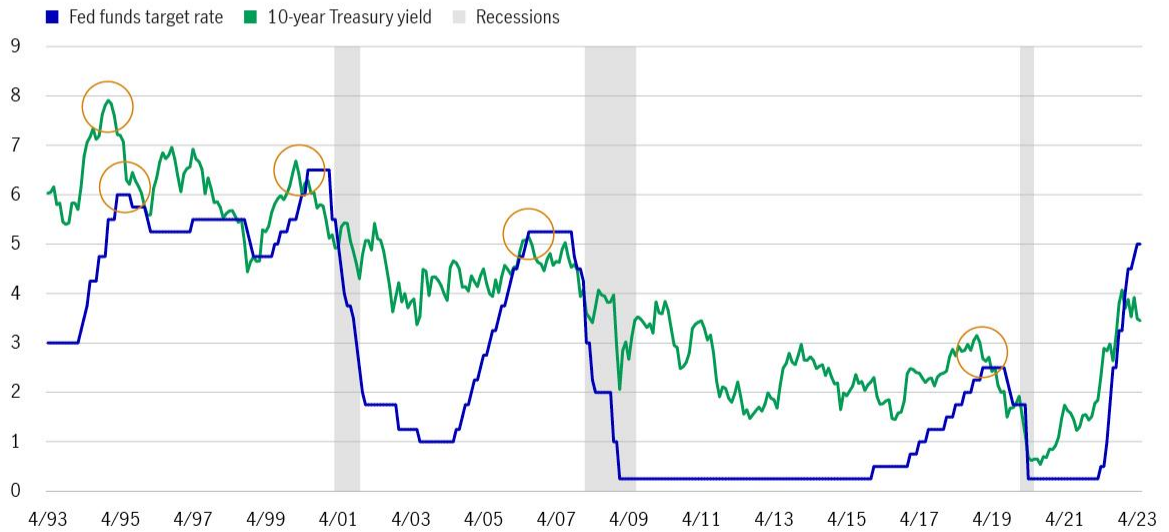
"The Fed may be driving too fast while looking too much at the rearview mirror."

EVERCORE ISI

The futures market suggests the Fed may be done hiking (%)

Current	5.25
June	5.25
July	5.25
September	5.00
November	4.75
December	4.50

The 10-year U.S. Treasury yield tends to peak for the cycle months before the Fed funds rate



Source: FactSet, as of 4/30/23. Fed refers to the U.S. Federal Reserve. Past performance does not guarantee future results.

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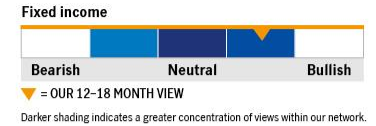
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The dispersion of returns following yield curve inversions calls for a focus on quality

"Yield curves invert close to the peak of a cycle, and of course after a peak there will be a recession."



PIPER | SANDLER

Core bonds—including MBS and investment-grade corporates—have historically outperformed other bond market segments after a yield curve inversion

Total return from U.S. Treasury yield curve inversion to end of subsequent recession

Morningstar fixed-income fund category averages	Total return (%) 2/28/00–12/3/01	Total return (%) 8/31/06–7/1/09	Total return (%) 8/31/19–5/1/20	Average (%)
Intermediate core bond	9.74	2.57	3.20	5.17
Intermediate core-plus bond	10.24	3.61	1.43	5.09
Short-term bond	8.28	1.95	0.14	3.46
Ultrashort bond	6.61	-0.38	0.10	2.11
Emerging markets bond	10.10	2.41	-9.16	1.12
Multisector bond	3.10	1.00	-5.07	-0.32
Nontraditional bond	-1.30	-0.46	-4.14	-1.97
Bank loan	3.89	-2.99	-7.66	-2.25
High yield bond	-2.86	-1.46	-7.39	-3.90
S&P 500 Index	-7.82	-9.49	-2.03	-6.45

Source: Morningstar Direct, as of 4/30/23. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. An inverted yield curve occurs when short-term interest rates move higher than long-term rates as a result of deteriorating economic performance. MBS refers to mortgage-backed securities. Past performance does not guarantee future results.

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Starting yield has historically been a major driver of bonds' 5-year total returns

"We don't want to catch a falling knife, but eventually yields will look attractive enough for us to increase our recommended portfolio duration."

Fixed income

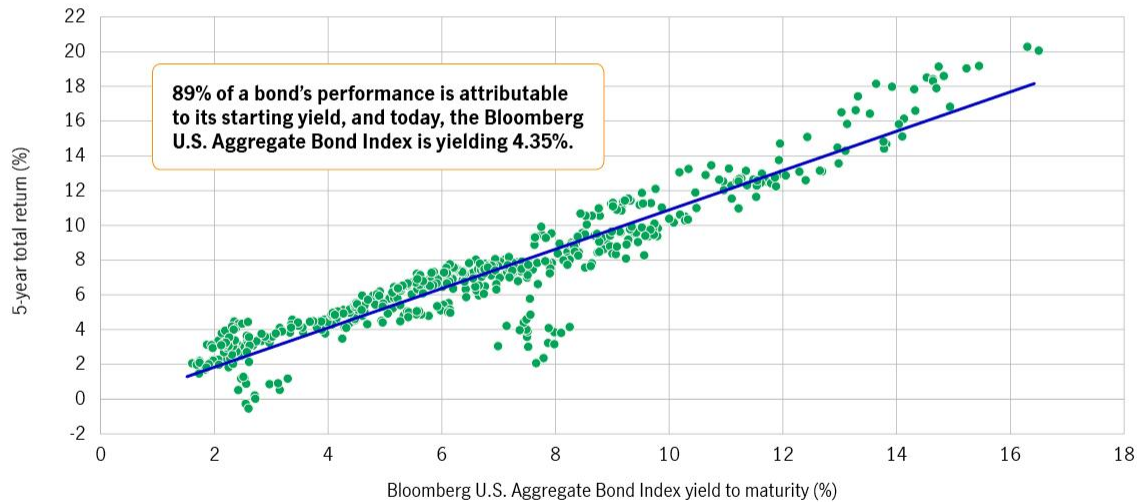


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Correlation of 5-year total return vs. starting yield to maturity for the Bloomberg U.S. Aggregate Bond Index



Largest Bloomberg U.S. Aggregate Bond Index drawdowns

Month ended	Drawdown (%)
November 2016	-3.28
July 2003	-3.55
August 2013	-3.67
October 2008	-3.83
May 1984	-4.88
September 1987	-4.90
June 1994	-5.15
August 1980	-12.74
October 2022	-15.72

Source: FactSet, as of 4/30/23. The Bloomberg U.S. Aggregate Bond Index tracks the performance of U.S. investment-grade bonds in government, asset-backed, and corporate debt markets. It is not possible to invest directly in an index. Drawdown is a measure of market declines from a peak to a subsequent trough. Month of trough is shown. Correlation is a statistical measure that describes how investments move in relation to each other, which ranges from -1.0 to 1.0. The closer the number is to 1.0 or -1.0, the more closely the two investments are related. Past performance does not guarantee future results.

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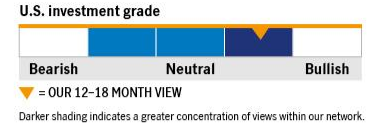
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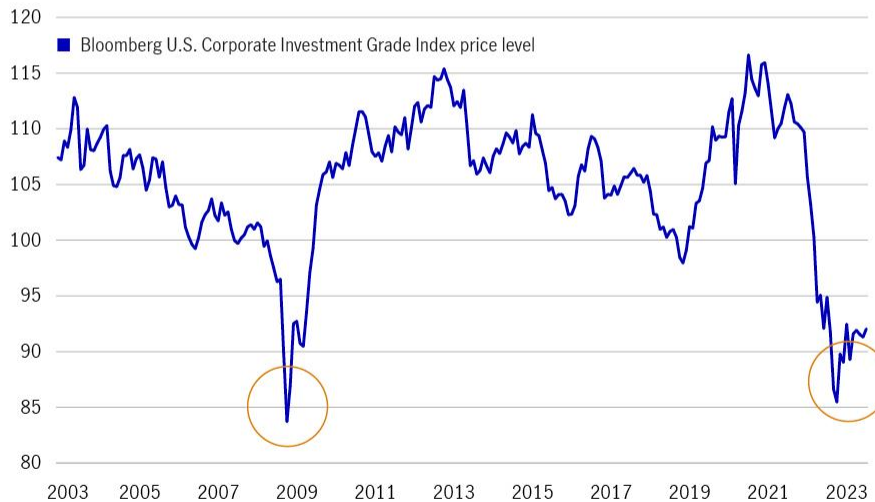
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Investment-grade corporates are trading at prices and yields not seen since the global financial crisis



“What we get paid to own the average investment-grade bond has increased significantly over the past year.” Manulife Investment Management

High-quality corporate bonds have rarely traded at valuations this low



We prefer higher-quality corporates with yields in the 4%-5% range, especially single A-rated issues

Bloomberg index/segment	Yield to maturity (%)
U.S. Corporate AAA	4.22
U.S. Corporate AA	4.44
U.S. Corporate A	4.91
U.S. Corporate Investment Grade	5.10
U.S. Corporate BAA	5.39
U.S. Credit/Corporate High Yield BA	6.84
U.S. High Yield Corporate	8.55
U.S. Credit/Corporate High Yield B	8.64
U.S. Credit/Corporate High Yield CAA	13.44

Source: FactSet, as of 4/30/23. The Bloomberg U.S. Corporate Investment Grade Index tracks the investment-grade, fixed-rate, taxable corporate bond market. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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Muni yields are the highest they've been in a decade, with opportunities across the credit spectrum

"Tax-exempt municipal bonds are the most attractively valued pocket of the U.S. spread product universe."

Municipal bonds

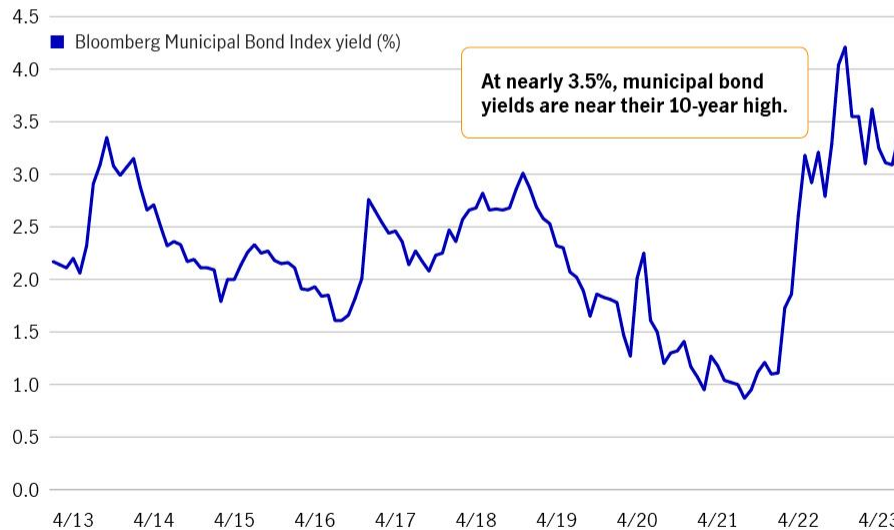


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Municipal bond yields are historically attractive, even before accounting for tax benefits



Source: FactSet, as of 4/30/23. The Bloomberg Municipal Bond Index tracks the performance of the U.S. investment-grade tax-exempt bond market. It is not possible to invest directly in an index. Past performance does not guarantee future results.

Our preference is for A-rated munis given their combination of attractive yield and higher credit quality

Bloomberg Municipal Bond Index yields by credit rating (%)

AAA	3.06
AA	3.22
A	3.75
BAA	4.48

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While there is extra income potential, EM debt can have greater duration and currency risk

"Currently, we are cautious on EM corporate debt. We recommend that investors focus on EM sovereign issuers that provide a significant yield pickup over U.S. bonds with comparable credit ratings and that are less likely to default than their corporate counterparts."

Emerging-market debt

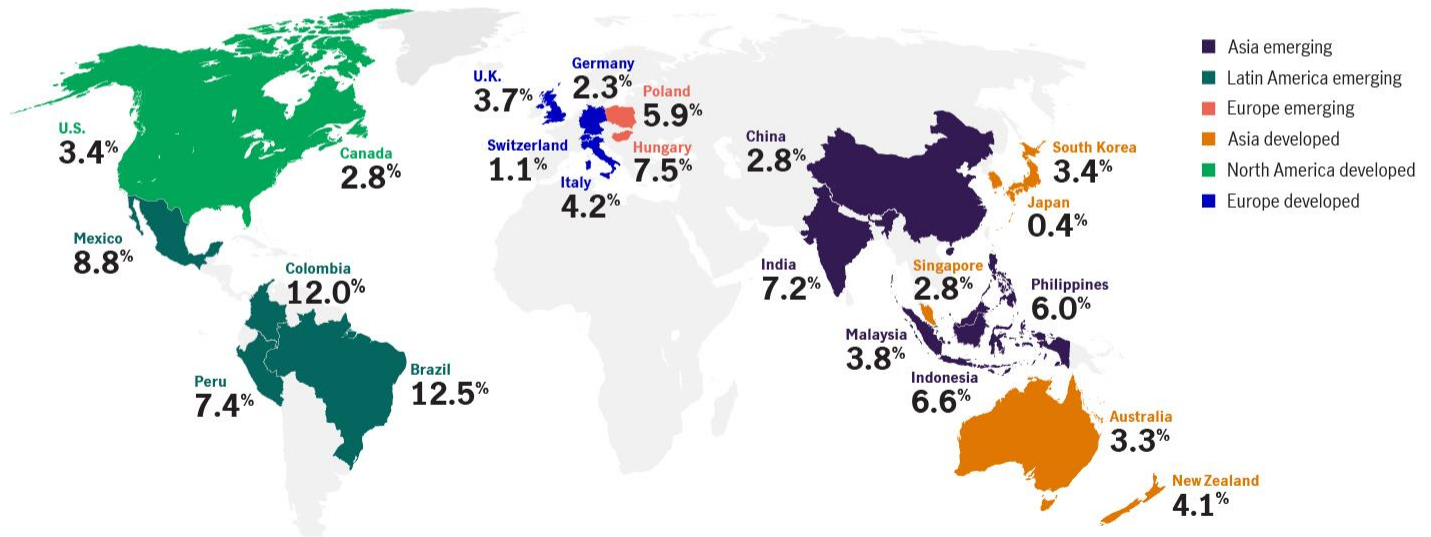


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10-year government bond yields



Source: FactSet, as of 4/30/23. Foreign investing, especially in emerging markets, has additional risks such as currency and market volatility and political and social instability. EM refers to emerging market. Past performance does not guarantee future results.

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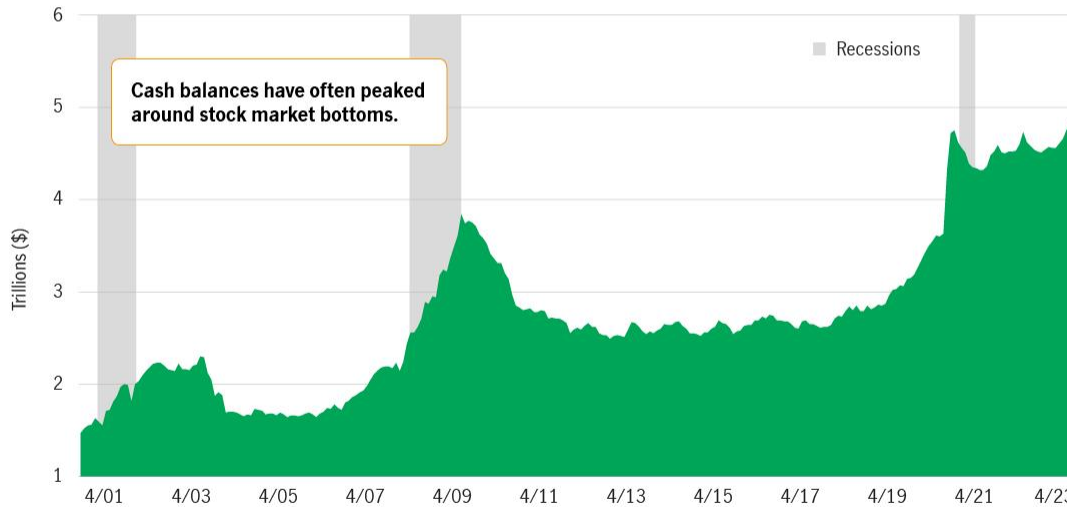
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Cash balances are increasing despite underwhelming yields relative to bonds

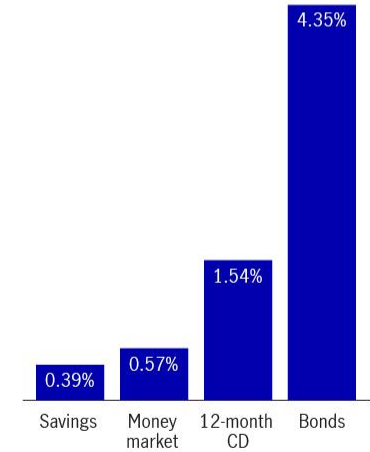
"If history is any guide, it suggests that whatever risk-dampening benefits short duration bonds have to offer are relatively short-lived."

Manulife Investment Management

Money market assets soared during the pandemic and remain elevated



Although rates on cash alternatives are up, they still lag bond yields



Source: FactSet, as of 4/30/23. Savings, money market, and 12-month CD rates are measured by the FDIC national averages. Bond yields are represented by the Bloomberg U.S. Aggregate Bond Index, which tracks the performance of U.S. investment-grade bonds in government, asset-backed, and corporate debt markets. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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Adding alternatives in a late-cycle environment can help reduce portfolio risk in multiple ways

"Having diversified exposure across alternatives can help maximize the different roles that strategies can play within a portfolio—from offering potential downside protection to providing differentiated sources of return."

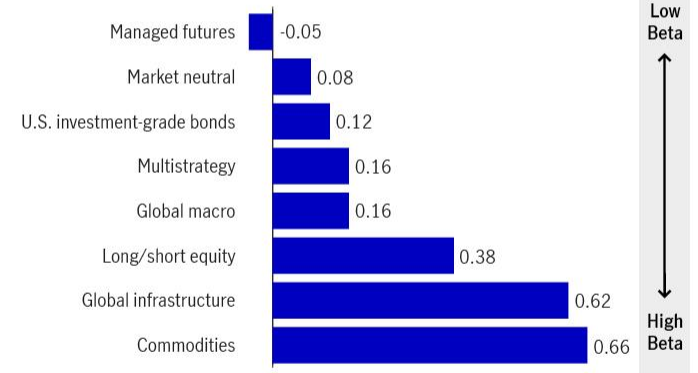
Manulife Investment Management

Consider allocating to alternatives that can help lower volatility or reduce a portfolio's equity-market beta—or both

5-year monthly annualized standard deviation



Beta vs. S&P 500 Index



Source: FactSet, as of 4/30/23. Standard deviation is a statistical measure of the historic volatility of a portfolio. It measures the fluctuation of a fund's periodic returns from the mean or average. The larger the deviation, the larger the standard deviation and the higher the risk. Beta measures the sensitivity of the fund to its benchmark. The beta of the market (as represented by the benchmark) is 1.00. Accordingly, a fund with a 1.10 beta is expected to have 10% more volatility than the market. U.S. large-cap equities are measured by the S&P 500 Index, which tracks the performance of 500 of the largest publicly traded companies in the United States. U.S. investment-grade bonds are represented by the Bloomberg U.S. Aggregate Bond Index, which tracks the performance of U.S. investment-grade bonds in government, asset-backed, and corporate debt markets. Market neutral is represented by the Credit Suisse Equity Market Neutral Hedge Fund Index, which tracks the aggregate performance of equity market neutral funds. Multistrategy is represented by the Credit Suisse Multi-Strategy Hedge Fund Index, which tracks the aggregate performance of multistrategy funds. Managed futures are represented by the Credit Suisse Managed Futures Hedge Fund Index, which tracks managed futures hedge funds. Global macro is represented by the Credit Suisse Global Macro Hedge Fund Index, which tracks global macro hedge funds, which may hold positions in practically any market with any instrument. Long/short equity is represented by the Credit Suisse Long/Short Equity Index, a subset of the Credit Suisse Hedge Fund Index, which tracks the aggregate performance of dedicated short bias funds. Global infrastructure is represented by the MSCI World Infrastructure Index, which tracks the global opportunity set of companies that are owners or operators of infrastructure assets. Commodities are represented by the S&P GSCI Total Return Index, which tracks general commodity price movements and inflation in the world economy. It is not possible to invest directly in an index. Past performance does not guarantee future results.

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Our top portfolio ideas to consider now

U.S. quality, value, and defense

Emphasizing companies with a combination of strong balance sheets, reasonable multiples, and more resilient cash flows should help position portfolios for the late-cycle economic environment in the United States.

U.S. mid caps

Mid-cap stocks occupy a Goldilocks position in the U.S. equity market, with generally higher quality than small caps and more attractive valuations than large caps.

Quality and defense in international

While certain macro headwinds have abated, we still believe the greatest risk in international equities is excessive exposure to cyclical sectors as global growth continues to slow.

High quality for fixed income

As the economy continues to decelerate, we're finding value in targeted high-quality segments of the fixed-income market, including municipal bonds, mortgage-backed securities, and investment-grade corporates.

Diversification does not guarantee a profit or eliminate the risk of a loss.

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Our investment strategists

As co-chief investment strategists, Emily and Matt are responsible for developing and delivering timely market and economic insight to financial professionals and institutional investors across the country. Together, they lead the development of John Hancock Investment Management's flagship quarterly market outlook, *Market Intelligence*. In doing so, they combine insight from the firm's global network of asset managers, independent research firms, broker-dealers, and banks with top-down fundamental and macro analysis. They're featured regularly on CNBC and Bloomberg TV and are quoted frequently in the financial press.



Emily R. Roland, CIMA

Co-Chief Investment Strategist

Emily Roland

Emily has over 20 years of industry experience. She joined the company's investments division in 2004 and has held several positions in product management, competitive intelligence, and market and industry research. Prior to joining John Hancock, she held roles at GMO and the Boston Stock Exchange. Emily earned an M.B.A. from Boston College and a B.B.A. from James Madison University, and she holds the Certified Investment Management Analyst designation.



Matthew D. Miskin, CFA

Co-Chief Investment Strategist

Matt Miskin

Matt has over 15 years of industry experience. Prior to joining the company's investments division in 2014, he was a manager due diligence analyst at LPL Financial Research, where he was responsible for manager and asset allocation changes related to the firm's recommended list and discretionary models. Matt earned a B.S. in Finance from Elon University and an M.B.A. from Babson College, and he holds the Chartered Financial Analyst designation.

Views are those of Emily R. Roland, CIMA, and Matthew D. Miskin, CFA, of John Hancock Investment Management Distributors LLC and are subject to change. No forecasts are guaranteed. The commentary is provided for informational purposes only, is subject to change as market and other conditions warrant, and is not an endorsement of any security, mutual fund, sector, or index. Any economic or market performance is historical and is not indicative of future results. Investing involves risks, including the potential loss of principal.

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Asset manager views are compiled throughout the preceding calendar quarter through in-person discussions, reviewed research, and on-site visits. These inputs are complemented by third-party research collected during the calendar quarter. Our views reflect John Hancock Investment Management's proprietary weighting of these inputs.

A bearish reading indicates the potential for an asset to underperform its class or subclass on a risk-adjusted basis. A bullish reading indicates the potential for an asset to outperform its class or subclass on a risk-adjusted basis. A neutral reading indicates the potential for performance in line with the asset's historical averages.

Stocks and bonds can decline due to adverse issuer, market, regulatory, or economic developments; foreign investing, especially in emerging markets, has additional risks, such as currency and market volatility and political and social instability; value stocks may decline in price; growth stocks may be more susceptible to earnings disappointments; the securities of small companies are subject to higher volatility than those of larger, more established companies; and high-yield bonds are subject to additional risks, such as increased risk of default. Fixed-income investments are subject to interest-rate and credit risk; their value will normally decline as interest rates rise or if an issuer is unable or unwilling to make principal or interest payments. Liquidity—the extent to which a security may be sold or a derivative position closed without negatively affecting its market value, if at all—may be impaired by reduced trading volume, heightened volatility, rising interest rates, and other market conditions. Hedging and other strategic transactions may increase volatility and result in losses if not successful. Currency transactions are affected by fluctuations in exchange rates. This material is not intended to be, nor shall it be interpreted or construed as, a recommendation or providing advice, impartial or otherwise. John Hancock Investment Management and our representatives and affiliates may receive compensation derived from the sale of and/or from any investment made in our products and services.

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Tough Choices in Challenging Times

Captain
Charlie Plumb

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Seminar Content	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)	Does not apply
The speaker was clear, effective, and engaging.					
Mike Lynch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emily Roland, CIMA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Captain Charlie Plumb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The content was meaningful and relevant to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would recommend this seminar to a friend or coworker.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seminar Experience	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)	Does not apply
I was very satisfied with:					
the location and venue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the food and refreshments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the overall experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Seminar Comments

What was the highlight of the event?

What was your least favorite aspect of the event?

How do you think this event could have been improved?

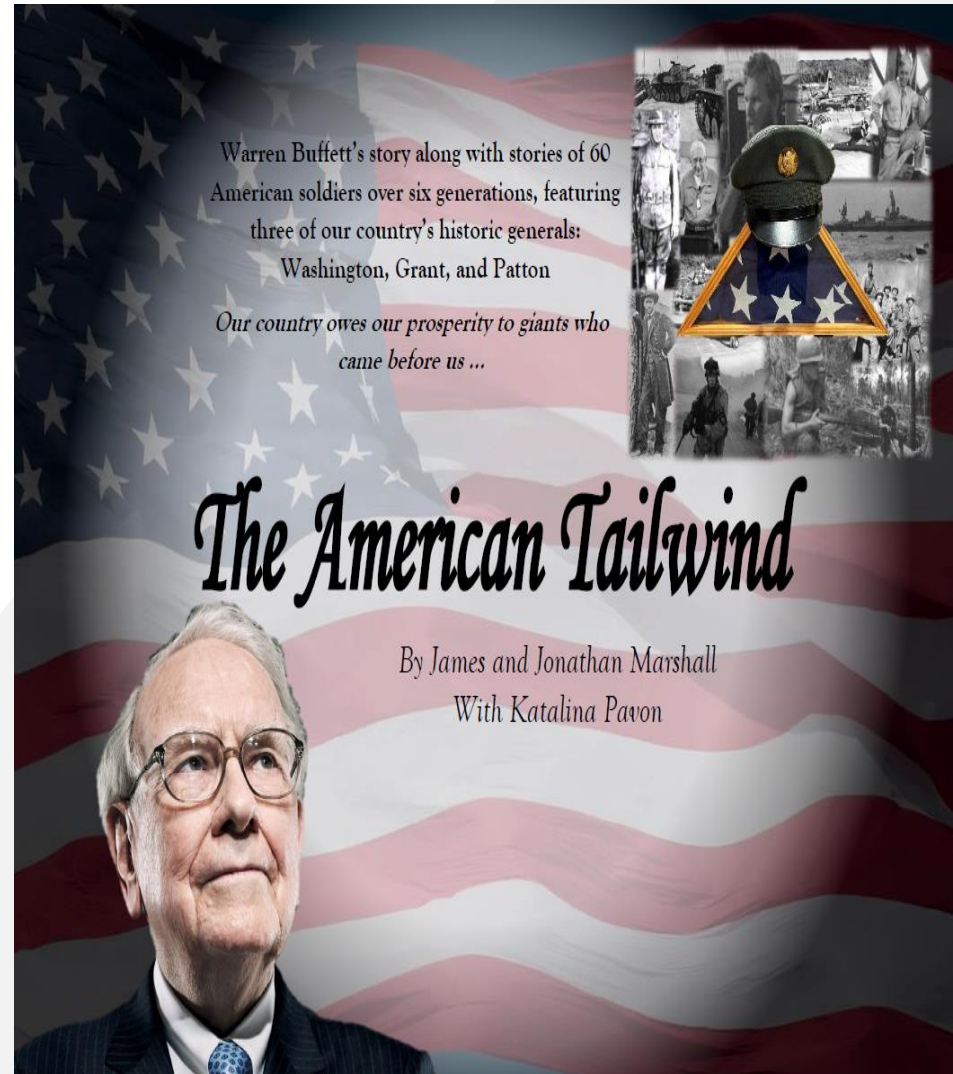
Additional Comments:

Coming Soon – The American Tailwind Book

Warren Buffett's story along with stories of 60 American soldiers over six generations, featuring three of our country's historic generals: Washington, Grant, and Patton

“It is beyond arrogance for American businesses or individuals to boast that they have ‘done it alone.’ The tidy rows of simple white crosses at Normandy should shame those who make such claims.”

– Warren Buffett



Captain Charlie Plumb



Captain Charlie Plumb has lived what he believes to be the American Dream. As a farm kid from Kansas, he fantasized about airplanes, although he felt certain he would never have the opportunity to pilot one. It would be the United States Navy who afforded Plumb the opportunity to live out that dream. After graduating from the Naval Academy, Plumb completed Navy Flight Training and reported to Miramar Naval Air Station in San Diego where he flew the first adversarial flights in the development of what would be called The Navy Fighter Weapons School, currently known as “TOP GUN.”

In his 75th mission, just five days before the end of his tour, Plumb was shot down over Hanoi, taken prisoner, tortured, and spent the next 2,103 days in North Vietnamese Prisoner of War camps. His first prison cell was 8 ft. long and 8 ft. wide. During his nearly six years of captivity, Plumb distinguished himself as a pro in underground communications. He was a great inspiration to all the other POWs and served as chaplain for two years.

Retirement Plan Investment Seminar

JUNE 13, 2023



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- Spectrum was named a winner by the National Association for Business Resources for the 2023 Milwaukee's Best and Brightest Companies to Work For®. Spectrum is one of 47 winners. An independent research firm evaluates each company's entry based on key measures in various categories.
- Spectrum Investment Advisors was named a winner for the Milwaukee Business Journal's 2019 Fastest Growing Firms. To be selected, a company must have revenue between \$3 million and \$500 million and have recorded a profit for the past three years. The 26 firms with the highest percentage of growth from 2016 to 2018 were selected as winners. Accounting firm CliftonLarsonAllen LLP, was used in the verification process.
- Spectrum was selected as a winner for 2019 OED Business of the Year in the medium category. Winners were selected by the Business Development Committee, made up of business and government leaders throughout Ozaukee County, at Ozaukee Economic Development (OED). The program recognizes companies that have seen significant business and job growth over the past five years and are strong community partners.
- Spectrum was listed among 607 Registered Investment Advisors on Financial Advisor Magazine's 2021 RIA Survey and Ranking. To be eligible for the ranking, firms must be independent registered investment advisors, file their own ADV statement with the SEC, and provide financial planning and related services to individual clients.
- Spectrum was given honorable mention for the Metropolitan Milwaukee Association of Commerce (MMAC) 2021 Focus on the Future Awards in the Talent category. The program honors businesses for their contributions to the Milwaukee region's economy. To apply, businesses and organizations must write a 250-word essay describing its success in the category of their choice.
- Spectrum Investment Advisors was named a winner in the micro category for the Milwaukee Business Journal's 2022 Best Places to Work. Eligible firms are located in the Milwaukee area and have 10 or more full time employees. Of the Business Journal's 180 firm nominations, 63 winners were selected in five categories. Participating firms had a large percentage of employees complete an online survey created and scored by the Business Journal's program partner, Quantum Workplace. Winners were chosen based on highest scores in areas such as: personal engagement, communication and resources, teamwork, retention, alignment with goals, trust with co-workers and senior leaders, manager effectiveness and job satisfaction.
- Spectrum was named a 2022 Top DC Advisor Team by the National Association of Plan Advisors (NAPA), which is a compilation of leading individual advisor teams, ranked by self-reported defined contribution assets under advisement. The 2022 list is made up of 332 teams with more than \$100 million in DC assets under advisement. NAPA was created by and for retirement plan advisors and is the only advocacy group exclusively focused on the issues that matter to retirement plan advisors.
- Spectrum Investment Advisors was named a Best Place to Work in Money Management for 2021, (and previously in 2020, 2019 and 2017) by Pensions & Investments (P&I). The 7th survey and recognition program is dedicated to identifying and recognizing the best employers in the money management industry. P&I partnered with Best Companies Group, an independent research firm, to conduct a two-part survey process of employers and their employees. To be eligible for consideration, companies must be for-profit or not-for-profit business or public agency, have a facility in the U.S., have a minimum of 20 full and/or part-time employees working in the United States, be in business a minimum of 1 year and have at least \$100 million of discretionary assets under management.
- Spectrum Investment Advisors has been chosen as a finalist for 401(k) Specialist's 2017 Top Advisors by Participant Outcomes (TAPO) for the month of July. 401(k) Specialist magazine and website are specifically focused on providing retirement plan advisors with the information needed to assist the retirement plan sponsors and participants they serve. The 401(k) Specialists Top Advisors by Participant Outcomes finalists are selected monthly out of advisors who chose to respond to the survey. An independent panel of industry experts then convenes annually to select the overall winner from the monthly finalists. The rating is not indicative of the advisors' future performance.
- Registration with the SEC does not imply a certain level of skill or training.
- AIF®. Accredited Investment Fiduciary, certifies that the recipient has specialized knowledge of fiduciary standards of care and their application to the investment management process.
- CFA®, Chartered Financial Analyst, designation is globally recognized and attests to a charterholder's success in a rigorous and comprehensive study program in the field of investment management and research analysis.
- CFP®, CERTIFIED FINANCIAL PLANNER™, administered by CFP Board, identifies to the public those individuals who have met rigorous professional standards and have agreed to adhere to the principles of integrity, objectivity, competence, fairness, confidentiality, professionalism and diligence when dealing with clients.
- CEBS, Certified Employee Benefit Specialist, certifies that the recipient has a comprehensive understanding of compensation and employee benefit principles and concepts.
- CPFA, Certified Plan Fiduciary Advisor, certifies that the recipient has the expertise required to act as a plan fiduciary or help plan fiduciaries manage their roles and responsibilities.
- CPA, Certified Public Accountant, a designation given by the American Institute of CPAs
- CRC®, Certified Retirement Counselor®, a professional development program accredited by the National Commission for Certifying Agencies that enables financial professionals to address the challenges facing today's retirees.
- GFS®, Global Financial Steward, the financial service industry's first leadership and stewardship designation. Designees undergo training in a new body of research called LeaderMetrics®, which is a framework that is used to evaluate the effectiveness of a decision-maker who is serving in a critical leadership role.
- QPA, Qualified Pension Administrator, a credential created by the American Society of Pension Professionals and Actuaries (ASPPA) to recognize professionals who are qualified to perform the technical and administrative functions of qualified plan administration.
- QKA, Qualified 401(k) Administrator, a credential offered for retirement plan professionals who work primarily with 401(k) plans.
- CPFC®, The Certified Personal Finance Counselor® provides professional development and training for those working with consumers in a one-on-one setting. Certification ensures that individuals have been trained and tested in counseling skills and the fundamentals of personal finance management.
- NQPA, Nonqualified Plan Advisor, a credential offered by the National Association of Plan Advisors certifying proficiency in Nonqualified plans.
- Series 65 certification is achieved by passing the North American Securities Administrators Association Series 65 exam, which qualifies candidates to be investment adviser representatives.
- An officer of Spectrum Investment Advisors, Inc. is a member of Retirement Advisor Council (RAC). This advertisement is not an endorsement by RAC of the products or services offered by Spectrum Investment Advisors, Inc. The Retirement Advisor Council advocates for successful qualified plan and participant retirement outcomes through the collaborative efforts of experienced, qualified retirement plan advisors, investment firms and asset managers, and defined contribution plan service providers.
- The WICPA, Wisconsin Institute of Certified Public Accountants, is the premier professional organization for Wisconsin CPAs, with nearly 8,000 members working in public accounting, industry, government, nonprofit and education.
- The WICPA is not affiliated with Spectrum Investment Advisors, Inc. and this presentation is not an endorsement by WICPA of the products or services offered by Spectrum Investment Advisors.
- Past performance is no guarantee of future results. Returns shown for periods longer than one year are annualized.
- Morningstar®, a leading provider of independent investment research in North America, Europe, Australia & Asia.
- ASPPA, the American Society of Pension Professionals & Actuaries, is a national organization for career retirement plan professionals. The membership consists of the many disciplines supporting retirement income management and benefits policy.
- planadviser and PLANSPONSOR magazines are the trusted information and solutions resource for America's retirement benefits decision makers.
- Spectrum has the ability to be an ERISA 3(21) Investment Advisor and 3(38) Investment Manager. A 3(21) Investment Advisor provides counsel and guidance, including one-on-one investment advice, but does not have discretion. A 3(38) Investment Manager is one that has been specifically appointed to have full discretionary authority and control to make investment decisions including the selection, monitoring and replacement of plan investment options.
- Spectrum may be compensated based on the assets in 401(k) plans, which Spectrum advises upon and, as such, may have a financial incentive to recommend employees' rollover their assets into those plans.

Important Disclosures

- Standardized returns assume reinvestment of dividends and capital gains. It depicts performance without adjusting for the effects of taxation or any applicable maximum sales charges but are adjusted to reflect ongoing fund expenses. If adjusted for taxation or maximum sales charges the performance quoted would be significantly reduced. The investment return and principal value of an investment will fluctuate thus an investor's shares when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein.
- Marshall's Spectrum Investing Concept® uses colors to communicate investments by helping identify asset classes and market cycles. It does not guarantee against loss.
- The performance quoted represents the reinvestment of dividends and capital gains, is net of expenses and does not reflect the maximum sales charge. Such a cost, if taken into consideration, will reduce the performance quoted.
- Investment scores are intended to help plan sponsors identify suitable products and are not meant to be predictive of future performance.
- Morningstar category averages and corresponding category index are used for benchmark comparisons. Category average performance is net of costs. One cannot invest directly in the category averages or indexes.
- Data has been received from sources believed reliable, but data cannot be guaranteed as to accuracy, completeness, or fitness for a particular purpose.
- This report is for informational purposes only and should not be construed as a recommendation or solicitation to buy or to sell any security, policy, or investment.
- Benchmark Disclosures: Morningstar Category Averages: Morningstar classifies mutual funds into peer groups based on their holdings. The Category Average calculates the average return of mutual funds that fall within the category during the given time period. The following indexes and their definitions provide an approximate description of the type of investments held by mutual funds in each respective Morningstar Category. One cannot invest directly in an index or category average. **10-Year Treasury Note** is a loan to the US government. Its yield is its rate of return and guides other interest rates. **90 day US T-Bill** – The total return of the benchmark 90-day US Treasury Bill. This figure is calculated by Morningstar using the average weekly auction rates for 90-day T-bills during the month. **Stable Value** – Stable value funds are capital preservation investment options available in 401(k) plans and other types of savings plans. They are invested in a high quality, diversified fixed income portfolio that are protected against interest rate volatility by contracts from banks and insurance companies. **Real Estate: DJ US Select REIT Index** – Measures the performance of publicly traded real estate trusts (REITs) and REIT-like securities to serve as proxy for direct real estate investment. **Large Cap Growth: S&P 500 Growth Index** – Measures the performance of growth stocks drawn from the S&P 500 index by dividing it into growth and value segments by using three factors: sales growth, the ratio of earnings change to price and momentum. **Intermediate-Term Bonds: Bloomberg Barclays US Agg Bond Index** – Measures the performance of investment grade, US dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS, ABS and CMBS. **Large Cap Blend: S&P 500 Index** – A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenue are based in the US.
- **Large Cap Value: S&P 500 Value Index** – Measures the performance of value stocks of the S&P 500 index by dividing into growth and value segments by using three factors: sales growth, the ratio of earnings change to price and momentum. **Mid Cap Value/Mid Cap Growth: S&P MidCap 400 Index** - A market cap weighted index that covers the complete market cap of the S&P 400 Index. All S&P 400 index stocks are represented in both and/or each Growth and Value index. **Mid Cap Blend: S&P MidCap 400 Index** – Measures the performance of mid-sized US companies, reflecting the distinctive risk and return characteristics of this market segment. **Small Cap Blend: Russell 2000 Index** – Measures the performance of the small-cap segment of the US equity universe. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. **Small Cap Value: Russell 2000 Value Index** – Measures the performance of small-cap value segment of Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values. **Small Cap Growth: Russell 2000 Growth Index** – Measures the performance of small-cap growth segment of Russell 2000 companies with higher price-to-value ratios and higher forecasted growth values. **S&P 1500 Composite Index** – Combines three leading indices, the S&P 500, the S&P MidCap 400 and the S&P SmallCap 600 to cover approximately 90% of the US market capitalization. **Foreign Large Cap Blend (International): MSCI EAFE NR Index** – This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-US, developed country indexes. **Health: S&P 1500 Health Care Index** – Measures the performance of health care (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Health Care (sector). **Natural Resources: S&P North American Natural Resources Index** – Measures the performance of US traded securities classified by the Global Industry Classification Standard (GICS) as energy and materials excluding the chemicals industry and steel but including energy companies, forestry services, producers of pulp and paper and plantations. **Equity Precious Metals: FTSE Gold Mines Index** – Measures the performance of the worldwide market in the shares of companies whose principal activity is the mining of gold.
- Information contained is not for public distribution.
- Availability of investments is subject to change.
- Investments in specialized industry sectors carry additional risks, which are outlined in the prospectus.
- Investing in mutual funds involves risk, including the possible loss of principal.
- Bonds are subject to default risk and interest rate risk. Bond values are subject to change in price as interest rates rise or fall.
- Small and mid-cap stocks are generally more volatile than large-cap stocks.
- Stock investing involves risk including loss of principal.
- Additional costs may include: contract charges, plan recordkeeping expenses, advisor costs and/or asset-based costs specific to qualified retirement plans.
- **Investors should consider the investment objectives, risks, charges and expenses of the investment company carefully before investing. The prospectus contains this and other important information about the investment company. You can obtain a prospectus from your financial representative or provider's website. Read carefully before investing.**



Spectrum Investor® Relative Risk and Performance (SIRRP) Score®

Investors have a challenging task of prudently selecting and monitoring the investment options made available to them. By utilizing a systematic process that provides investment fiduciaries with the tools they need to select, evaluate, and monitor funds in a prudent manner, the Spectrum Investor® Relative Risk and Performance (SIRRP) Score® can help make this task easier.

The SIRRP Score® is Spectrum Investment Advisors, Inc. proprietary mutual fund scoring system that is based on various quantitative measurements of a fund's risk and performance, while also including qualitative factors such as manager tenure and expenses. Using time-tested statistical theory, the system ranks each component relative to that of other funds in the same category. Collectively, the components are weighted and combined together to make a single scalable score representative of the fund's overall relative quality.

Investment Selection and Monitoring Simplified

A fiduciary's task of fund selection and monitoring is simplified by looking at the SIRRP Score® for each investment to help determine the quality of that investment relative to its category, and to the alternate fund options. The SIRRP Score® weighs risk more heavily to show the importance of volatility in long-term investing. In combination with the Morningstar® percentile rankings that Spectrum Investment Advisors Inc. has been using, which are solely performance based, the SIRRP Score® is a valuable complement to the Spectrum Investor® process.

While the advantage of the SIRRP Score® is that it is simple and easy to understand, the methodology that goes into arriving at the SIRRP Score® is built on complex investment principles, which help achieve fiduciary objectives. Below is a detailed explanation of how the SIRRP Score® works. By using long-term (10-year) measures and also weighting them more heavily than short-term measures, it is able to better focus on the fund's performance through multiple market cycles and helps prevent investors from making decisions based on short-term anomalies or results.

SIRRP Score® Methodology

The SIRRP Score® weighs risk at 50%, performance at 30% and qualitative factors at 20%. Each qualitative component is ranked on a 100-point scale using the arithmetic mean as the midpoint of all the funds in its Morningstar® Category. The best performing funds will be near one and the worst performing funds will be near 100. Scores of 30 or below are very suitable; 30-60 are acceptable and 60 or over are placed onto the watch list. All of the components are then weighted accordingly and summed together. This final number is ranked against all the funds in its Morningstar® Category and the percentile rank is the fund's SIRRP Score®.

All of the components (with exception to Management Tenure and Net Expense Ratio) are defined by three, five, and ten-year statistics. The SIRRP Score® places more weight on long-term results than short-term results. It weights three-year statistics at 30%, five-year at 30%, and ten-year at 40%. Funds with less than three-year track records are not included in the category. Funds that do not have a five- or ten-year track record are adjusted to account for the impact of short-term anomalies by reducing its weighted score.

Please refer to the chart below for the full depiction of the components and the SIRRP Score® methodology. Glossary definitions follow the description chart.

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Spectrum Investor® Relative Risk and Performance (SIRRP) Score®

Glossary of Terms

Risk Factors

Standard Deviation is a statistical measure of the volatility of the fund's return.

Beta is a measure of a fund's sensitivity to market movements. A portfolio with a beta greater than 1 is more volatile than the market, and a portfolio with a beta of less than 1 is less volatile than the market.

Up-Less-Down Capture: The Up Capture reflects how the investment has historically performed relative to the benchmark index in an Up market. Similarly, the Down Capture statistic measures the investments historical relative performance in Down Markets. The score measures Up Capture relative to Down Capture, giving a favorable score if Up Capture is greater than Down Capture.

Performance

Total Return reflects performance without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing fund expenses and assumes reinvestment of dividends and capital gains.

Qualitative Factors

Information Ratio measures a portfolio manager's ability to generate excess returns to a benchmark.

R-Squared reflects the percentage of a fund's movements that is explained by movements in its benchmark index, showing the degree of correlation between the fund and the benchmark. This figure is also helpful in assessing how likely it is that alpha and beta are statistically significant.

Alpha measures the difference between a fund's actual returns and its expected performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Manager Tenure is the length of time the lead manager or management team has been managing the fund.

Net Expense Ratio (prospectus net expense ratio) reflects actual expenses paid by the fund as well as any voluntary waivers, reductions from brokerage service arrangements and any other expense offset arrangements.