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& INVESTMENT GROUP

Presents:

RETIREMENT WELL-PLANNED

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- Chartered Retirement Planning Counselor®
- Certified Retirement Counselor®

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CRPC conferred by College for Financial Planning. CRC conferred by InFRE®

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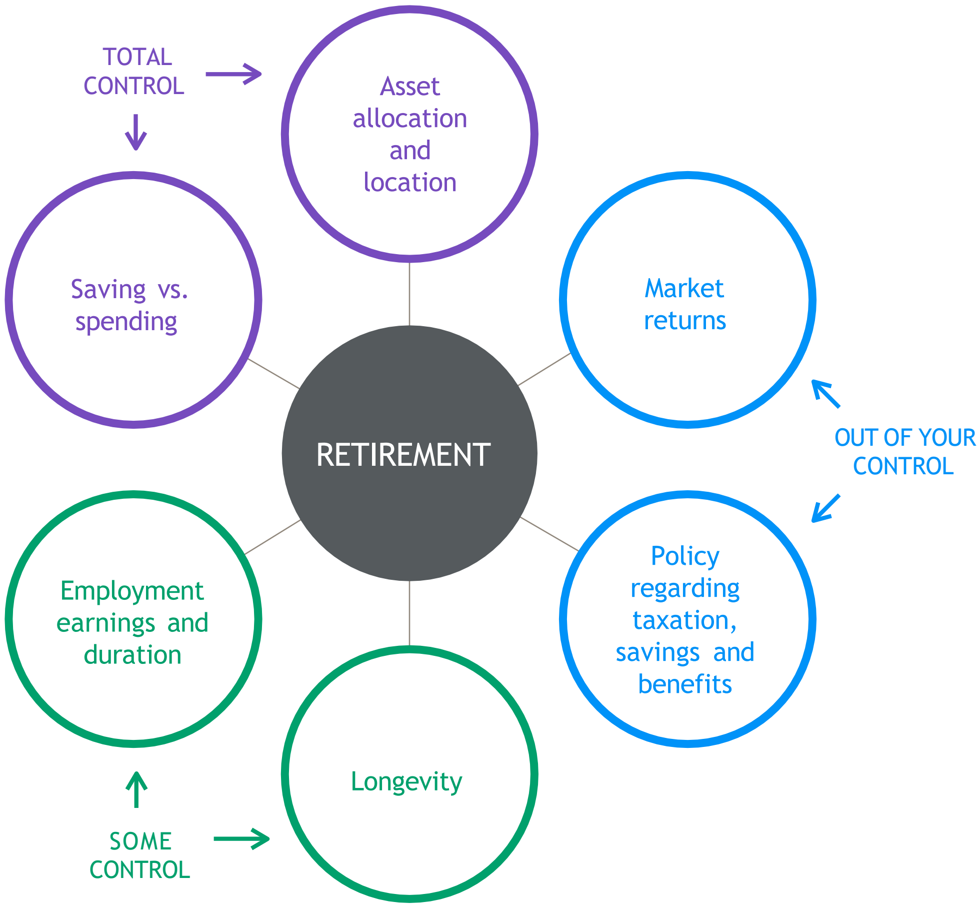
Retirement Well-Planned

What does retirement look like for you?

The retirement equation

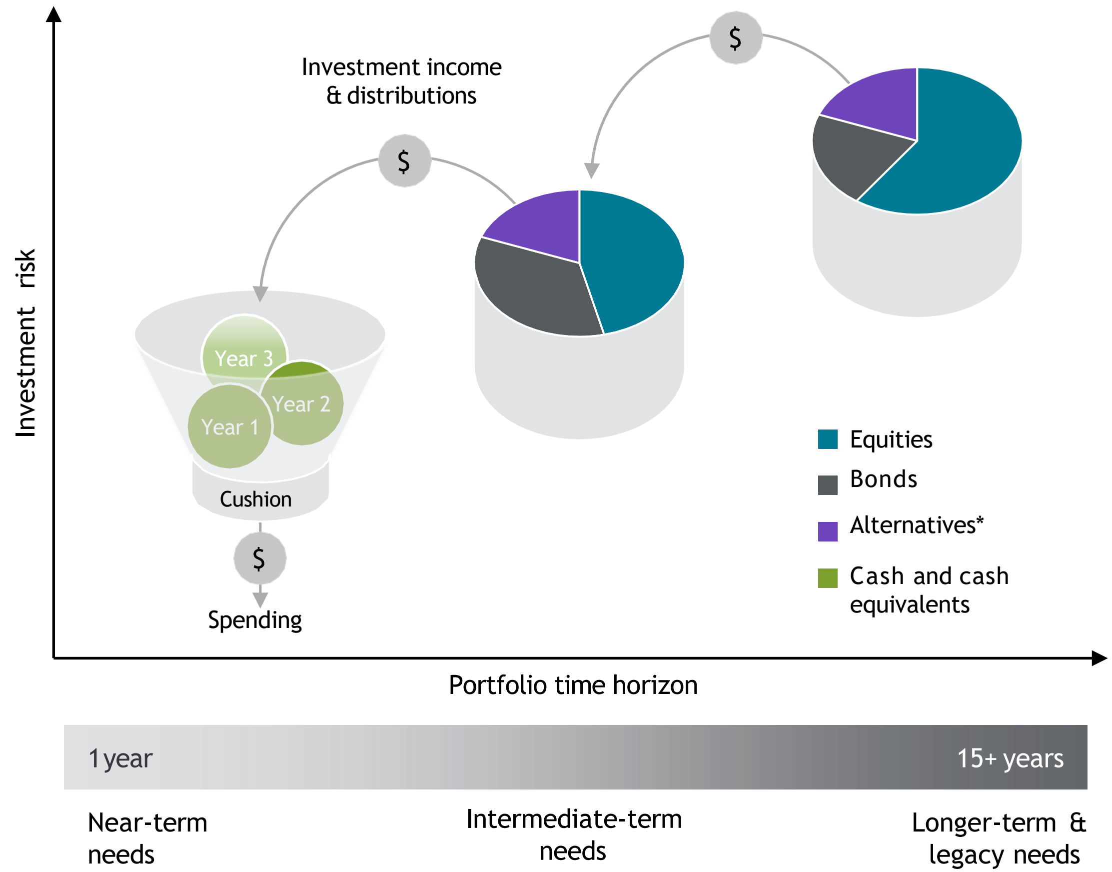


A sound retirement plan

Make the most of the things that you can control but be sure to evaluate factors that are somewhat or completely out of your control within your comprehensive retirement plan.

Source: The Importance of Being Earnest, J.P. Morgan Asset Management, 2013.

Structuring a portfolio in retirement: the bucket strategy



Time-based segmentation

Aligning your time horizon with an investment approach may help you to be more comfortable with maintaining diversified portfolio allocations in retirement.

For the near-term portfolio, consider maintaining:

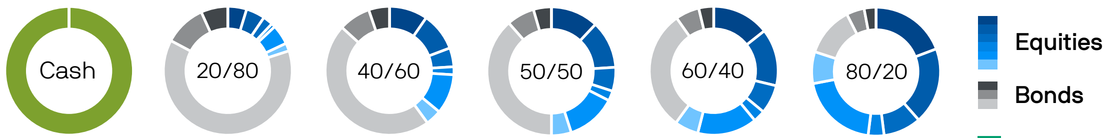
- Funds to cover 1-3 years worth of the gap between your income and spending needs
- A cushion for unexpected expenses

For illustrative purposes only. Source: J.P. Morgan Asset Management. Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. Equity securities are subject to stock market risk, meaning that stock prices in general may decline over short or extended periods of time. Investing in alternative assets involves higher risks than traditional investments and is suitable only for the long term. They are not tax efficient and have higher fees than traditional investments. They may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain.
*Equity, fixed income and cash are considered traditional asset classes. The term "alternative" describes all non-traditional asset classes. They include private and public equity, venture capital, hedge funds, real estate, commodities, distressed debt and more.

Effects of withdrawal rates and portfolio allocations

Likelihood of success after 35 years in retirement

Various initial withdrawal rates and diversified asset allocations



Initial withdrawal rate	Cash	20/80	40/60	50/50	60/40	80/20
1%	95-100	95-100	95-100	95-100	95-100	95-100
2%	95-100	95-100	95-100	95-100	95-100	95-100
3%	95-100	95-100	95-100	95-100	95-100	95-100
4%	0-5	90-95	90-95	90-95	90-95	90-95
5%	0-5	50-55	70-75	70-75	75-80	75-80
6%	0-5	10-15	35-40	45-50	50-55	55-60
7%	0-5	0-5	15-20	20-25	30-35	40-45
8%	0-5	0-5	0-5	5-10	15-20	25-30
9%	0-5	0-5	0-5	0-5	5-10	15-20
10%	0-5	0-5	0-5	0-5	0-5	5-10

Find your balance

At both the highest and the lowest confidence levels, you may want to consider adjusting your spending and/or asset allocation.

An overly conservative withdrawal rate may require unnecessary lifestyle sacrifices. While a more equity-heavy portfolio may lead to higher likelihoods of success, the magnitude of the failures may be greater due to increased volatility.

A well-diversified portfolio with a dynamic withdrawal strategy is typically optimal.

This chart is for illustrative purposes only and must not be used, or relied upon, to make investment decisions. Portfolios are described using equity/bonds. For asset allocation details, see "Model Portfolio Details" on the Disclosure page. J.P. Morgan Asset Management's (JPMAM) model is based on proprietary Long-Term Capital Market Assumptions equilibrium returns. The resulting projections include only the benchmark return associated with the portfolio and do not include alpha from the underlying product strategies within each asset class. The yearly withdrawal amount (1% to 10%) is set as a fixed percentage of the initial amount of $1,000,000 and is then inflation adjusted over the period (2.5%). The percentile outcomes represent the percentage of simulated results with an account balance greater than $0 after 35 years (e.g., "95-100" means that 95-100% of simulations had account balances greater than $0 after 35 years). Overlap percentiles are included in the lower bracket (e.g., 80 is included in "75-80"; 85 is included in "80-85"). Allocations, assumptions and expected returns are not meant to represent JPMAM performance. Given the complex risk/reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations. References to future returns for either asset allocation strategies or asset classes are not promises or even estimates of actual returns a client portfolio may achieve.

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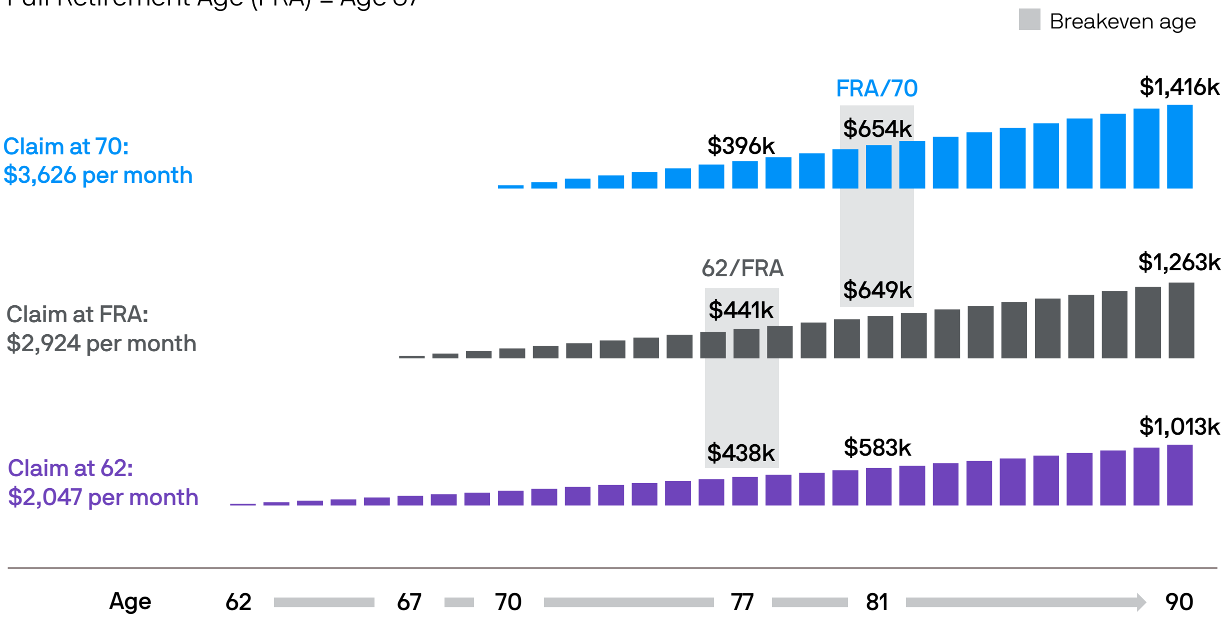
Maximizing Social Security benefits: average earner

Cumulative individual maximum benefit by claim age

Full Retirement Age (FRA) = Age 67



At age 62, probability of living to at least age:

	62	67	70	77	81	90
	100%	93%	87%	71%	58%	23%
	100%	96%	92%	80%	69%	34%
*	100%	99%	99%	94%	87%	49%

Planning opportunity

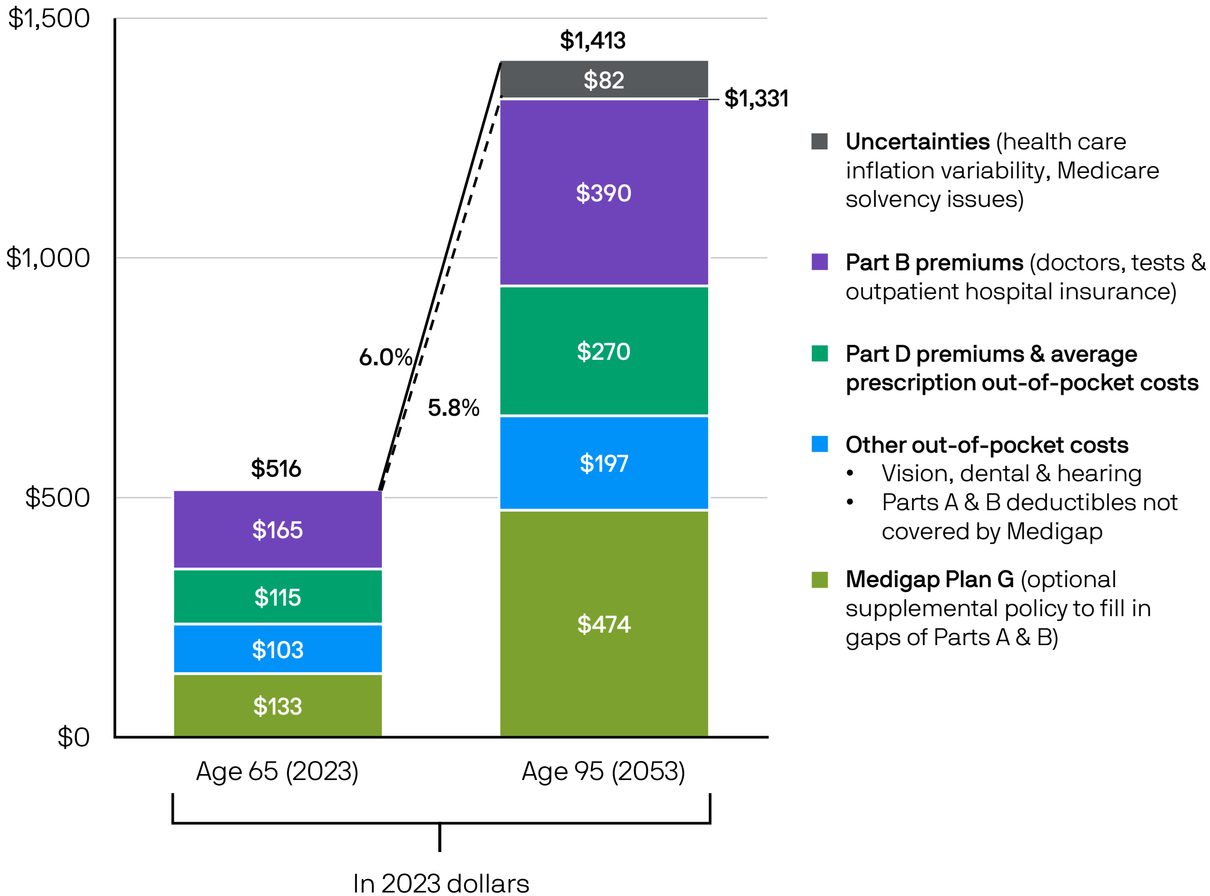
Delaying benefits means increased Social Security income later in life, but your portfolio may need to bridge the gap and provide income until delayed benefits are received.

Source: Social Security Administration, J.P. Morgan Asset Management.
*Couple assumes at least one lives to the specified age or beyond. Breakeven assumes the same individual, born in 1961, earns $81k in the year before retirement, retires at the end of age 61 and claims at 62 & 1 month, 67 and 70, respectively. Benefits are assumed to increase each year based on the Social Security Administration 2022 OASDI Trustee's Report intermediate estimates (annual benefit increase of 2.4% in 2024 and thereafter). Monthly amounts with the cost-of-living adjustments (not shown on the chart) are: $3,295 at FRA and $4,387 at age 70. Exact breakeven ages are 76 years & 9 months and 80 years & 7 months.

Rising health care costs in retirement

Original Medicare costs in retirement (in 2023 dollars)

Monthly amount per person



A growing concern

Annual expenses per person in 2023 are $6,192.

Given variation in health care cost inflation from year to year, it may be prudent to assume an annual health care inflation rate of 6.0%, which may require growth as well as current income from your portfolio in retirement.

Estimated future value total average monthly cost at age 95 is $2,965. Today's dollar calculation used a 2.5% discount rate to account for overall inflation. Medigap premiums typically increase with age, in addition to inflation, except for the following states: AR, CT, MA, ME, MN, NY, VT, WA. For local information, contact the State Health Insurance Assistance Program (SHIP) https://www.shiptacenter.org/. Plan G premium is nationwide average for non-smokers. If Plan G is not available, analysis includes the most comprehensive plan available.
Source: HealthView Services proprietary data file received January 2023 used by permission.

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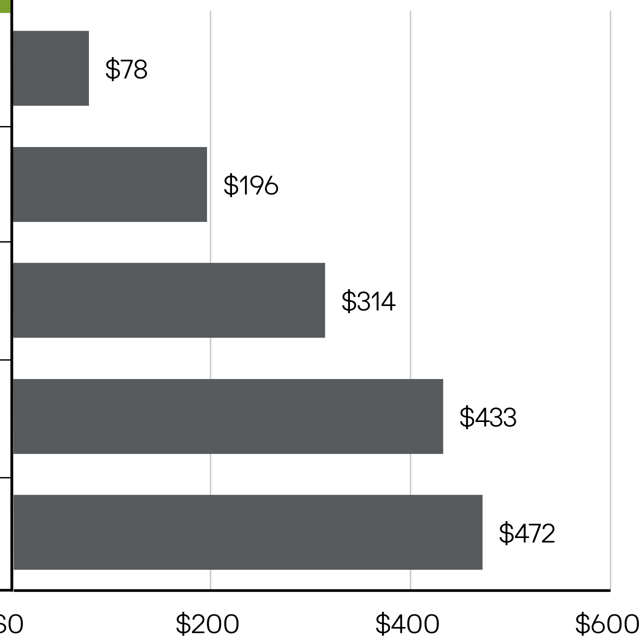
2023 monthly Medicare surcharges

The surcharge amount is the same for all income levels within a band

If you go over a threshold, you pay the additional premium for that band

Modified Adjusted Gross Income based on 2021 tax year filing[1]	
Filing single	Filing jointly
$97,001 - $123,000	$194,001 - $246,000
$123,001 - $153,000	$246,001 - $306,000
$153,001 - $183,000	$306,001 - $366,000
$183,001 - $499,999	$366,001 - $749,999
$500,000 or more	$750,000 or more

Additional monthly premium amount per person
Parts B & D in 2023



Surcharge details

There may be a bigger impact for singles and surviving spouses: Medicare surcharge thresholds for singles are half of the thresholds for couples.

Couples are less likely to be affected unless they have significant pensions, work or rental income.

Filing an appeal?
If you have stopped work or you have lower income due to circumstances outside of your control, you might be eligible for an appeal. See form SSA-44 for details: https://www.ssa.gov/forms/ssa-44-ext.pdf

[1]The Social Security Administration uses the most recent federal return supplied by the IRS. If you amended your return in a way that changes your surcharge amount, you may need to contact your Social Security office.
Source: Medicare.gov as of December 1, 2022.
This is not meant to be personal tax advice. Please consult your tax professional for specifics for your situation. Modified Adjusted Gross Income (MAGI) for purposes of calculating Medicare surcharges is Adjusted Gross Income (AGI) plus tax-exempt interest income. Thresholds increase each year with inflation starting in 2020, except the top threshold, which was added in 2019; this top threshold is set to annually inflate starting in 2028.

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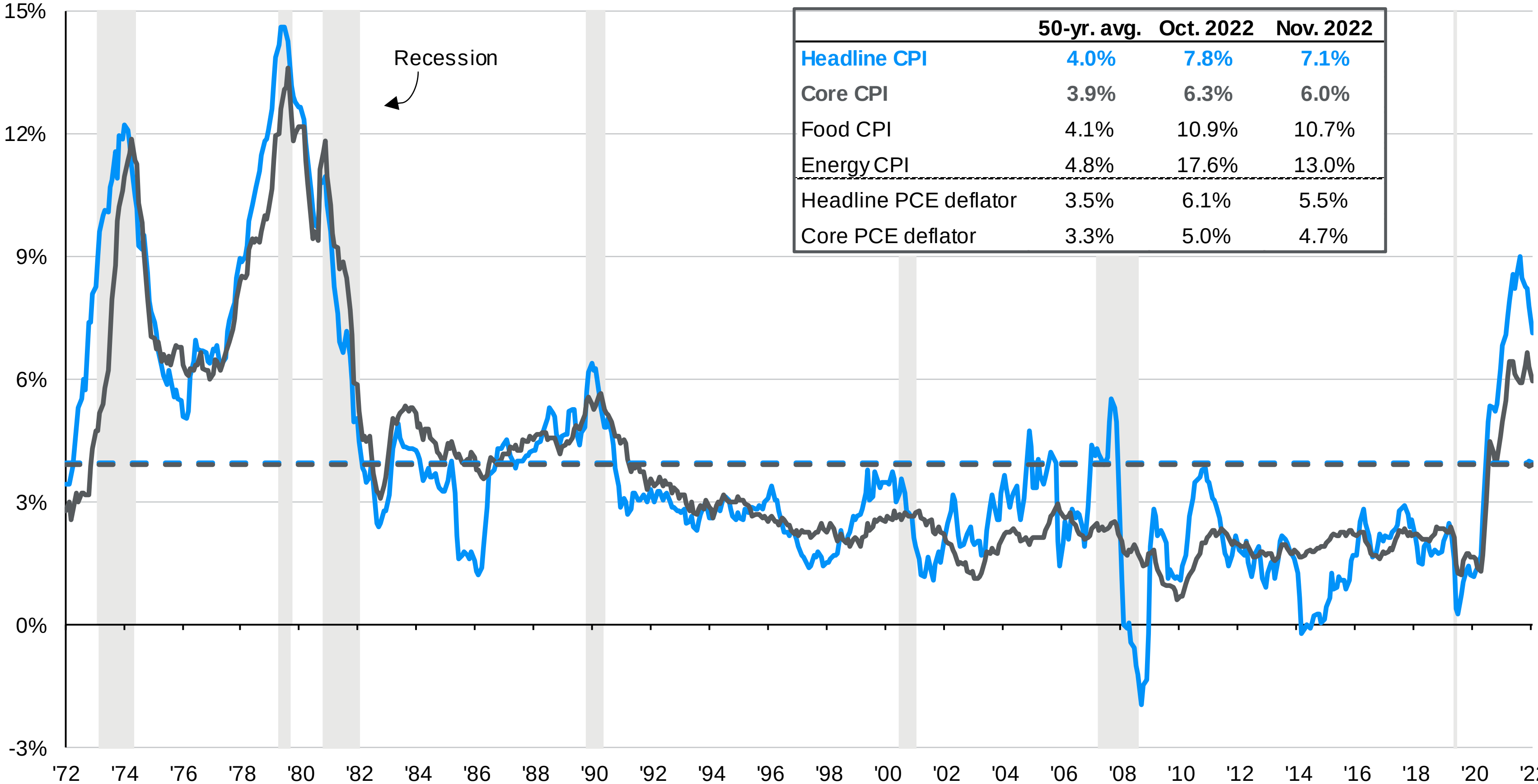
Economy

Inflation

CPI and core CPI

% change vs. prior year, seasonally adjusted



	50-yr. avg.	Oct. 2022	Nov. 2022
Headline CPI	4.0%	7.8%	7.1%
Core CPI	3.9%	6.3%	6.0%
Food CPI	4.1%	10.9%	10.7%
Energy CPI	4.8%	17.6%	13.0%
Headline PCE deflator	3.5%	6.1%	5.5%
Core PCE deflator	3.3%	5.0%	4.7%

Source: BLS, FactSet, J.P. Morgan Asset Management.
CPI used is CPI-U and values shown are % change vs. one year ago. Core CPI is defined as CPI excluding food and energy prices. The Personal Consumption Expenditure (PCE) deflator employs an evolving chain-weighted basket of consumer expenditures instead of the fixed-weight basket used in CPI calculations.
Guide to the Markets – U.S. Data are as of December 31, 2022.

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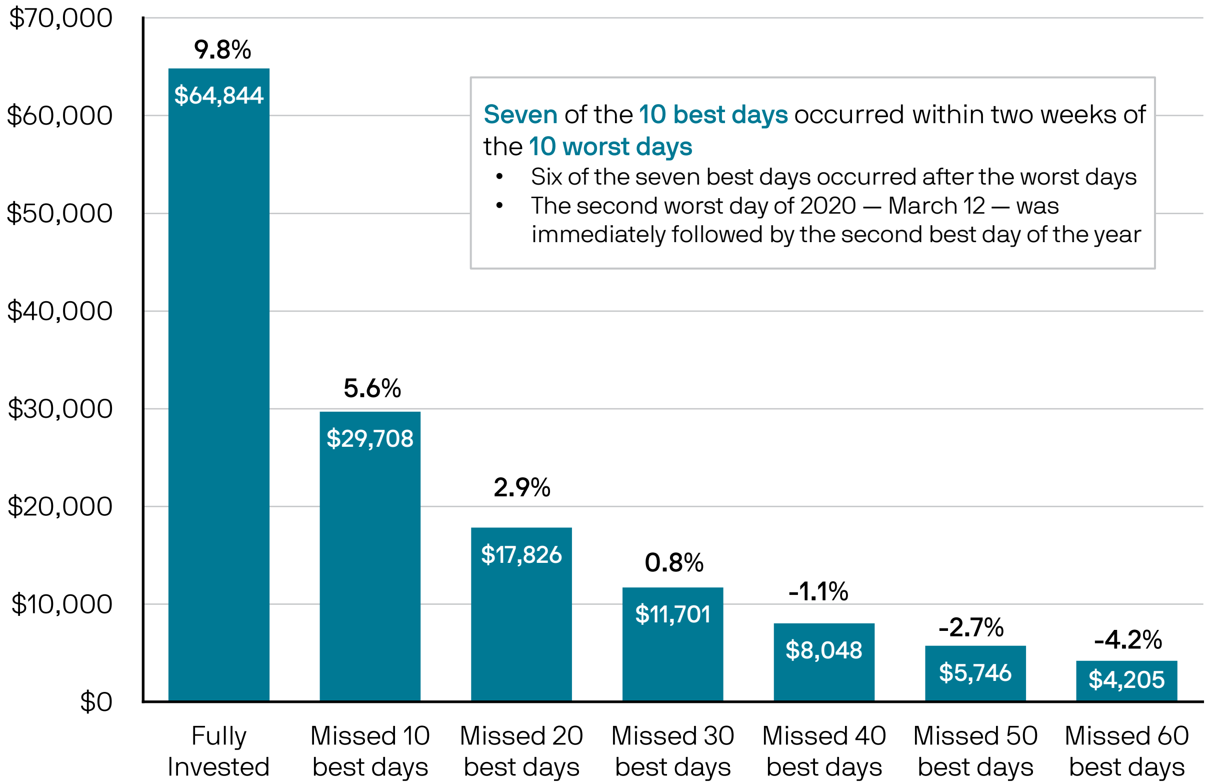
Impact of being out of the market

Returns of the S&P 500

Performance of a $10,000 investment between January 1, 2003 and December 30, 2022

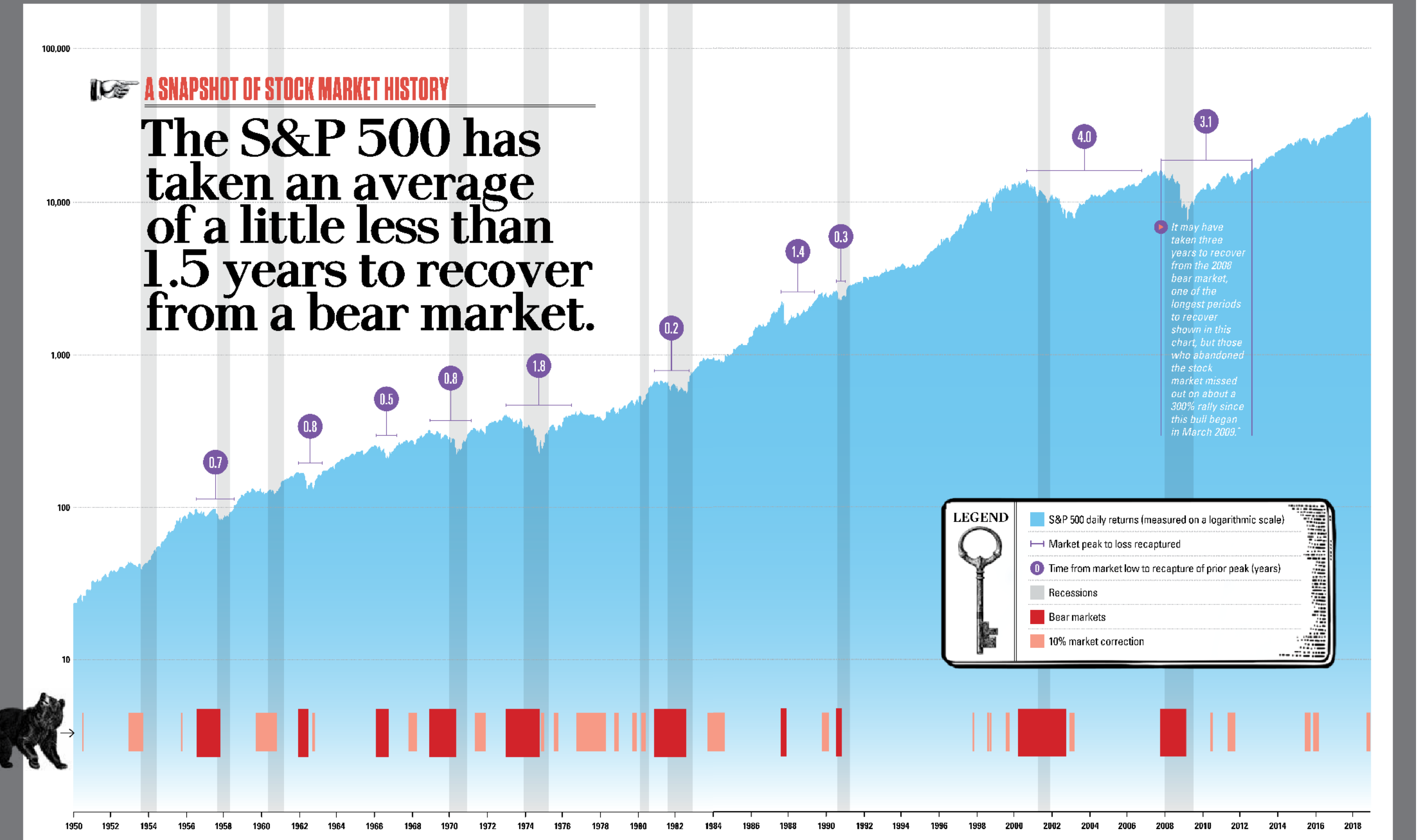


Plan to stay invested

Losses hurt more than gains feel good. Market lows can result in emotional decision making.

Taking “control” by selling out of the market after the worst days is likely to result in missing the best days that follow. Investing for the long term in a well-diversified portfolio can result in a better retirement outcome.

Source: J.P. Morgan Asset Management analysis using data from Bloomberg. Returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Indices do not include fees or operating expenses and are not available for actual investment. The hypothetical performance calculations are shown for illustrative purposes only and are not meant to be representative of actual results while investing over the time periods shown. The hypothetical performance calculations are shown gross of fees. If fees were included, returns would be lower. Hypothetical performance returns reflect the reinvestment of all dividends. The hypothetical performance results have certain inherent limitations. Unlike an actual performance record, they do not reflect actual trading, liquidity constraints, fees and other costs. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact of certain market factors such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. Returns will fluctuate and an investment upon redemption may be worth more or less than its original value. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2022.



*As of November 30, 2018, the S&P 500 is up 308% cumulatively since March 9, 2009.

https://www.lpl.com/content/dam/lpl-www/documents/outlook-2019.pdf

Feast or Famine

S&P 500® Index Stats Since 1926	
Total Years (1926-2021):	96
Positive Years	71 yrs (74%)
Negative Years	25 yrs (26%)
# of Years Gains >20%:	36 yrs
# of Years Losses <20%:	6 yrs

S&P 500® Average Annual Return: 10.5%

The S&P 500® Index has grown at its average annual rate in only 6 years since 1926

Worse than -20%

2008	-37.0%
2002	-22.1%
1974	-26.5%
1937	-35.0%
1931	-43.3%
1930	-24.9%

-20% to -12%

1973	-14.7%

-12% to -8%

2001	-11.9%
2000	-9.1%
1969	-8.5%
1966	-10.1%
1962	-8.7%
1957	-10.8%
1946	-8.1%
1941	-11.6%
1940	-9.8%
1932	-8.2%
1929	-8.4%

-8% to 0%

2018	-4.4%
1990	-3.2%
1981	-4.9%
1977	-7.2%
1953	-1.0%
1939	-0.4%
1934	-1.4%

0% to 8%

2015	1.4%
2011	2.1%
2007	5.5%
2005	4.9%
1994	1.3%
1992	7.7%
1987	5.2%
1984	6.3%
1978	6.6%
1970	4.0%
1960	0.5%
1956	6.6%
1948	5.5%
1947	5.7%

8% to 12%

2016	**12.0%**
2004	**10.9%**
1993	**10.0%**
1968	**11.1%**
1959	**12.0%**
1926	**11.6%**

12% to 20%

2020	18.4%
2014	13.7%
2012	16.0%
2010	15.1%
2006	15.8%
1988	16.8%
1986	18.5%
1979	18.4%
1972	19.0%
1971	14.3%
1965	12.5%
1964	16.5%
1952	18.4%
1949	18.8%
1944	19.8%

More than 20%

2021	28.7%
2019	31.5%
2017	21.8%
2013	32.4%
2009	26.5%
2003	28.7%
1999	21.0%
1998	28.6%
1997	33.4%
1996	23.1%
1995	37.4%
1991	30.5%
1989	31.5%
1985	32.2%
1983	22.5%
1982	21.4%
1980	32.4%
1976	23.8%
1975	37.2%
1967	24.0%
1963	22.8%
1961	26.9%
1958	43.4%
1955	31.6%
1954	52.6%
1951	24.0%
1950	31.7%
1945	36.4%
1943	25.9%
1942	20.3%
1938	31.1%
1936	33.9%
1935	47.7%
1933	54.0%
1928	43.6%
1927	37.5%

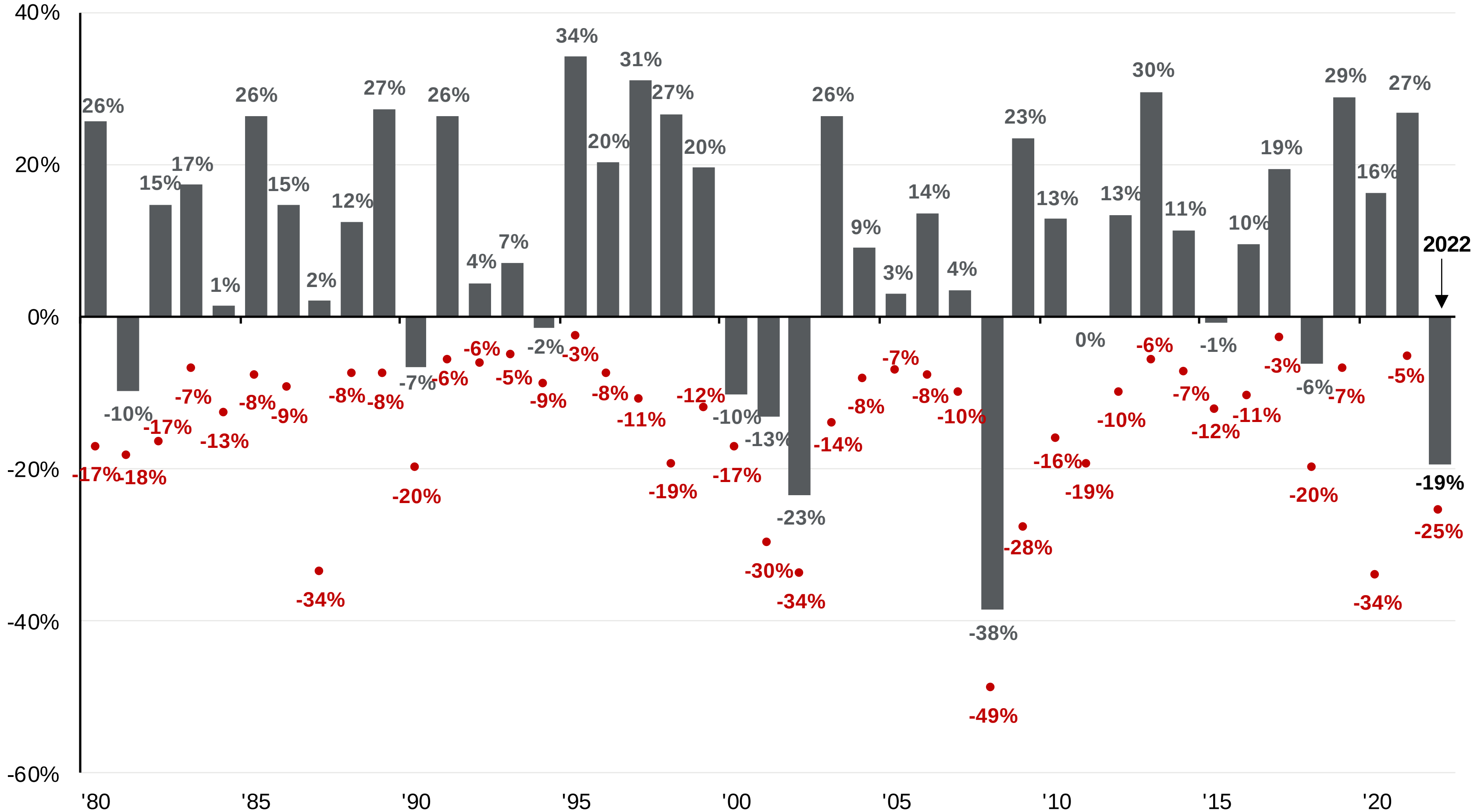
Source: FactSet, S&P Dow Jones Indices. Data calculated from 1926-2021 using total return.
Past performance is no guarantee of future results.

Equities

Annual returns and intra-year declines

S&P intra-year declines vs. calendar year returns

Despite average intra-year drops of 14.3%, annual returns were positive in 32 of 43 years



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.
Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2022, over which time period the average annual return was 8.7%.
Guide to the Markets – U.S. Data are as of December 31, 2022.

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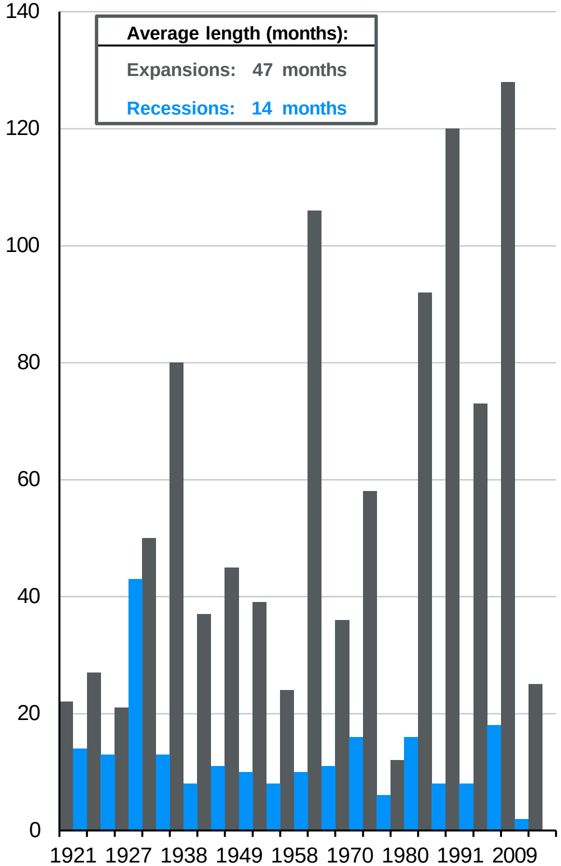
U.S. expansions and recessions

Economy

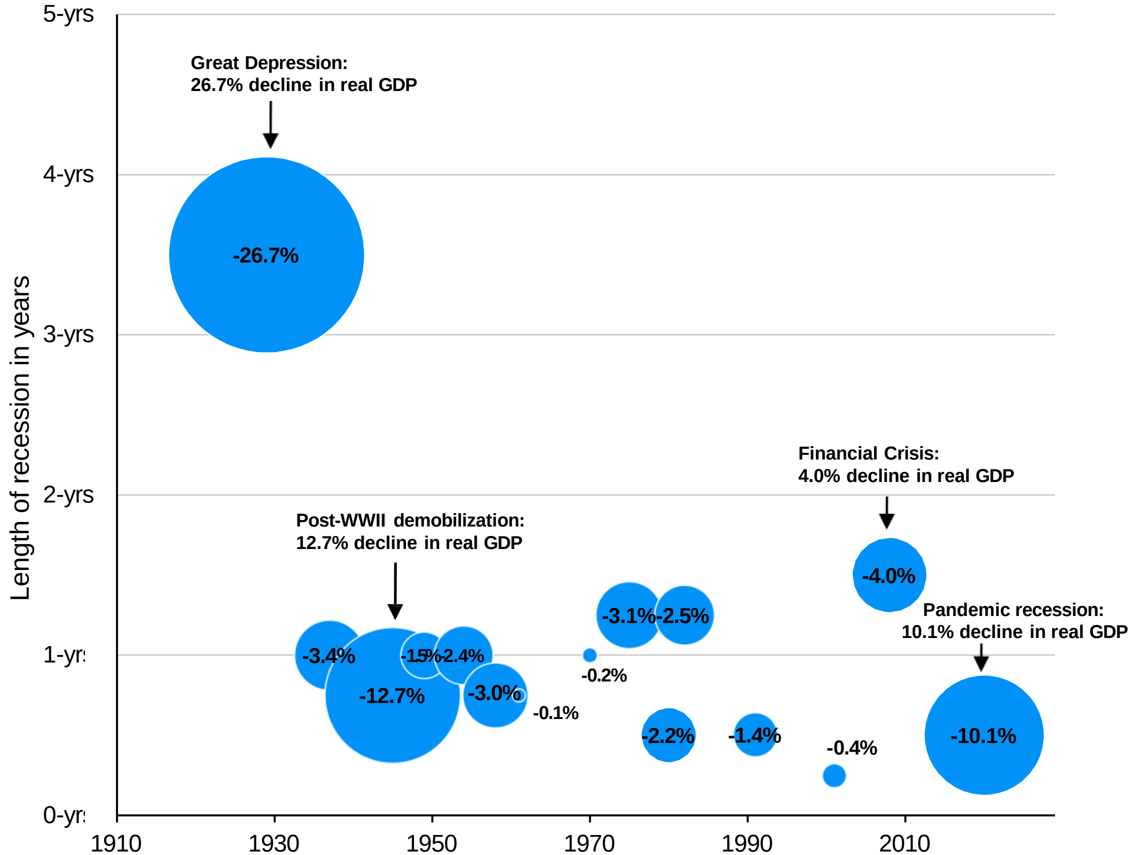
Length of expansions and recessions

Months



The Great Depression and post-war recessions

Length and severity of recession



Source: BEA, NBER, J.P. Morgan Asset Management.
Left-hand chart assumes the current expansion lasted until at least June 2022. Bubble size reflects the severity of the recession, which is calculated as the decline in real GDP from the peak quarter to the trough quarter except in the case of the Great Depression, where it is calculated from the peak year (1929) to the trough year (1933), due to a lack of available quarterly data. Data for length of economic expansions and recessions obtained from the National Bureau of Economic Research (NBER). Past performance is not a reliable indicator of current and future results.
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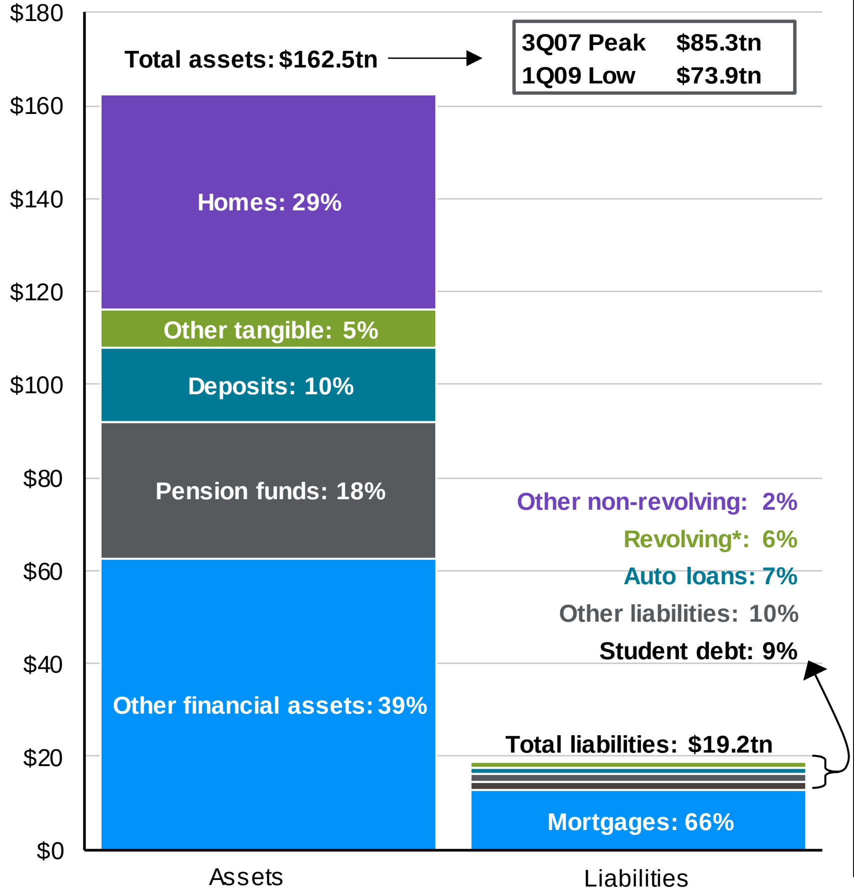
Consumer finances

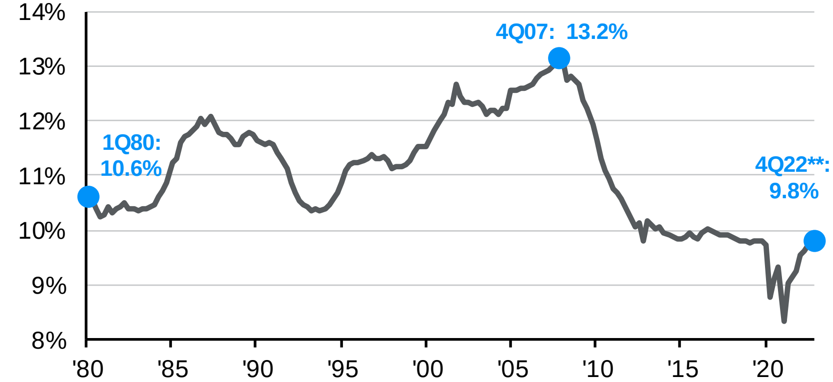
Consumer balance sheet

3Q22, trillions of dollars outstanding, not seasonally adjusted



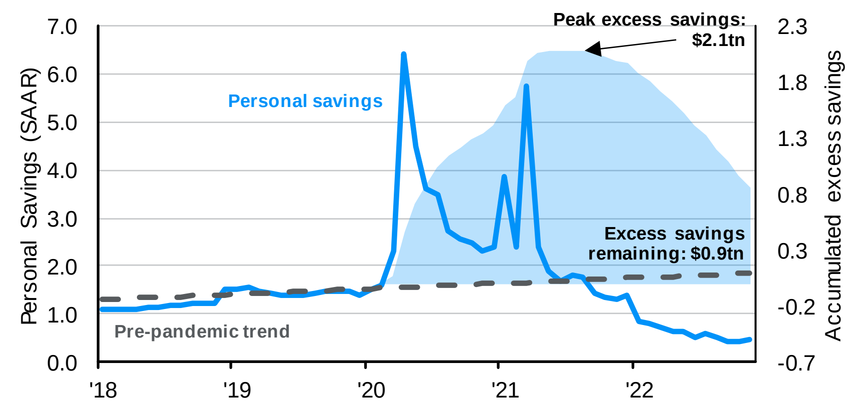
Household debt service ratio

Debt payments as % of disposable personal income, SA



Household excess savings

Trillions of USD



Source: FactSet, FRB, J.P. Morgan Asset Management; (Top and bottom right) BEA.
Data include households and nonprofit organizations. SA – seasonally adjusted. *Revolving includes credit cards. Values may not sum to 100% due to rounding. **4Q22 figures for debt service ratio are J.P. Morgan Asset Management estimates. From March 2020 to August 2021, consumers amassed a peak $2.1 trillion in excess savings relative to the pre-pandemic trend. Since August 2021, consumers have drawn down on those excess savings, with the remaining reflected in the chart annotation.
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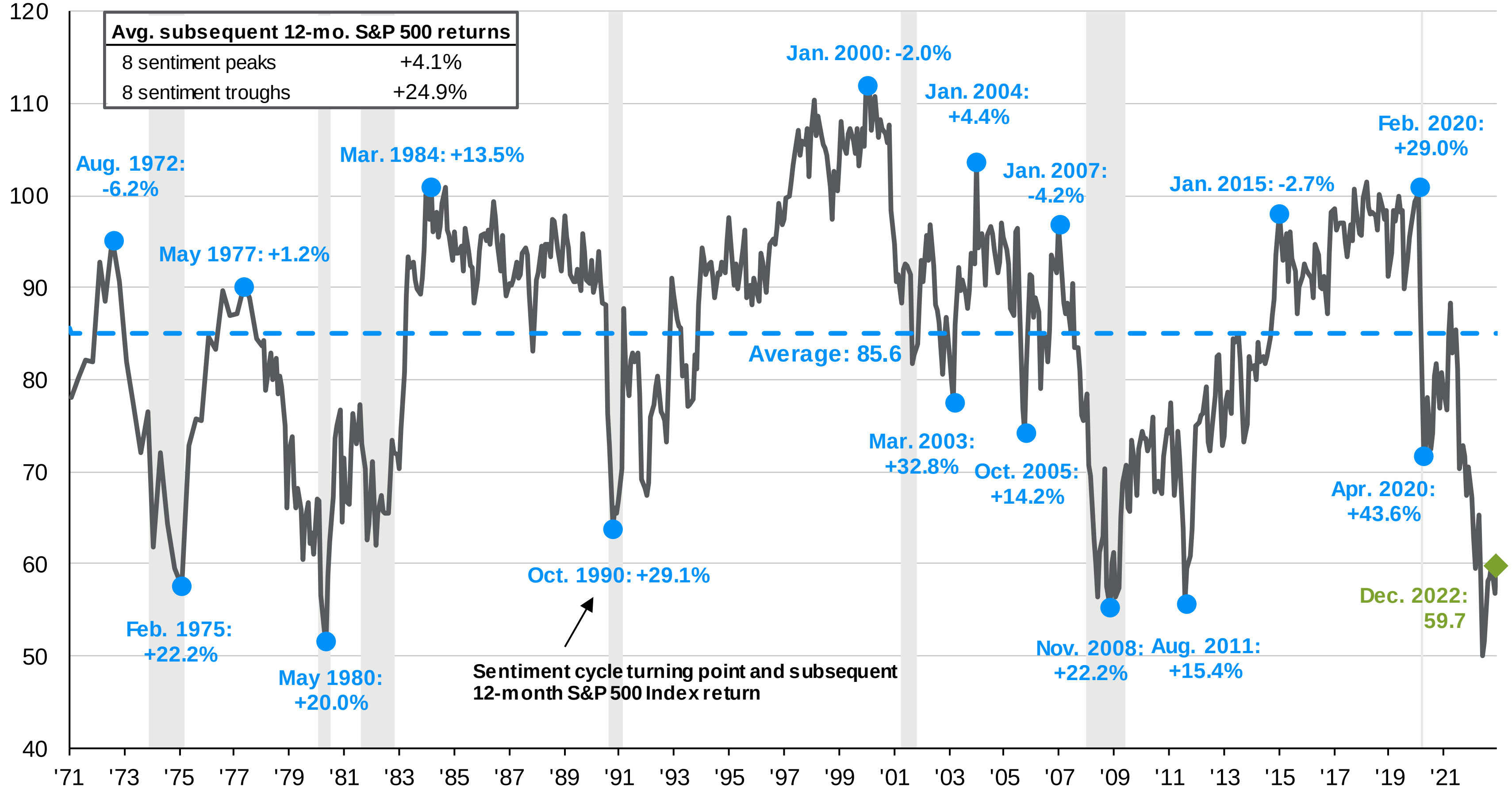
Economy

Consumer confidence and the stock market

Consumer Sentiment Index and subsequent 12-month S&P 500 returns

Avg. subsequent 12-mo. S&P 500 returns	
8 sentiment peaks	+4.1%
8 sentiment troughs	+24.9%



Source: FactSet, Standard & Poor's, University of Michigan, J.P. Morgan Asset Management.
Peak is defined as the highest index value before a series of lower lows, while a trough is defined as the lowest index value before a series of higher highs. Subsequent 12-month S&P 500 returns are price returns only, which excludes dividends. Past performance is not a reliable indicator of current and future results.
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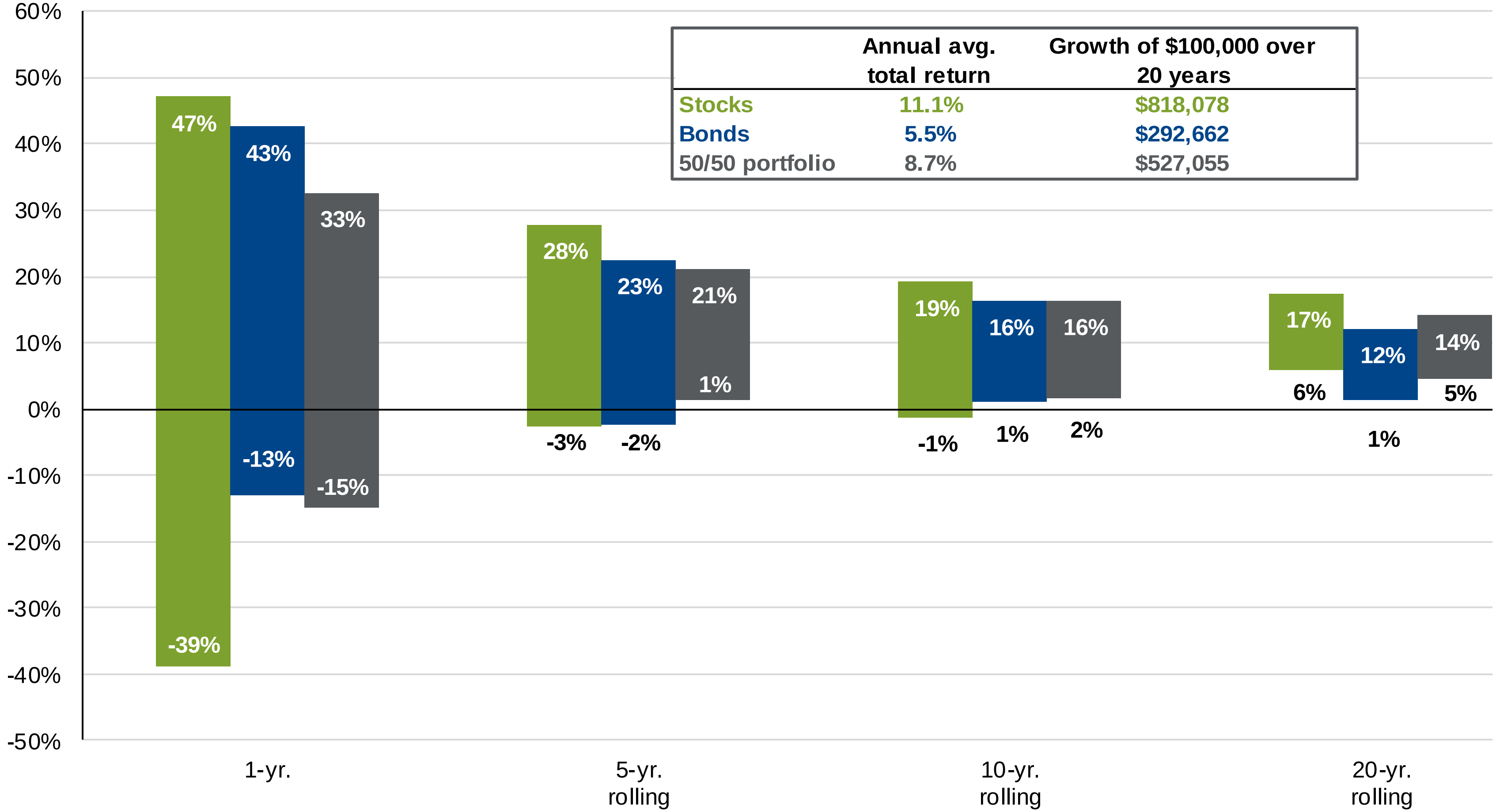
Time, diversification and the volatility of returns

Range of stock, bond and blended total returns

Annual total returns, 1950-2022



	Annual avg. total return	Growth of $100,000 over 20 years
Stocks	11.1%	$818,078
Bonds	5.5%	$292,662
50/50 portfolio	8.7%	$527,055

Source: Bloomberg, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management.
Returns shown are based on calendar year returns from 1950 to 2021. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Bloomberg Aggregate thereafter. Growth of $100,000 is based on annual average total returns from 1950 to 2022.
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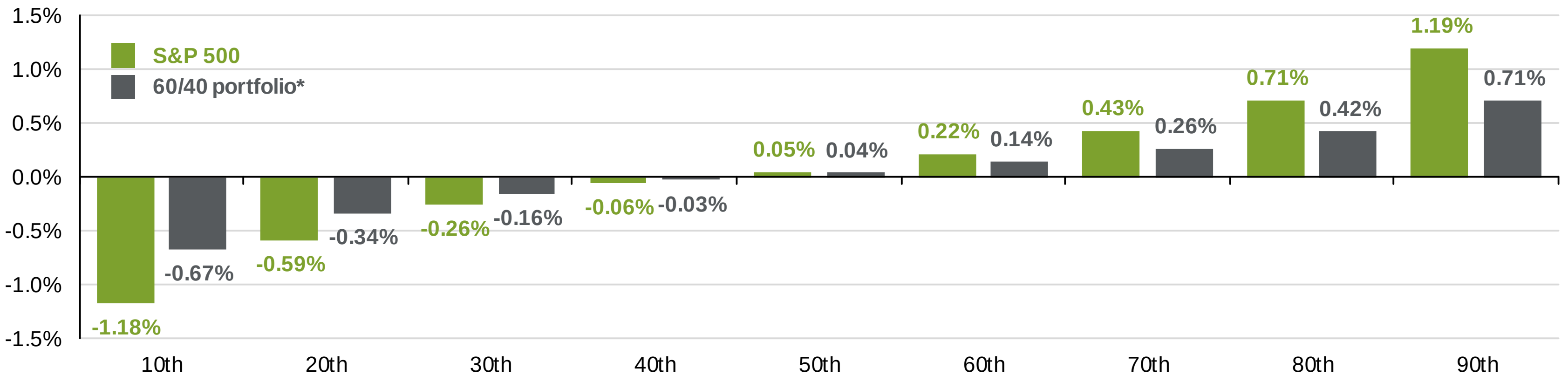
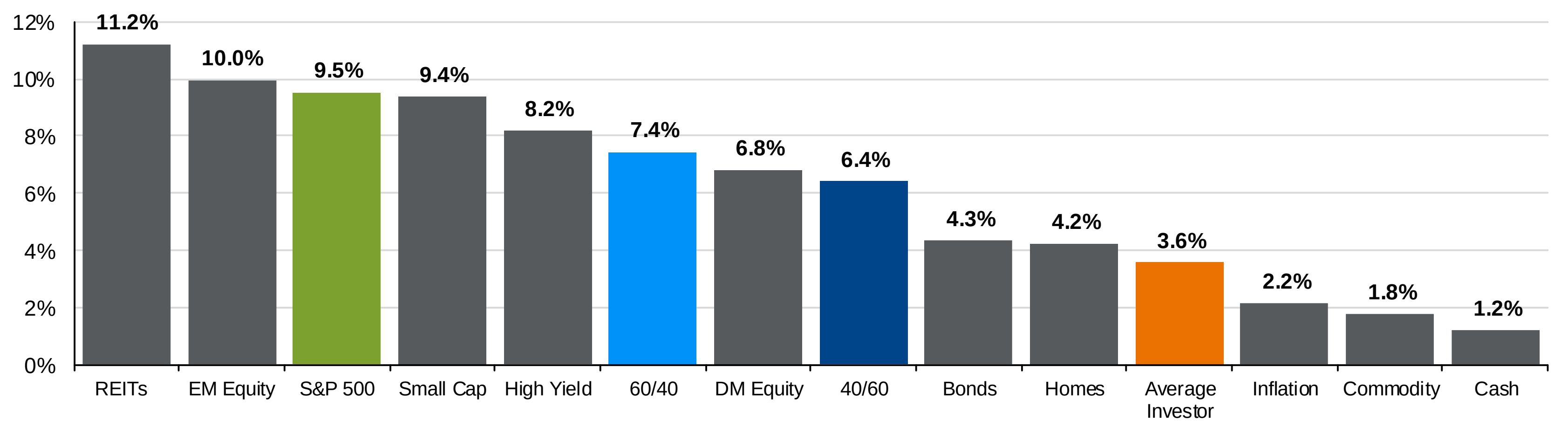
Diversification and the average investor

Equities vs. 60/40 portfolio: Last 20 years' daily market performance by decile



20-year annualized returns by asset class (2002 – 2021)



Source: Bloomberg, FactSet, Standard & Poor's, J.P. Morgan Asset Management; (Bottom) Dalbar Inc, MSCI, NAREIT, Russell.
Indices used are as follows: REITs: NAREIT Equity REIT Index, Small Cap: Russell 2000, EM Equity: MSCI EM, DM Equity: MSCI EAFE, Commodity: Bloomberg Commodity Index, High Yield: Bloomberg Global HY Index, Bonds: Bloomberg U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Cash: Bloomberg 1-3m Treasury, Inflation: CPI. *60/40: A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high-quality U.S. fixed income, represented by the Bloomberg U.S. Aggregate Index. The portfolio is rebalanced annually. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior.
Guide to the Markets – U.S. Data are as of June 30, 2022.

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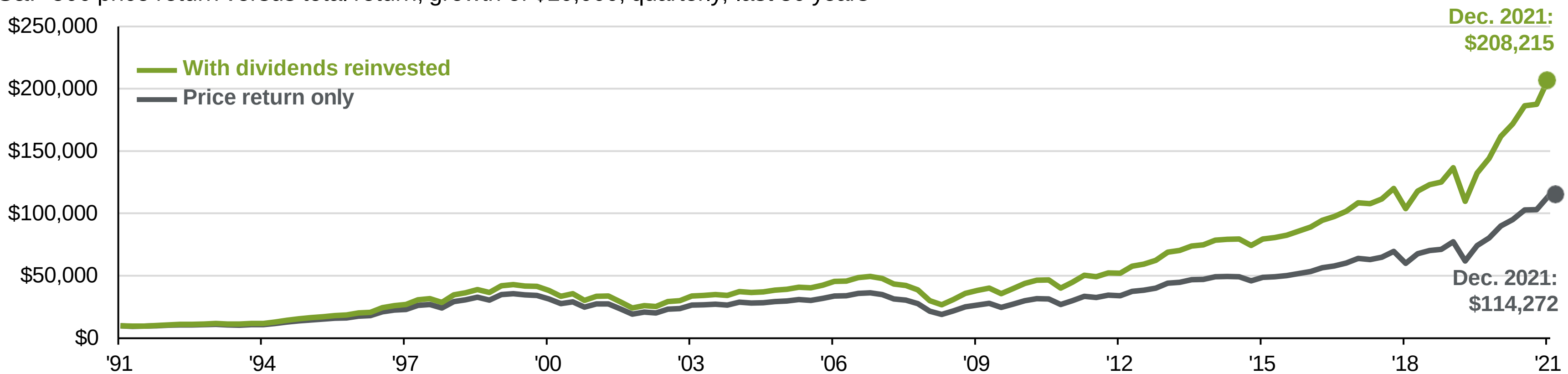
Investing Principles

3 – Harness the power of dividends and compounding

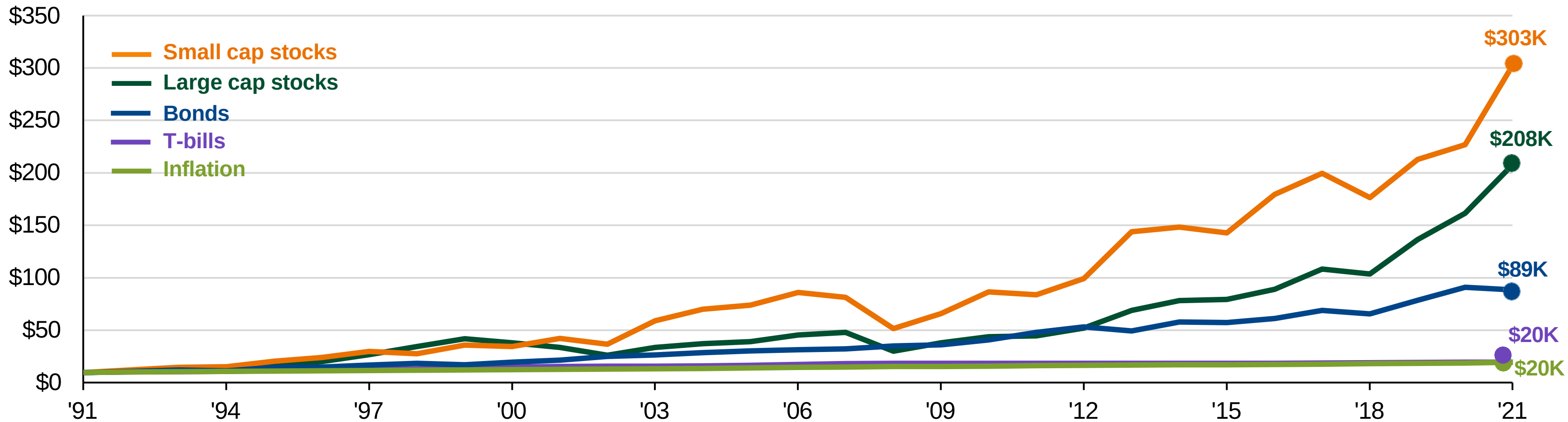
The power of compounding

S&P 500 price return versus total return, growth of $10,000, quarterly, last 30 years



Major asset classes versus inflation

Growth of $10,000 from 1992-2021, annual, USD thousands



Source: Ibbotson, Standard & Poor's, J.P. Morgan Asset Management.
Guide to the Markets – U.S. Data are as of December 31, 2021.

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Investing Principles

Traditional IRAs vs. Roth IRAs: 2022/2023

	Traditional IRA	Roth IRA
Maximum contribution 2023	• $6,500 (earned income) • $7,500 (age 50 and over)[1] • Reduced by Roth IRA contributions	• $6,500 (earned income) • $7,500 (age 50 and over)[1] • Reduced by Traditional IRA contributions
Tax-deductibility income limits (Traditional IRA) and contribution income limits (Roth IRA)	If you or your spouse is covered by a retirement plan at work, tax deductibility of contributions phases out at these income levels: **2022** Single: $68,000-$78,000[2] Married: $109,000-$129,000[2] **2023** Single: $73,000-$83,000[2] Married: $116,000-$136,000[2]	Contributions are non-deductible; employer plan coverage does not change the contribution phase-out limits: **2022** Single: $129,000-$144,000 Married: $204,000-$214,000 **2023** Single: $138,000-$153,000 Married: $218,000-$228,000
Federal tax treatment	• Investment growth is tax deferred and contributions may be tax deductible. Deductible contributions and investment gains are taxed as ordinary income upon withdrawal. • If non-deductible contributions have been made, each withdrawal is taxed proportionately on a pro-rata basis, taking into consideration all contributions made to all Traditional IRAs owned.	• Taxes are due upon conversion of account balances not yet taxed. • Qualified withdrawals of contributions at any time are tax free and IRS penalty free; converted amounts may be withdrawn tax free.[3] • Qualified withdrawals of earnings are tax free and IRS penalty free if taken after five years have passed since the account was initially funded and the account owner is age 59½ or older (other exceptions may be applicable). • Multiple Roth IRAs are considered one Roth IRA for withdrawal purposes and distributions MUST be withdrawn in a specific order deemed by the IRS that applies regardless of which Roth IRA is used to take that distribution.
Early withdrawals	Early withdrawals before age 59½ are generally subject to a 10% IRS penalty unless certain exceptions apply.	
Mandatory withdrawals	By April 1 of the year after one's RMD age: 70½ for those born prior to July 1, 1949; 72-75 for those born after July 1, 1949 (see slide 11).	None for account owner
Deadline to contribute	**2022:** April 15, 2023 **2023:** April 18, 2024	**2022:** April 15, 2023 **2023:** April 18, 2024

[1]Must be age 50 or older by December 31 of the contribution year. IRS Publication 590.
[2]Assumes participation in an employer's retirement plan. No income limits apply when investors and spouses are not covered by a retirement plan at work. Income limits based on Modified AGI (Adjusted Gross Income less certain deductions). Use Worksheet 1-1 in IRS Publication 590-A or consult your tax professional.
[3]Distributions from a conversion amount must satisfy a five-year investment period to avoid the 10% penalty. This pertains only to the conversion amount that was treated as income for tax purposes. The presenter of this slide is not a tax or legal professional. Clients should consult a personal tax or legal professional prior to making any tax- or legal-related investment decisions. IRS Publication 590.
Source: IRS.gov; IRS Notice 2022-55.

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Reference

Retirement plan contribution and deferral limits: 2022/2023

Type of Retirement Account	Specifics	2022	2023
401(k), 403(b), 457(b)	401(k) elective deferral limit/with catch-up contribution (age 50 and over)	$20,500/$27,000	$22,500/$30,000
	Annual defined contribution limit	$61,000	$66,000
	Annual compensation limit	$305,000	$330,000
	Highly compensated employee threshold	$135,000	$150,000
	403(b)/457 elective deferrals/with catch-up contribution (age 50 and over)	$20,500/$27,000	$22,500/$30,000
SIMPLE IRA	SIMPLE employee deferrals/with catch-up deferral (age 50 and over)[1]	$14,000/$17,000	$15,500/$19,000
SEP IRA	Maximum contribution[2]	$61,000	$66,000
	SEP minimum compensation	$650	$750
	SEP annual compensation limit	$305,000	$330,000
Health Savings Account (HSA)	Maximum contribution amount/with catch-up contribution (age 55 and over)	**Single:** $3,650/$4,650 **Family:** $7,300/$8,300	**Single:** $3,850/$4,850 **Family:** $7,750/$8,750
	Minimum deductible	**Single:** $1,400 **Family:** $2,800	**Single:** $1,500 **Family:** $3,000
	Maximum out-of-pocket expenses	**Single:** $7,050 **Family:** $14,100	**Single:** $7,500 **Family:** $15,000
Social Security	Wage base	$147,000	$160,200
	Maximum earnings test exempt amounts[3]	$19,560/year (before FRA*) $51,960/year (in year of FRA*)	$21,240/year (before FRA*) $56,520/year (in year of FRA*)
	Maximum Social Security benefit at FRA*	$3,568/month	$3,808/month
Defined benefit – Maximum annual benefit at retirement		$245,000	$265,000

*FRA is Full Retirement Age for Social Security. Assumes FRA at age 67. Maximum benefit if FRA is age 66: $3,240/month in 2022 and $3,506/month in 2023.
[1]Employer may either match employee's salary reduction contributions dollar for dollar up to 3% of employee's compensation or make non-elective contributions equal to 2% of compensation up to the annual compensation limit. IRS Publication 560.
[2]Employer contributions may not exceed the annual defined contribution limit or 25% of compensation. Other rules apply for self-employed individuals. IRS Publication 560.
[3]In calendar years before FRA, benefit reduced $1 for every $2 of earned income above the limit; during year of FRA, benefit reduced $1 for every $3 of earned income in months prior to FRA.
Source: IRS.gov; IRS Notice 2022-55; IRS Notice 2022-24; SSA.gov; Social Security Administration Fact Sheet: 2023 Social Security changes.

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A closer look at tax rates: 2023

Federal income tax rates applicable to taxable income

<table>
<tr><th>Tax rate</th><th>Single filers</th><th>Married filing jointly</th><th>Capital gains & dividends</th><th>Medicare tax on earned income</th><th>Medicare tax on investment income</th><th>Limits to itemized deductions</th></tr>
<tr><td>10%</td><td>Up to $11,000</td><td>Up to $22,000</td><td rowspan="2">0%
up to $44,625 (single) / $89,250 (married)</td><td rowspan="5">1.45% (employee portion, employers also pay 1.45%)</td><td rowspan="5">0%</td><td rowspan="7">-Medical expenses greater than 7.5% of AGI deductible
-SALT (state and local taxes) deduction capped at $10,000
-Mortgage interest deduction limited to primary/secondary homes with up to $750,000 new debt. Deduction is allowed on new home equity debt that is used to repair, build or improve upon home
-Cash charitable gifts deductible up to 60% of AGI</td></tr>
<tr><td>12%</td><td>$11,000-$44,725</td><td>$22,000-$89,450</td></tr>
<tr><td>22%</td><td>$44,725-$95,375</td><td>$89,450-$190,750</td><td rowspan="4">15%
up to $492,300 (single) / $553,850 (married)</td></tr>
<tr><td>24%</td><td>$95,375-$182,100</td><td>$190,750-$364,200</td></tr>
<tr><td>32%</td><td>$182,100-$231,250</td><td>$364,200-$462,500</td></tr>
<tr><td>35%</td><td>$231,250-$578,125</td><td>$462,500-$693,750</td><td rowspan="2">2.35% (includes 1.45% employee tax referenced above plus additional 0.90% tax for earned income above MAGI* $200,000/$250,000 threshold)</td><td rowspan="2">3.80% (additional tax will be levied on lesser of i) net investment income or ii) excess MAGI above $200,000/$250,000 threshold)</td></tr>
<tr><td>37%</td><td>$578,125 or more</td><td>$693,750 or more</td><td>20%</td></tr>
</table>

The personal exemption has been repealed and individual tax rates and personal deductions sunset after 2025 as per the TCJA 2017.
Standard deduction: Single $13,850; Married filing jointly $27,700.
*Modified Adjusted Gross Income (MAGI) is AGI plus amount excluded from income as foreign earned income, tax-exempt interest and Social Security benefit.

Top/tax rates for ordinary income, capital gains and dividend income

Type of gain	Maximum rate
Top rate for ordinary income & non-qualified dividends	37%/40.8%*
Short-term capital gains (assets held 12 months or less)	37%/40.8%*
Long-term capital gains (assets held more than 12 months) & qualified dividends	20%/23.8%*

Alternative Minimum Tax (AMT) exemption**

Filing status	Exemption	Exemption phase-out range
Single/Head of Household	$81,300	$578,150-$903,350
Married filing jointly	$126,500	$1,156,300-1,662,300

*Includes top tax rate plus 3.8% Medicare tax on the lessor of net investment income or excess of MAGI over threshold (single threshold $200,000; married filing jointly $250,000).
**The exemption amount is reduced .25 for every $1 of AMTI (income) above the threshold amount for the taxpayer's filing status. For AMTI above the top range the exemption will be $0.

Federal estate, generation-skipping transfer (GST) tax & gift tax exemption

Top federal estate tax rate	40%
Federal estate, GST & gift tax exemption	$12.92 million per individual/$25.84 million per couple*
Annual gift tax exclusion	$17,000 per donor, per donee ($34,000 per couple)

*Increased levels expire after 2025.
Source: IRS.gov. The presenter of this slide is not a tax or legal professional. This slide is for informational purposes only and should not be relied on as tax or legal advice. Clients should consult their tax or legal professional before making any tax- or legal-related investment decisions.

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Unless otherwise stated, all data are as of December 31, 2022 or most recently available.

Guide to the Markets – U.S.

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2023 disclosures

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Asset class	20/80	40/60	50/50	60/40	80/20
U.S. large cap growth	4.8%	9.6%	12.0%	14.4%	19.3%
U.S. large cap value	4.8%	9.6%	12.0%	14.4%	19.3%
U.S. mid/small cap	2.5%	4.8%	6.0%	7.3%	9.5%
U.S. REITs	1.0%	2.0%	2.5%	3.0%	4.0%
Developed market equities	5.0%	10.0%	12.5%	15.0%	20.0%
Emerging market equities	2.0%	4.0%	5.0%	6.0%	8.0%
U.S. investment-grade bonds	62.8%	46.8%	38.5%	30.3%	12.5%
U.S. high yield bonds	10.5%	8.0%	7.0%	6.0%	4.5%
Emerging market debt	6.8%	5.3%	4.5%	3.8%	3.0%

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