RETIREMENT INSIGHTS

Guide to Retirement℠

2017 Edition

J.P.Morgan
Asset Management

J.P. MORGAN RETIREMENT STRATEGIST TEAM

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Retirement landscape

Saving

Spending

Investing

Reference

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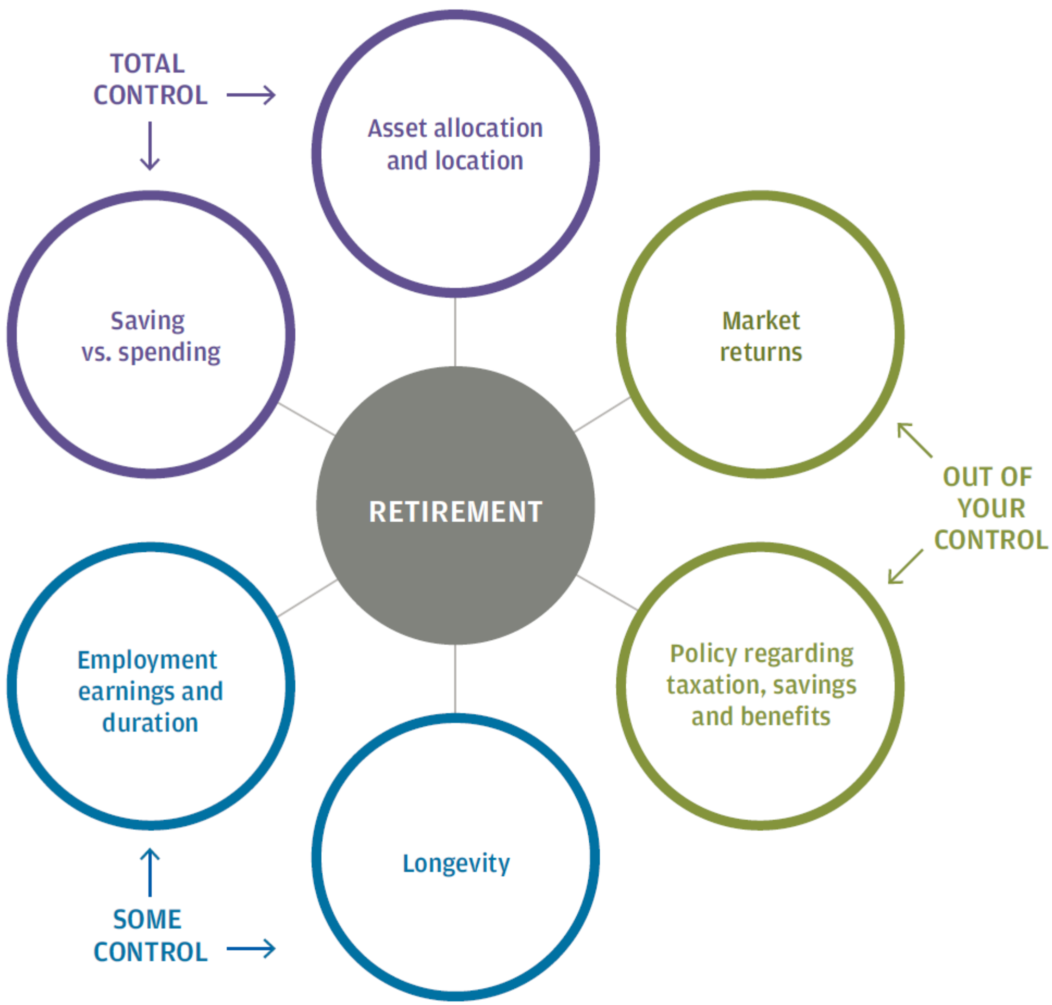
The retirement equation



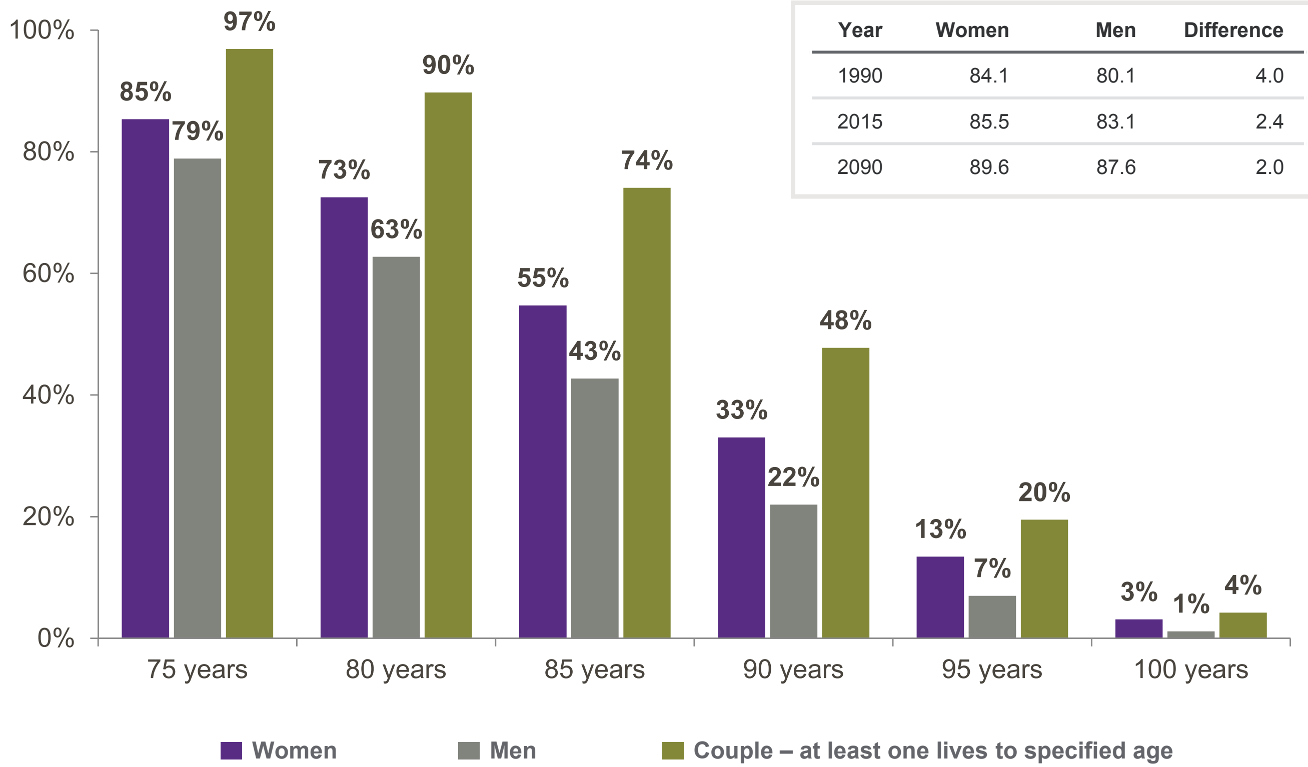
A SOUND RETIREMENTPLAN

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.

Life expectancy probabilities

If you're 65 today, the probability of living to a specific age or beyond



Average life expectancy at age 65

Year	Women	Men	Difference
1990	84.1	80.1	4.0
2015	85.5	83.1	2.4
2090	89.6	87.6	2.0

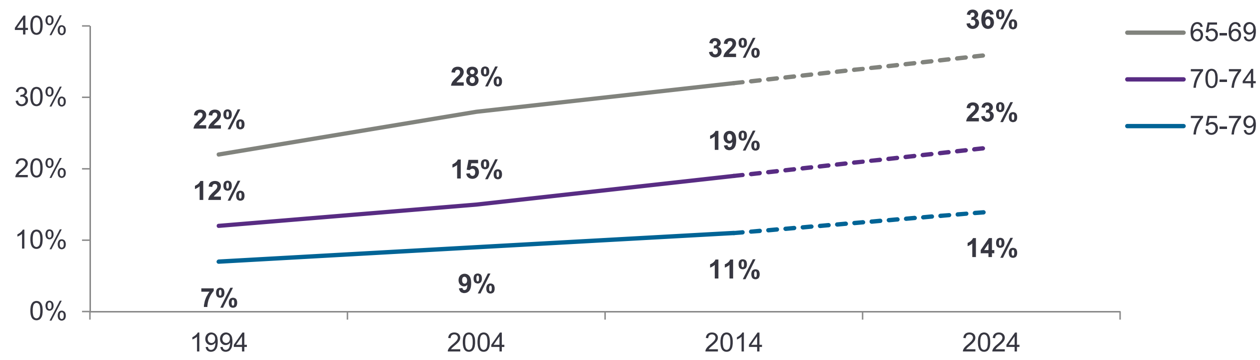
PLAN FOR LONGEVITY

Average life expectancy continues to increase and is a mid-point not an end-point. You may need to plan on the probability of living much longer – perhaps 30+ years in retirement – and invest a portion of your portfolio for growth to maintain your purchasing power over time.

Chart: Social Security Administration, Period Life Table, 2013 (published in 2016), J.P. Morgan Asset Management.
Table: Social Security Administration 2016 OASDI Trustees Report.
Probability at least one member of a same-sex female couple lives to age 90 is 55% and a same-sex male couple is 39%.

Older Americans in the workforce

Percent of people in the civilian labor force 1994-2024

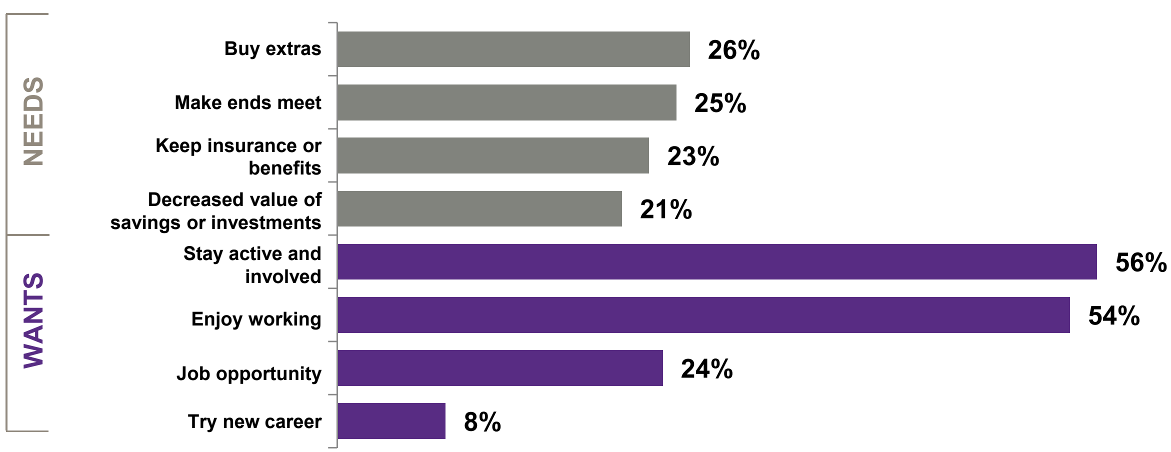


	1994	2004	2014	2024
Total civilian population 65+	31M	35M	45M	62M

IT'S STILL OFF TO WORK I GO

More people are working later in life, motivated by the desire to do so.

Major reasons people work in retirement

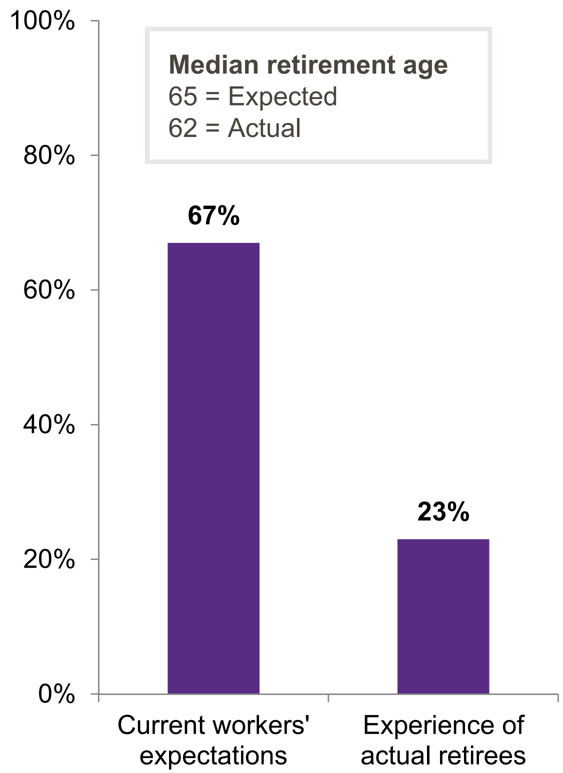


Source (top chart): Bureau of Labor Statistics, Monthly Labor Review, December 2015. Actual data to 2014 and projection to 2024. Civilian population age 65+ is non-institutionalized population.

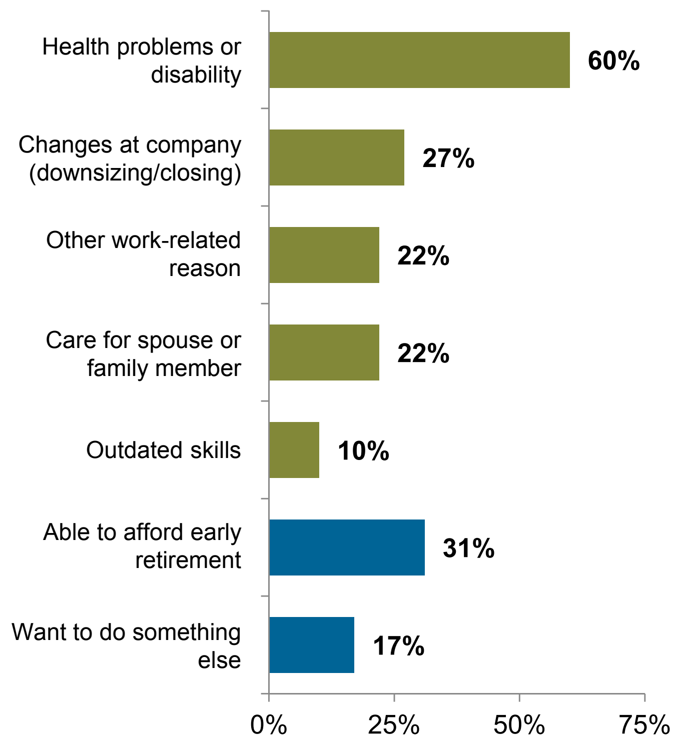
Source (bottom chart): Employee Benefit Research Institute, Mathew Greenwald & Associates, Inc., 2014 Retirement Confidence Survey. Data as of March 2014. Latest available data through December 31, 2015.

Managing expectations of ability to work

Expectations of workers vs. retirees
Retire at age 65 or older



Reasons cited for retiring earlier than planned



EARLY RETIREMENT

You may not have complete control over when you retire, so you should consider having a back-up plan. You may have to draw income earlier and make your portfolio last longer than you anticipate.

Source: Employee Benefit Research Institute, Mathew Greenwald & Associates, Inc., 2016 Retirement Confidence Survey. Data as of March 2016.

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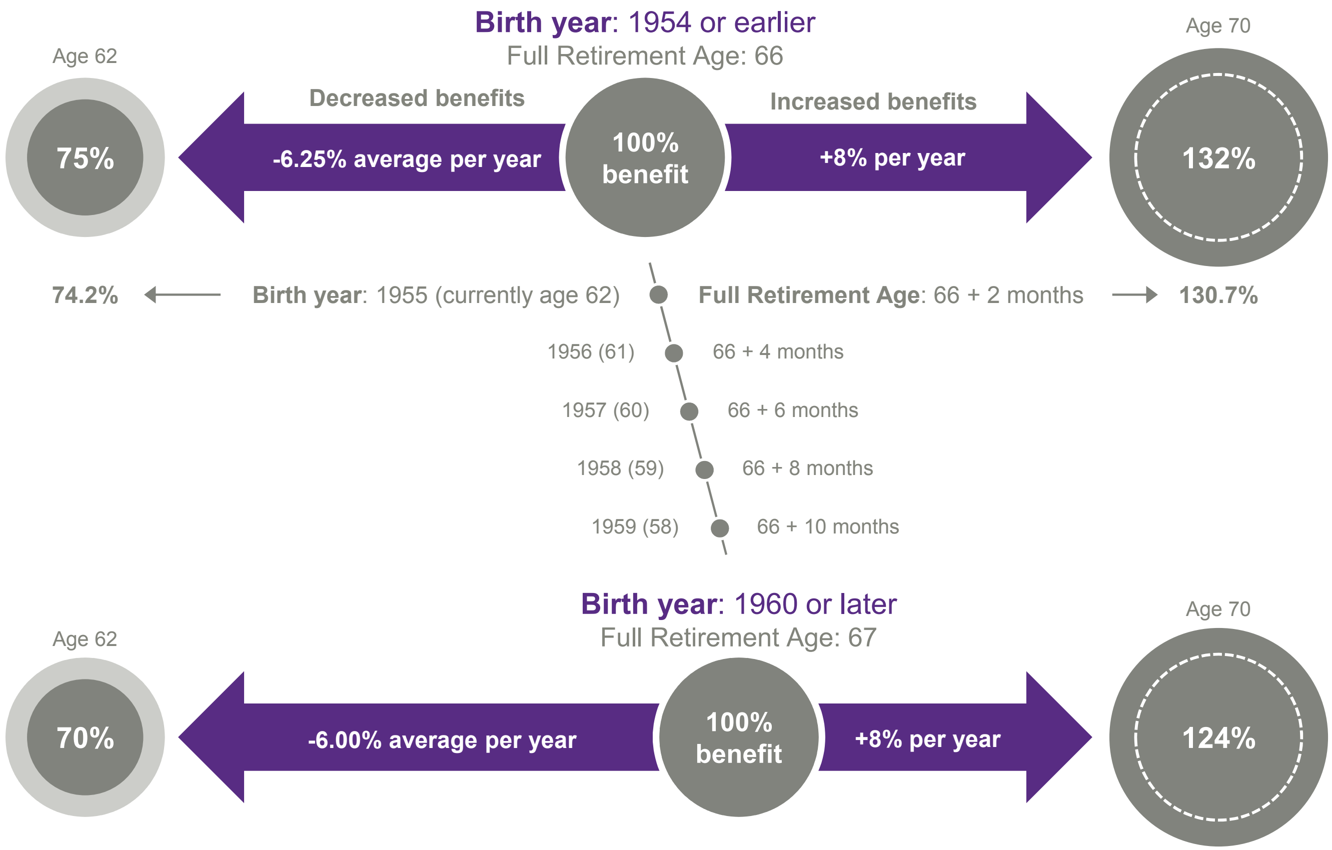
Retirement landscape

Benefits differ by birth year and claim age
Full Retirement Age = 100% benefit



Cost of living increase for benefits (2017)	0.3%	Average cost of living adjustment (1985-2017)	2.6%

UNDERSTAND THE TRADEOFFS

Deciding when to claim benefits will have a permanent impact on the benefit you receive. Claiming before your full retirement age can significantly reduce your benefit, while delaying increases it.

In 2017, full retirement age begins to transition from 66 to 67 by adding two months each year for the next six years. This makes claiming early even more of a benefit reduction.

For illustrative purposes only. For those born in 1956 or earlier, there is a 7.3% compound growth rate for each year of waiting to take benefits; 7.4% for those born in 1957 or after. The Social Security Amendments Act of 1983 increased FRA from 65 to 67 over a 40-year period. The first phase of transition increased FRA from 65 to 66 for individuals turning 62 between 2000 and 2005. After an 11-year hiatus, the transition from 66 to 67 (2017-2022) will complete the move.

Source: Social Security Administration, J.P. Morgan Asset Management

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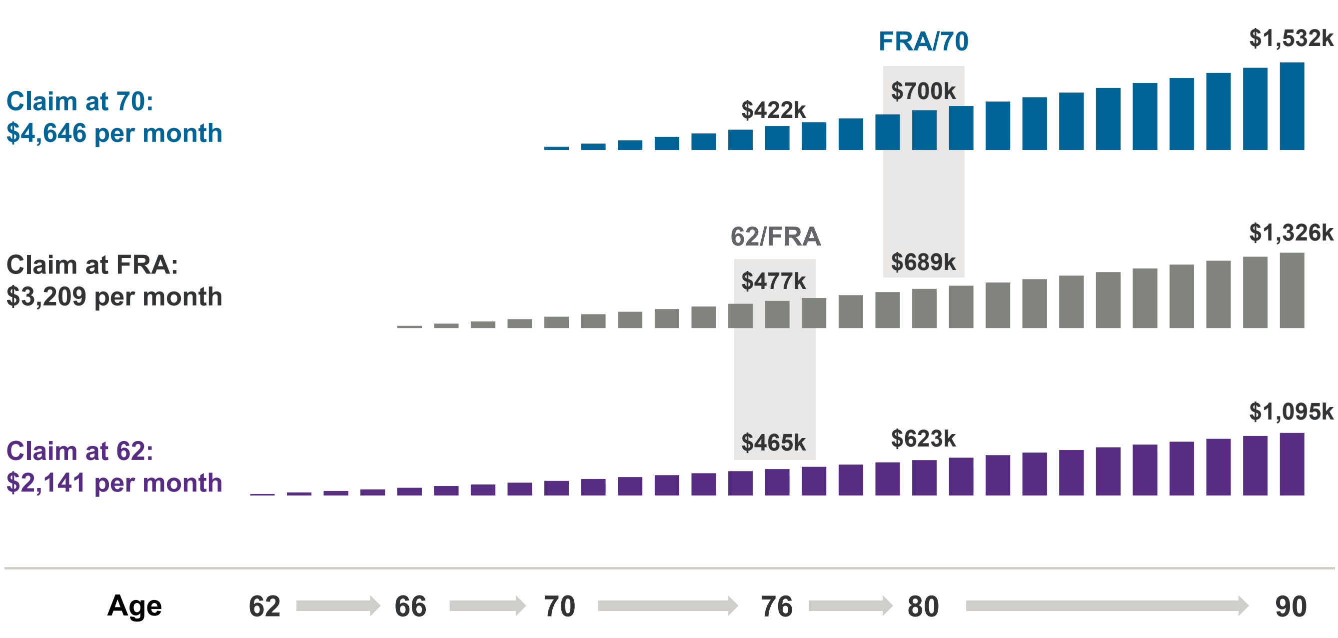
Maximizing Social Security benefits

Cumulative individual benefit by claim age
Full Retirement Age (FRA) = Age 66 & 2 months

Breakeven age



At age 62, probability of living to at least age:	62	66	70	76	80	90
Man	100%	94%	87%	73%	60%	21%
Woman	100%	97%	92%	81%	71%	32%
Couple*	100%	99%	99%	95%	88%	47%

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 1955, earns the maximum wage base, retires at the end of age 61, and claims at 62 & 1 month, 66 & 2 months and 70, respectively. Benefits are assumed to increase each year based on the Social Security Administration 2016 Trustee's Report "intermediate" estimates (annual benefit increase of 2.9% in 2018 and 2.6% thereafter). Monthly amounts without the cost of living adjustments (not shown on the chart) are: $2,141 at age 62; $2,888 at age 66; and $3,773 at age 70. Exact breakeven ages are 76 & 2 months and 80 & 5 months.

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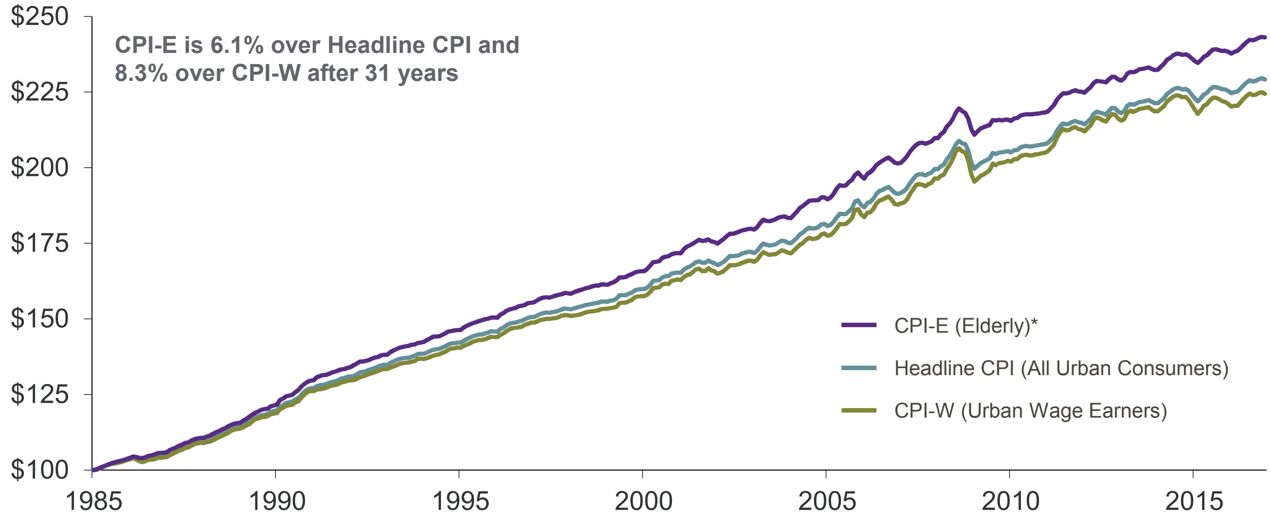
Comparison of inflation 1985-2016

1985 = $100



Weighting and inflation by spending category (%)

	Health care	Housing	Food & bev.	Transport.	Entertain.	Apparel	Edu.	Other
CPI-E	11.9	46.0	13.0	13.9	5.4	2.2	4.5	3.2
Headline CPI	8.4	42.2	15.0	15.3	5.7	3.1	7.1	3.2
CPI-W	7.0	40.7	16.2	17.0	5.3	3.3	7.0	3.4
Inflation	4.9	2.8	2.8	2.1	1.1	0.7	5.1	4.7

EROSION OF PURCHASING POWER

Older Americans experience a higher degree of inflation than both urban consumers (Headline CPI) and the inflation measure used to adjust Social Security benefits (CPI-W). Your investment strategy will need sufficient growth to outpace this higher inflation, particularly as Social Security covers less over time.

*CPI-E is an experimental index from BLS that is based on elderly households with the referenced individuals at age 62 and older.

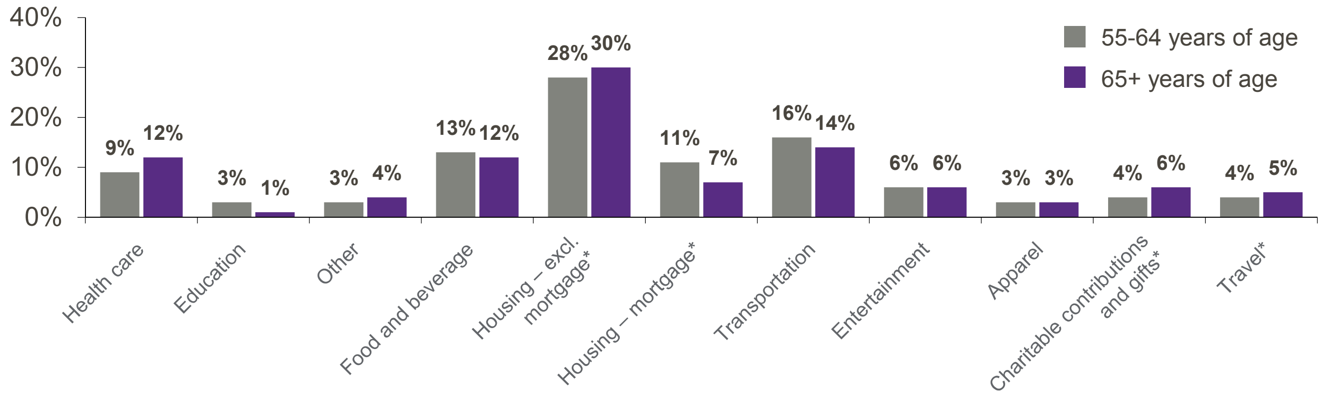
Headline CPI is also referred to as CPI-U, including food and energy.

Graph: Based on Consumer Price Indices, BLS, J.P. Morgan Asset Management. Data as of December 31, 2016.

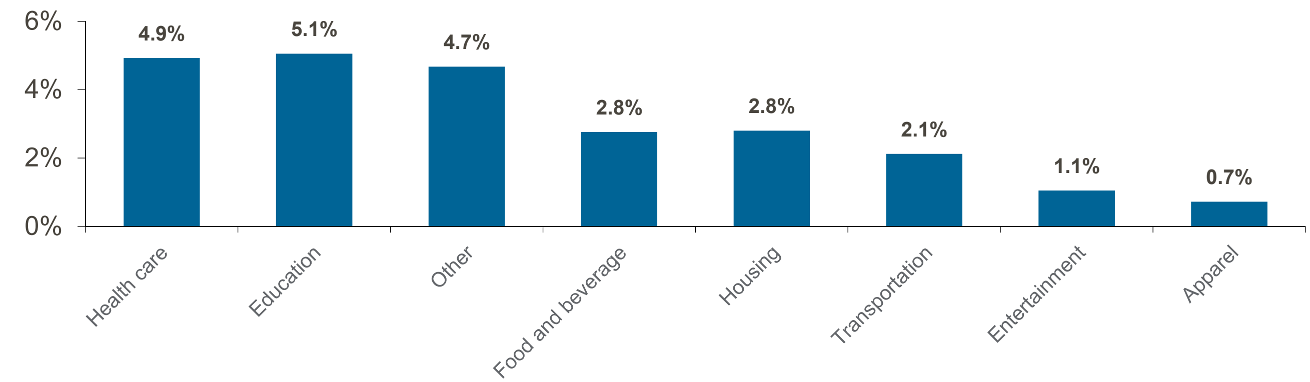
Table: Weightings: BLS, as of December 2015. Inflation: BLS, Consumer Price Index, J.P. Morgan Asset Management. Data represent annual percentage increase from December 1981 through December 2016 with the exception of entertainment and education, which date back to 1993. The inflation rate for the Other category is derived from personal care products and tobacco. Tobacco has experienced more than 7% inflation since 1986 but each age group only spends 0.4%-0.7% on tobacco (27%-37% of combined personal care products and tobacco), which is a lower proportion than represented in the Other inflation rate.

Spending and inflation

Spending by age and category



Average inflation by spending category 1982-2016



LOSING GROUND

Inflation disproportionately affects older Americans due to differences in spending habits and price increases in those categories.

*There are no individual inflation measures for these specific subcategories.

Source (top chart): BLS, 2015 Consumer Expenditure Survey for households where at least one member has a bachelor's degree. Charitable contributions include gifts to religious, educational and political organizations, and other cash gifts. Spending percentages may not equal 100% due to rounding.

Source (bottom chart): BLS, Consumer Price Index, J.P. Morgan Asset Management. Data represent annual percentage increase from December 1981 through December 2016 with the exception of entertainment and education, which date back to 1993. The inflation rate for the Other category is derived from personal care products and tobacco. Tobacco has experienced more than 7% inflation since 1986 but each age group only spends 0.4%-0.7% on tobacco (27%-37% of combined personal care products and tobacco), which is a lower proportion than represented in the Other inflation rate.

Saving

Lower forward-looking returns may require higher savings going forward
Values assume you would like to maintain an equivalent lifestyle in retirement

Current age	$50,000	$75,000	$100,000	$150,000	$200,000	$250,000	$300,000
	Checkpoint (x current household income)						
25	-	-	0.2	0.7	1.0	1.3	1.4
30	-	0.5	0.8	1.3	1.8	2.1	2.2
35	0.3	1.2	1.5	2.1	2.6	3.0	3.2
40	0.8	1.9	2.3	3.1	3.7	4.1	4.3
45	1.5	2.8	3.3	4.2	4.9	5.4	5.7
50	2.4	3.9	4.5	5.6	6.4	7.0	7.3
55	3.4	5.2	5.9	7.2	8.2	9.0	9.3
60	4.5	6.8	7.5	9.1	10.4	11.2	11.7
65	6.1	8.8	9.8	11.7	13.3	14.3	14.8

How to use:

- Household income is assumed to be gross income (before tax and savings).
- Go to the intersection of your current age and your closest current household income.
- Multiply your salary by the checkpoint shown. This is the amount you should have saved today, assuming you continue contributions of 10% going forward.
- Example: For a 40-year-old with a household income of $100,000: $100,000 x 2.3 = $230,000.

MODEL ASSUMPTIONS

Assumed annual gross savings rate: **10%***

Pre-retirement investment return: **6.0%**

Post-retirement investment return: **5.0%**

Inflation rate: **2.25%**

Retirement age –
- Primary earner: **65**
- Spouse: **62**

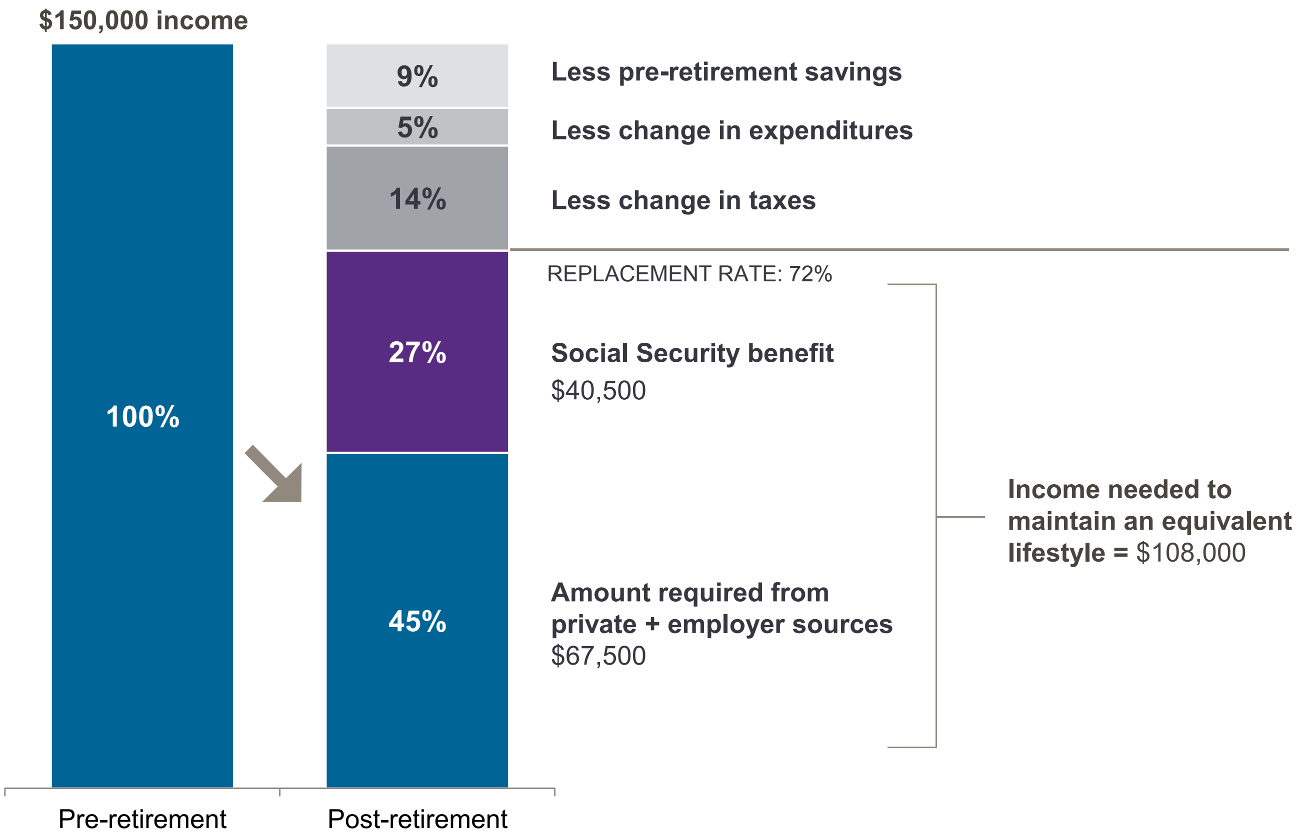
Years in retirement: **30**

*10% is approximately twice the U.S. average annual savings rate

This chart is for illustrative purposes only and must not be relied upon to make investment decisions. J.P. Morgan's model is based on J.P. Morgan Asset Management's (JPMAM) proprietary long-term capital market assumptions (10-15 years) and an 80% confidence level. Household income replacement rates are derived from an inflation-adjusted analysis of: Consumer Expenditure Survey (BLS) data (2011-2014); Social Security benefits using modified scaled earnings in 2017 for a single wage earner at age 65 and a spousal benefit at age 62 reduced by Medicare Part B premiums. For more details, see slide 14 of the *Guide to Retirement*.

Consult with a financial advisor for a more personalized assessment. Allocations, assumptions and expected returns are not meant to represent JPMAM performance. Given the complex risk/reward tradeoffs 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.

Income replacement rate methodology
Based on gross annual household income



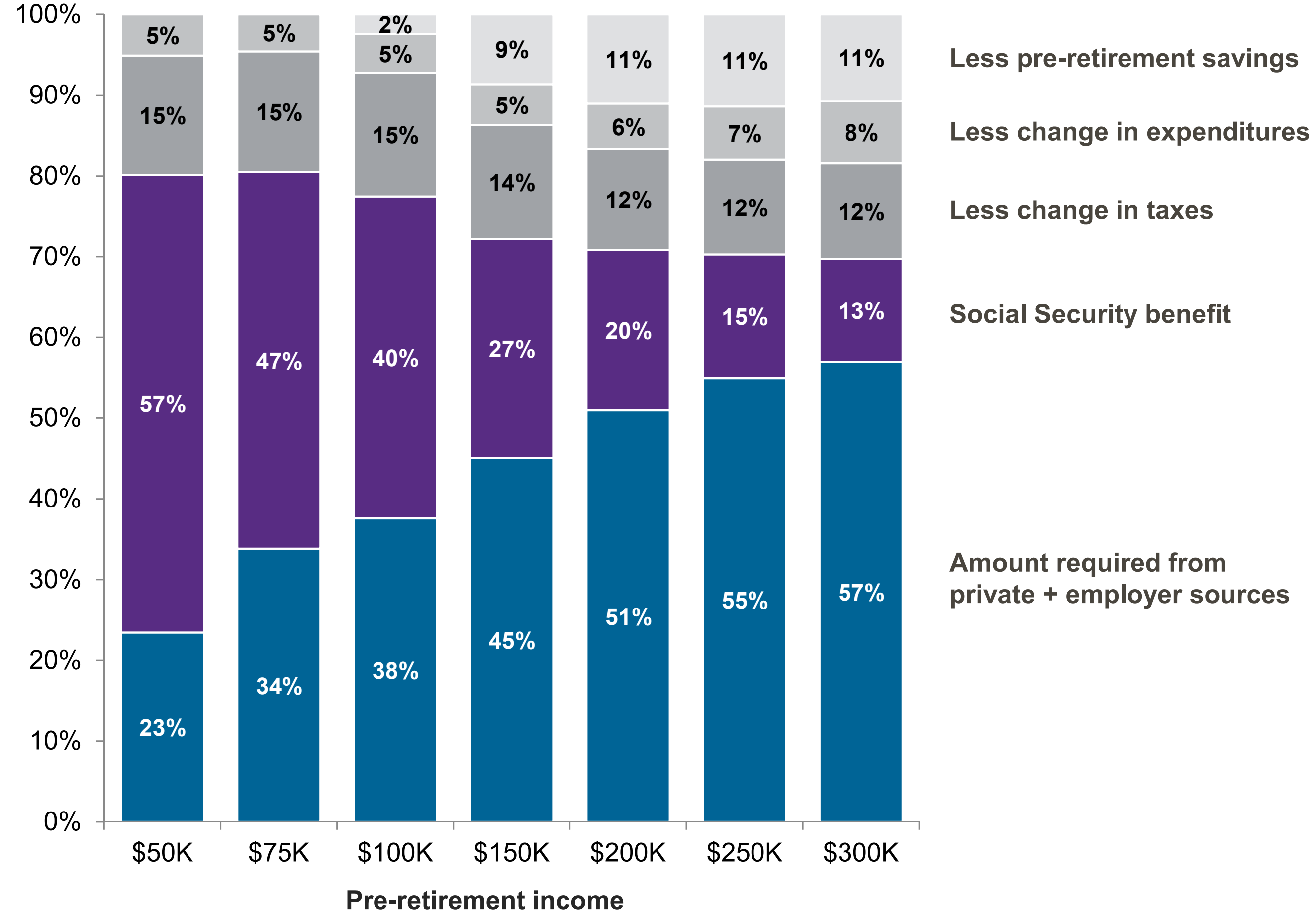
ESTIMATING RETIREMENT LIFESTYLE NEEDS

Less income may be needed in retirement to maintain an equivalent lifestyle due to no longer needing to save, lower spending in certain categories and lower income taxes.

Source: J.P. Morgan Asset Management analysis, 2016. Household income replacement rates are derived from an inflation-adjusted analysis of: Consumer Expenditure Survey (BLS) data (2011-2014); Social Security benefits using modified scaled earnings in 2016 for a single wage earner at age 65 and a spousal benefit at age 62 reduced by Medicare Part B premiums; and 2016 OASDI and FICA taxes. The income replacement needs may be lower for households in which both spouses are working and the second spouse's individual benefits are greater than their spousal benefit. Single household income replacement needs may vary as spending is typically less than a two-spouse household; however, the loss of the Social Security spousal benefit may offset the spending reduction. Percentages and values may not sum due to rounding.

Income replacement needs vary by household income

Replacement rate detail by household income



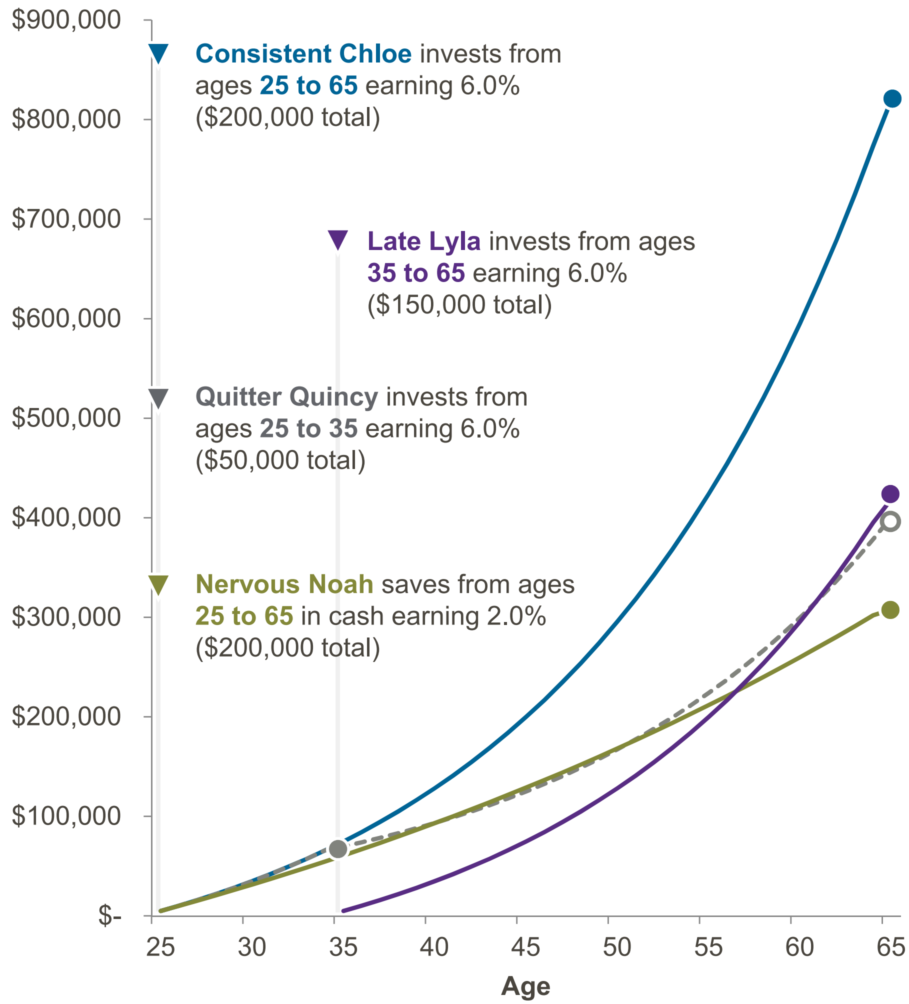
SPENDING NEEDS BY INCOME

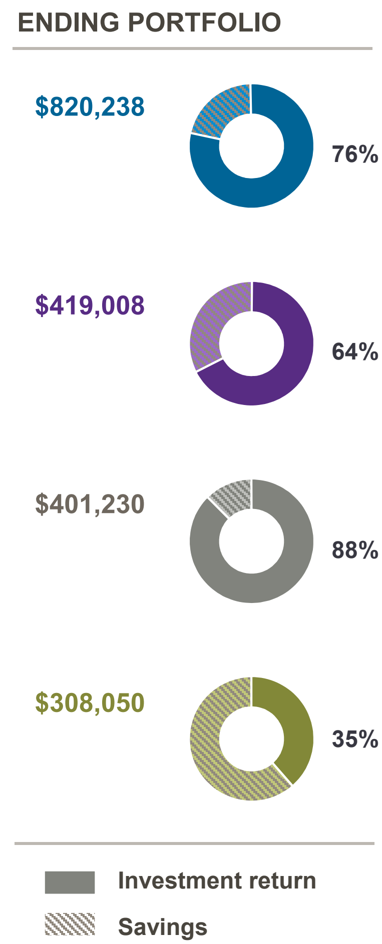
Estimated income replacement needs range from 70%-80% depending on pre-retirement household income. The more you earn, the more of your income you will be responsible for providing as Social Security replaces less.

Source: J.P. Morgan Asset Management analysis, 2016. Household income replacement rates are derived from an inflation-adjusted analysis of: Consumer Expenditure Survey (BLS) data (2011-2014); Social Security benefits using modified scaled earnings in 2016 for a single wage earner at age 65 and a spousal benefit at age 62 reduced by Medicare Part B premiums; and 2016 OASDI and FICA taxes. The income replacement needs may be lower for households in which both spouses are working and the second spouse's individual benefits are greater than their spousal benefit. Single household income replacement needs may vary as spending is typically less than a two-spouse household; however, the loss of the Social Security spousal benefit may offset the spending reduction. Percentages and values may not sum due to rounding.

Benefit of saving and investing early

Account growth of $5,000 invested/saved annually





SAVING FUNDAMENTALS

Saving early and often, and investing what you save, are some of the keys to a successful retirement due to the power of compounding over the long term.

The above example is for illustrative purposes only and not indicative of any investment. Account value in this example assumes a 6.0% annual return and cash assumes a 2.0% annual return. Source: J.P. Morgan Asset Management, Long-Term Capital Market Assumptions. Compounding refers to the process of earning return on principal plus the return that was earned earlier.

Annual savings needed if starting today

Start saving age	$50,000	$75,000	$100,000	$150,000	$200,000	$250,000	$300,000
	Savings rate (x current household income)						
25	7%	10%	11%	13%	15%	16%	17%
30	9	13	14	17	19	21	22
35	11	17	18	22	25	27	28
40	15	22	25	29	33	36	37
45	21	31	34	41	46	50	52
50	31	45	50	60	68	73	76

MODEL ASSUMPTIONS

Pre-retirement investment return: **6.0%**

Post-retirement investment return: **5.0%**

Inflation rate: **2.25%**

Retirement age –
- Primary earner: **65**
- Spouse: **62**

Years in retirement: **30**

How to use:
- Go to the intersection of your current age and your closest current household income.
- This is the percentage of your current household income you should contribute annually going forward if you have $0 saved for retirement today.
- Example: A 40-year-old with household income of $100,000 and $0 saved for retirement today, will need to save 25% every year until retirement.

Important things you need to know:
- Lower forward -looking returns may require higher savings going forward.
- Values assume you would like to maintain an equivalent lifestyle in retirement.
- Household income is assumed to be gross income (before tax and savings).

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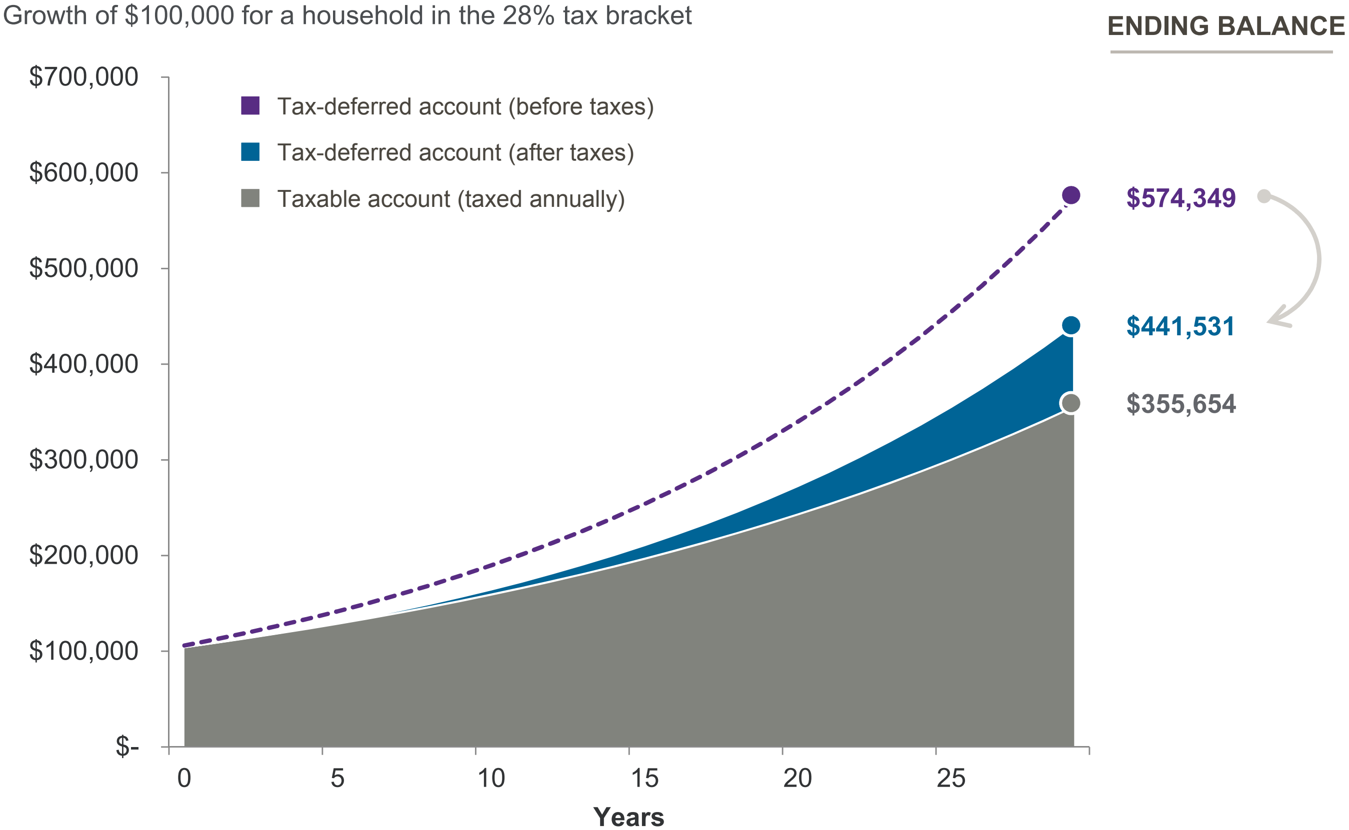
The power of tax-deferred compounding

Taxable vs. tax-deferred investing over a 30-year timeframe
Growth of $100,000 for a household in the 28% tax bracket



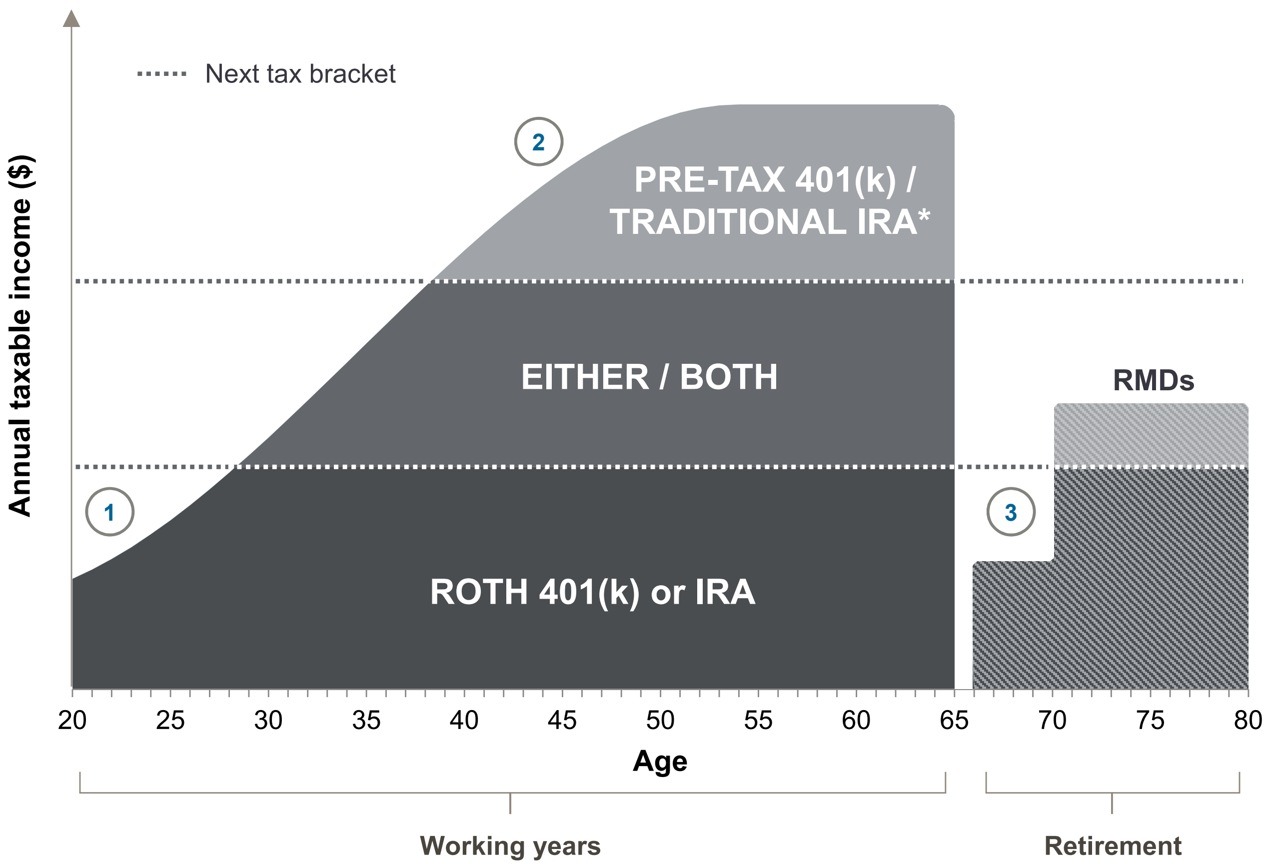
TAXES CAN WAIT

Sheltering investment growth in tax-deferred accounts over the long-term may result in more wealth for retirement. The value of tax deferral in this example is equivalent to nearly 1% higher annual return over the time period.

Source: JP Morgan Asset Management. Chart shows after-tax $100,000 initial account value in the beginning of year one for a tax-deferred account and a taxable account. Assumes a 6.0% annual return for both accounts. Investment returns in taxable account are taxed annually at 28% (capital gains and qualified dividends are not considered in this analysis). Tax-deferred account balance is taken as a lump sum after year 30 and taxed at 28% federal tax rate. If tax-deferred account is taken as lump sum at other tax rates, after-tax balance will be $503,197 (15%), $455,762 (25%), $417,814 (33%), $386,507 (39.6%). This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. This chart is for illustrative purposes only. Past performance is no guarantee for future results.

Evaluate a Roth at different life stages

Changes in lifetime taxable income
Hypothetical wage curve



THINK OPPORTUNISTICALLY

Effectively managing taxes over a lifetime requires a careful balance of your current income tax picture and building income tax diversification. Consider:

1. Contributing to a Roth early in your career and shifting as your income increases.

2. Roth 401(k) contributions in peak earning years if wealth is concentrated in tax-deferred accounts.

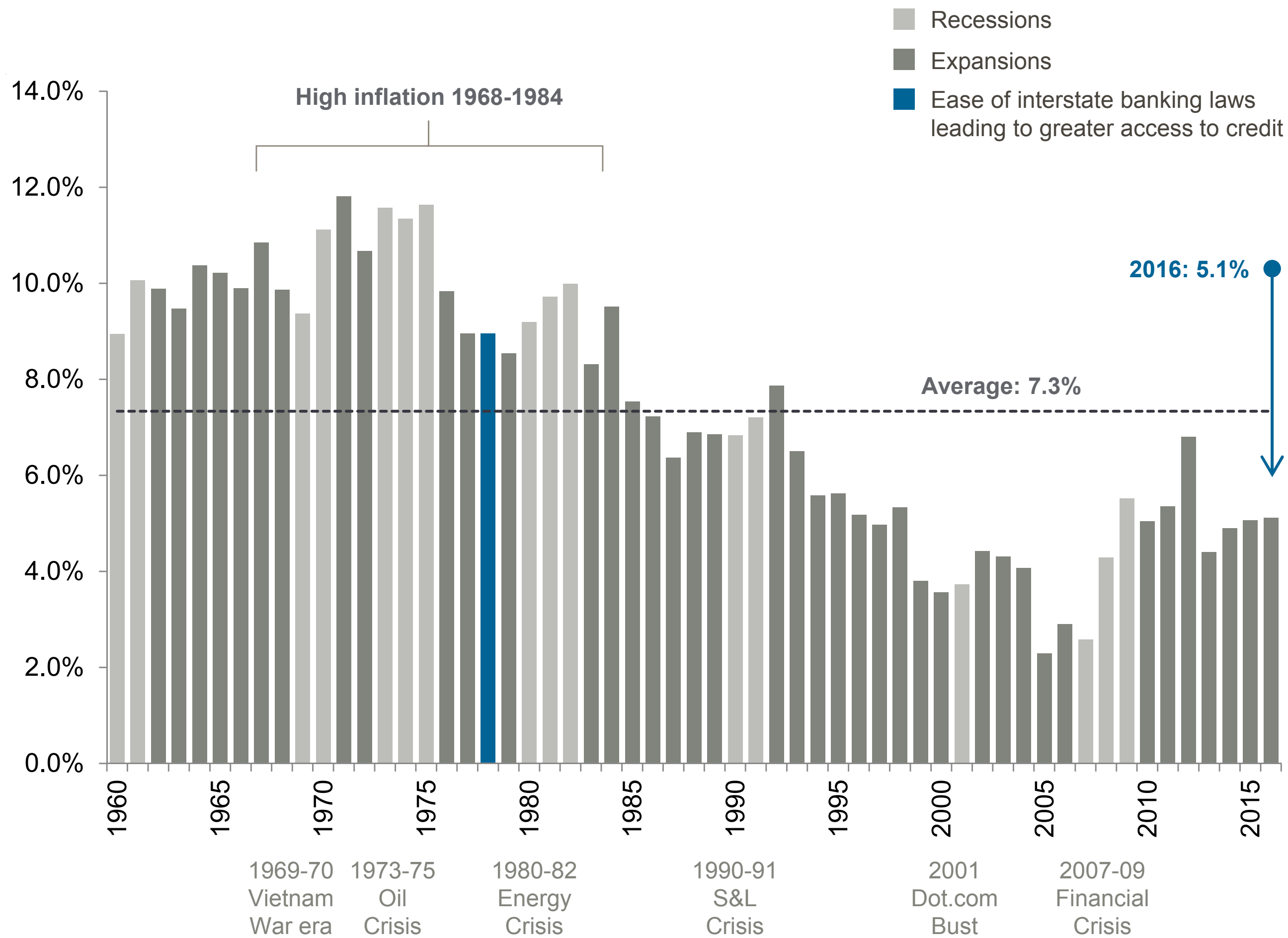
3. Proactive Roth conversions in lower income retirement years if RMDs are likely to push you into a higher tax bracket.

*If eligible to make a deductible contribution (based on your MAGI). The illustration reflects savings options into Traditional and Roth IRA accounts, as well as into pre-tax retirement and Roth 401(k) accounts.

RMD = Required Minimum Distribution. RMDs are calculated every year based on the account value and the owner's life expectancy using IRS actuarial data. IRA owners must begin taking RMDs no later than April 1 following the year the owner turns age 70½. For owners of employer-based qualified plans, RMDs must begin at age 70½ or when the owner retires, whichever is later. Owners of Roth IRAs are not required to take RMDs; however, RMDs are required in Roth 401(k) accounts. Any employer contribution will be applied to the participant's pre-tax retirement account for both Traditional and Roth 401(k) plans, and subsequent distributions will be subject to tax.

The above example is for illustrative purposes only. Source: J.P. Morgan Asset Management

Personal savings rate
Annual, % of gross income



BEWARE THE WEALTH EFFECT

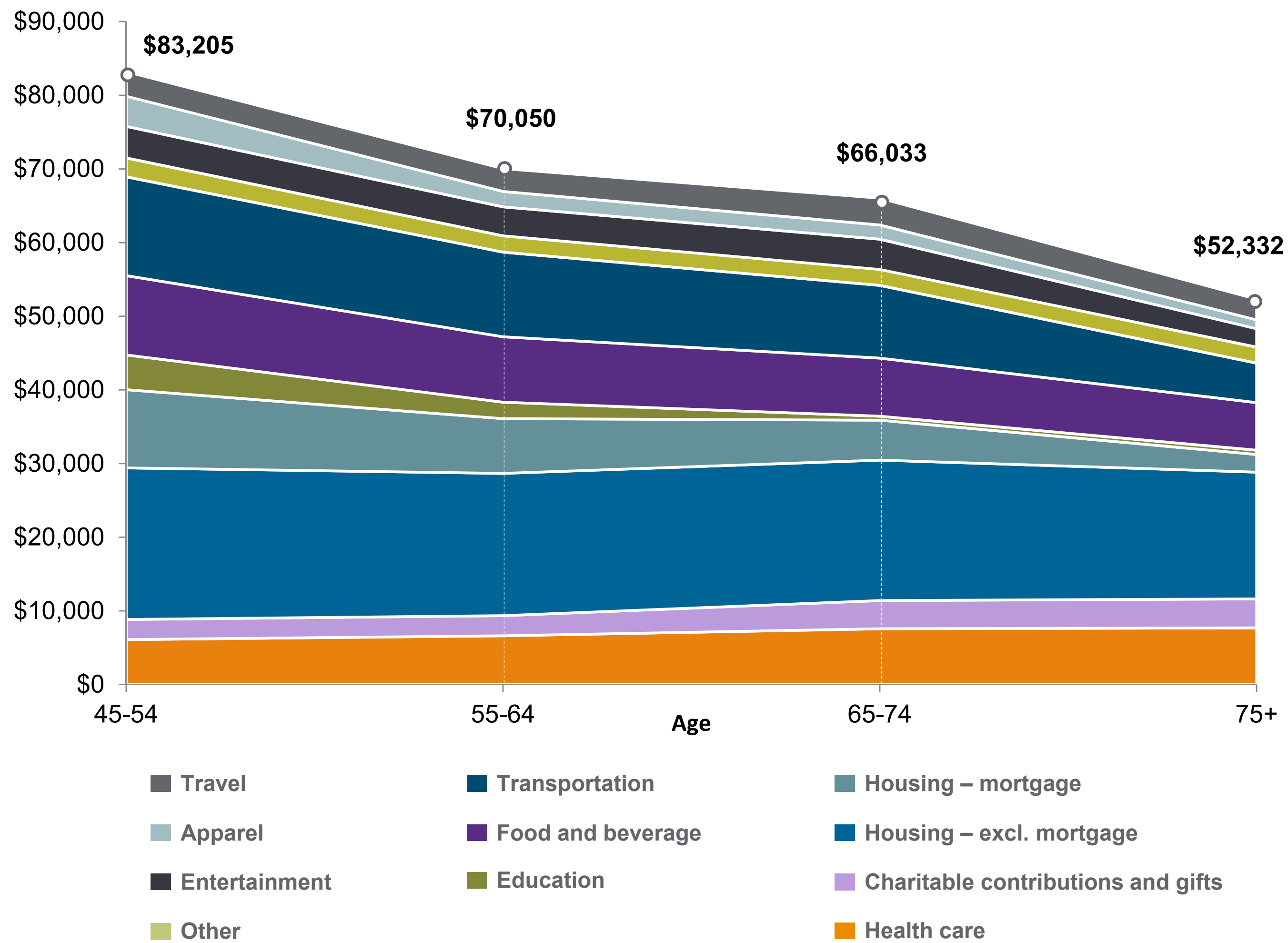
During economic expansions when the value of stocks and homes increase, Americans tend to save less than during recessions. On average, Americans are saving well below the 10%-15% consistent annual savings rate required to successfully fund retirement.*

*Recommended savings rates are based on J.P. Morgan analysis of median and affluent households.

Source: J.P. Morgan Asset Management, Bureau of Economic Analysis, National Bureau of Economic Research. Personal savings rate is calculated as personal savings (after-tax income minus personal outlays) divided by gross income. Employer and employee contributions to retirement funds are included in after-tax income but not in personal outlays, and thus are implicitly included in personal savings. Savings rate data as of December 31, 2016.

Spending

Average household spending patterns by various age groups



WHAT TO EXPECT

Household spending peaks at the age of 45, after which spending declines in all categories but health care and charitable contributions and gifts. Housing is the largest expense, even at older ages.

Source: J.P. Morgan Asset Management. Estimates based on average consumer expenditure from the 2015 Consumer Expenditure Survey (BLS) for each age group excluding pension contributions. Population includes households where a bachelor's degree or higher is achieved by any member. Average household size for age 45–54 is 3.0, age 55–64 is 2.3, age 65–74 is 1.9 and age 75+ is 1.9.

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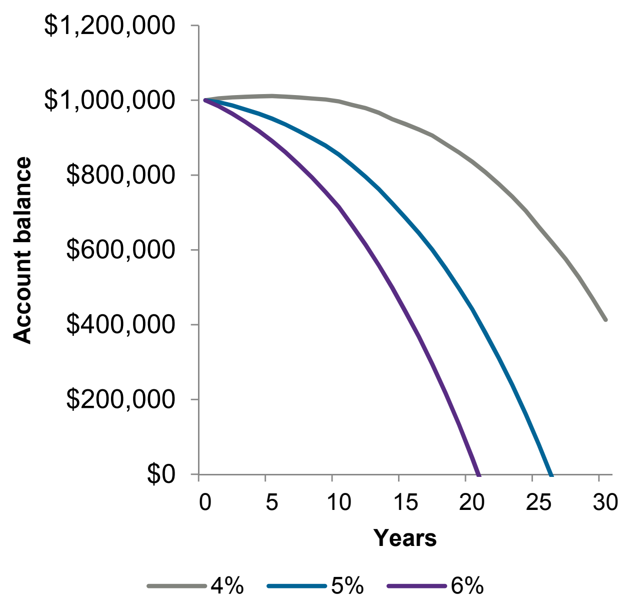
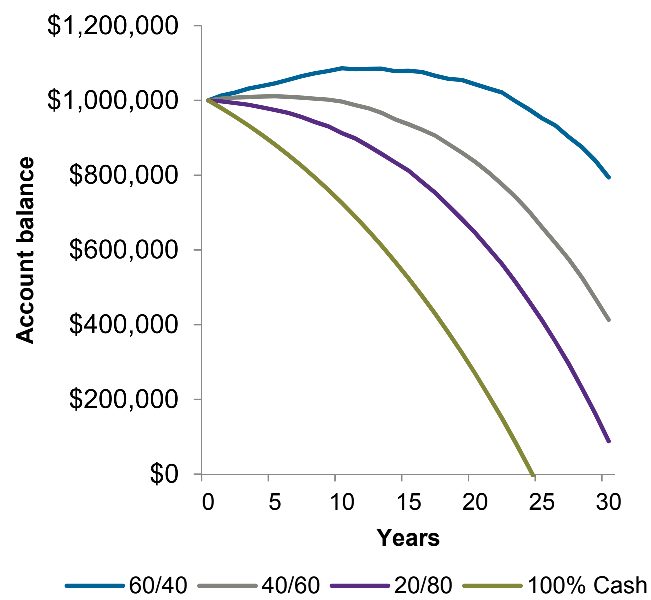
Effects of withdrawal rates and portfolio allocations

Years of sustainable withdrawals for a portfolio for typical markets
Projected nominal outcomes, 50th percentile

40/60 portfolio at various initial withdrawal rates



Various portfolios at 4% initial withdrawal rate



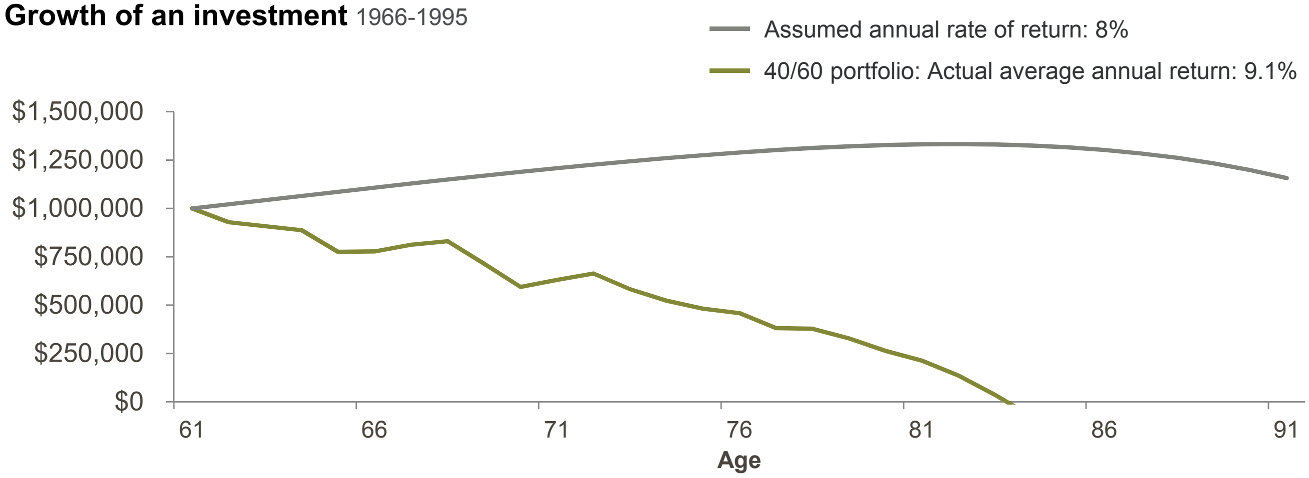
ONE SIZE DOES NOT FIT ALL

Higher initial withdrawal rates or overly conservative portfolios can put your retirement at risk. However, setting your spending at retirement too low and not adjusting along the way may require unnecessary lifestyle sacrifices in retirement. You may want to consider a dynamic approach that adjusts over time to more effectively use your retirement savings.

50th percentile means that 50% of the time you'll have better outcomes. Based on the high percentage of outcomes that tend to be clustered near the median, this may be considered the most likely potential outcome. For the 40/60 portfolio at a 4% withdrawal rate, the real portfolio value at period 30 is $212,029 vs. $413,328 nominal.

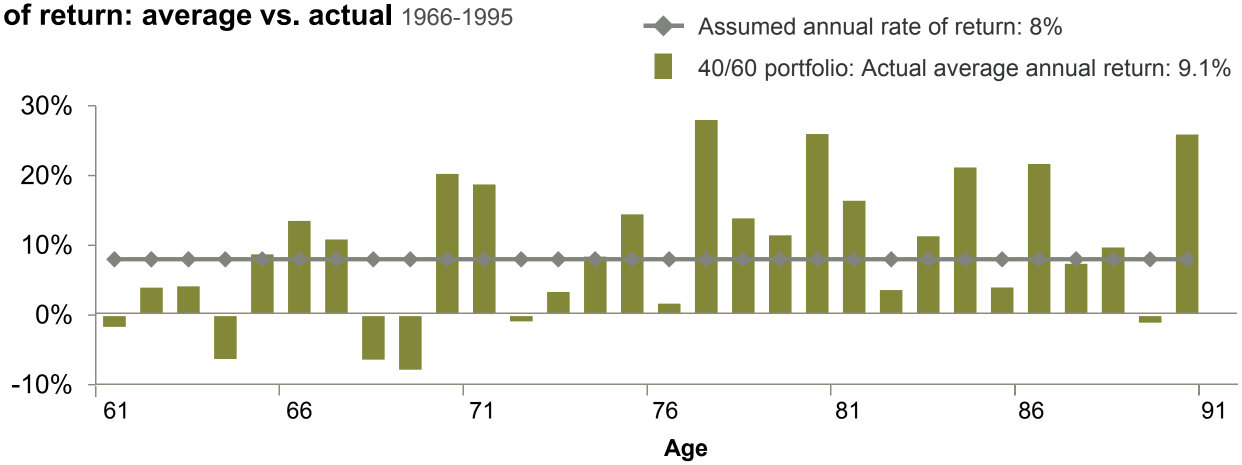
These charts are for illustrative purposes only and must not be used, or relied upon, to make investment decisions. Portfolios are described using equity/bond denotation (e.g. a 40/60 portfolio is 40% equities and 60% bonds). Hypothetical portfolios are composed of US Large Cap for equity, US Aggregate Bonds and US Cash for cash, with compound returns projected to be 6.25%, 3.00% and 2.00%, respectively. J.P. Morgan's model is based on J.P. Morgan Asset Management's (JPMAM) proprietary Long-Term Capital Markets Assumptions (10–15 years). The resulting projections include only the benchmark return associated with the portfolio and does not include alpha from the underlying product strategies within each asset class. The yearly withdrawal amount is set as a fixed percentage of the initial amount of $1,000,000 and is then inflation adjusted over the period (2.25%). Allocations, assumptions and expected returns are not meant to represent JPMAM performance. Given the complex risk/reward tradeoffs 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.

Growth of an investment 1966-1995



Assumptions: Enter retirement at age 60 with $1,000 000. Start with a 5.4% withdrawal of $54,000. Increase dollar amount of withdrawal by overall rate of inflation (3%) each year, which is lower than the average inflation rate of the period between 1966-1995.

Rate of return: average vs. actual 1966-1995



SEQUENCE RETURN RISK

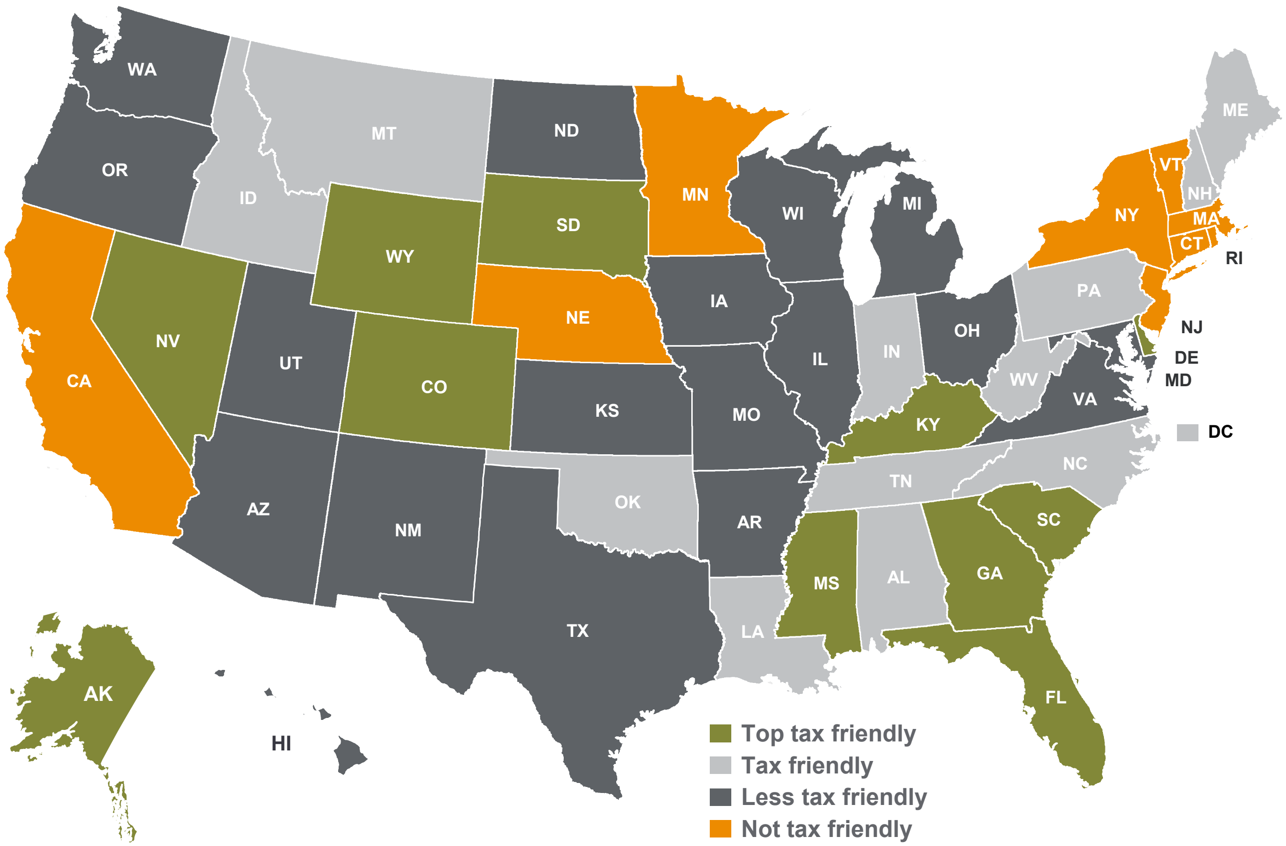
Withdrawing assets in volatile markets early in retirement can ravage a portfolio. Adjust your plan regularly, and you may want to evaluate investment solutions that provide downside protection.

Spending

Source: J.P. Morgan Asset Management. Returns are based on a hypothetical portfolio, which is assumed to be invested 40% in the S&P 500 Total Return Index and 60% in the Barclays Capital U.S. Aggregate Index. The assumptions are presented for illustrative purposes only. They must not be used, or relied upon, to make investment decisions. There is no direct correlation between a hypothetical investment and the anticipated future return of an index. Past performance does not guarantee future results.

J.P.Morgan Asset Management

Comparison of state taxes paid by a retiree household



MODEL ASSUMPTIONS

Scenario based on retired married couple filing jointly

State income tax on[1] –
- Annual retirement plan distribution: $80,000
- Total Social Security benefits: $42,000

Property tax on[2]: 2.5x median home value by state

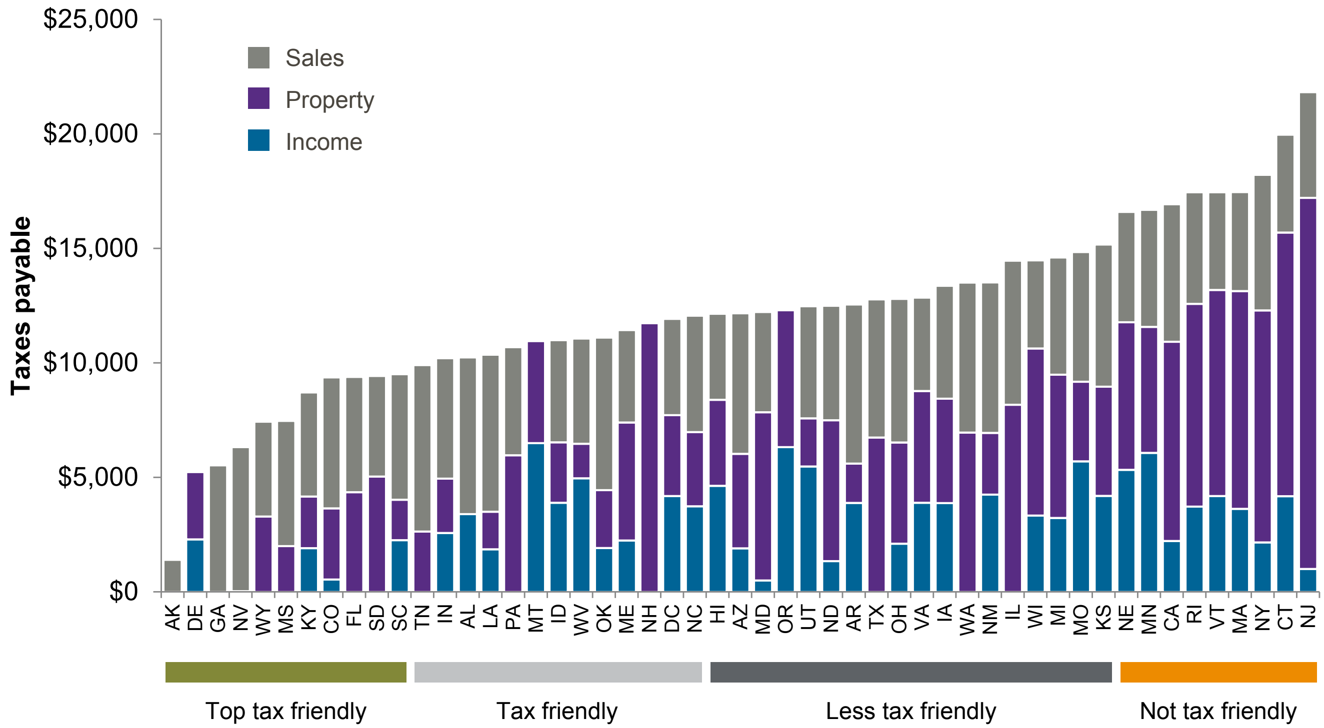
Sales/average local sales tax on[3]: Remaining income net of federal & state income tax and property tax

Tax favorability based on household overall effective state tax rate: Top tax friendly (<8%), Tax friendly (8%-9.9%), Less tax friendly (10%-13%), Not tax friendly (>13%). Retired married household age 65. [1] State income tax liability is based on all taxable sources of retirement income minus allowable state personal exemptions and a standard deduction. State-specific exemptions, deductions and/or credits related to eligible retirement income and Social Security are included. States with no income tax: AK, FL, NV, SD, TX, WA, WY. States that tax interest and dividends only: TN and NH. States that tax Social Security: CO, CT, KS, MN, MO, MT, NE, NM, ND, RI, UT, VT, WV. States that do not tax retirement plan distributions or Social Security: IL, MS, PA. [2] State property tax applies to home value only and includes state-specific homestead exemptions/credits. [3] States with no sales tax: AK, DE, MT, NH, OR (local taxes may apply).

Of note: CA imposes a 1% surtax on taxpayers earning more than $1M ($1,052,886 married) for a top marginal tax rate of 13.3%. NYC levies an additional 2.907-3.876% on taxable income. HI top marginal income tax rate reduced to 8.25% in 2017.

Source: J.P. Morgan Asset Management. The presenter of this slide is not a tax or legal advisor, and this slide should not be used as such. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions.

Composition of estimated state taxes



Effective state tax rate:	<8%	8%-9.9%	10%-13%	>13%

MODEL ASSUMPTIONS

Scenario based on retired married couple filing jointly

State income tax on[1] –

- Annual retirement plan distribution: $80,000
- Total Social Security benefits: $42,000

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Retired married household age 65. [1] State income tax liability is based on all taxable sources of retirement income minus allowable state personal exemptions and a standard deduction. State-specific exemptions, deductions and/or credits related to eligible retirement income and Social Security are included. States with no income tax: AK, FL, NV, SD, TX, WA, WY. States that tax interest and dividends only: TN and NH. States that tax Social Security: CO, CT, KS, MN, MO, MT, NE, NM, ND, RI, UT, VT, WV. States that do not tax retirement plan distributions or Social Security: IL, MS, PA. [2] State property tax applies to home value only and includes state-specific homestead exemptions/credits. [3] States with no sales tax: AK, DE, MT, NH, OR (local taxes may apply).

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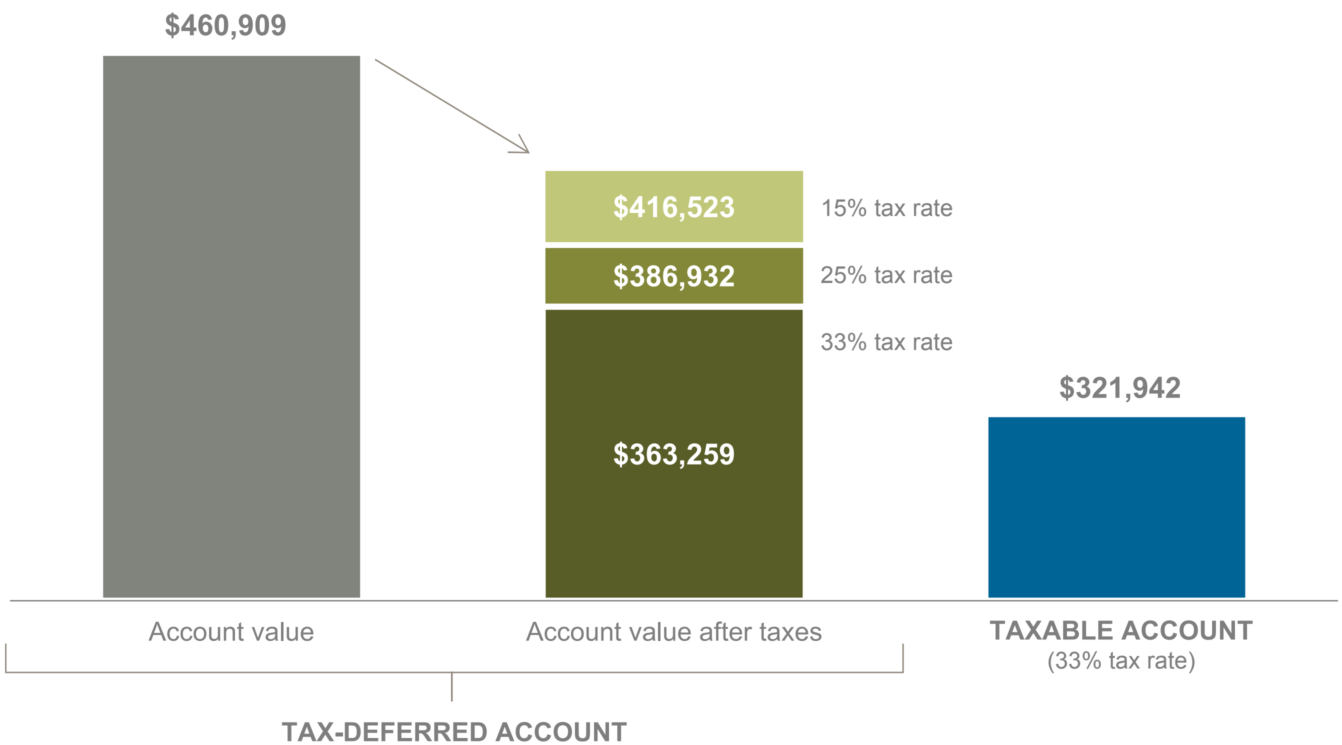
Source: J.P. Morgan Asset Management. The presenter of this slide is not a tax or legal advisor, and this slide should not be used as such. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions.

Spending

Taxable vs. tax-deferred investing over a 30-year timeframe



KEEP A BIGGER SLICE

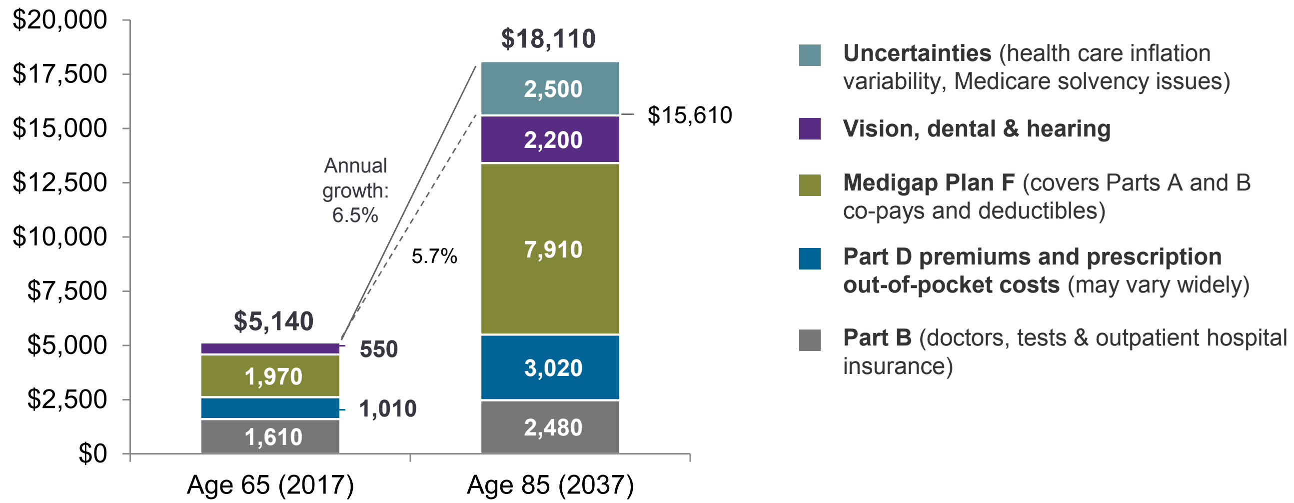
Tax-advantaged accounts can shelter income-producing investments from current income taxation and result in greater long-term growth than taxable accounts. Actively managing your tax picture in retirement may help you keep even more of your tax-deferred wealth.

Source: J.P. Morgan Asset Management. Assumes $5,500 after-tax contributions at the beginning of each year for 30 years and 6.0% annual investment return that is assumed to be subject to ordinary income taxes (capital gains and qualified dividends are not considered in this analysis). Tax-deferred account balance is taken as lump sum and taxed at the 15%, 25% and 33% federal tax rate, respectively, at time of withdrawal. Taxable account contributions are after tax and assume a 33% federal tax rate during accumulation. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.

J.P.Morgan Asset Management

Spending

Traditional Medicare estimated median health care costs per person



A GROWING CONCERN

Given variation in health care cost inflation from year to year, it may be prudent to assume an annual health care inflation rate of 6.5%, which may require growth as well as current income from your portfolio in retirement.

Additional premium per person for Modified Adjusted Gross Incomes (MAGI) of:

		ADDITIONAL PREMIUM		TOTAL MEDIAN COSTS	
FILING SINGLE	MARRIED FILING JOINTLY	2017	2018*	2017	2018*
$85,001 – $107,000	$170,001 – $214,000	$802	$722	$5,942	$5,798
107,001 – 133,500	214,001 – 267,000	802	1,820	5,942	6,896
133,501 – 160,000	267,001 – 320,000	2,017	2,928	7,157	8,004
160,001 – 214,000	320,001 – 428,000	3,234	4,018	8,374	9,094
>214,000	>428,000	4,450	4,018	9,590	9,094

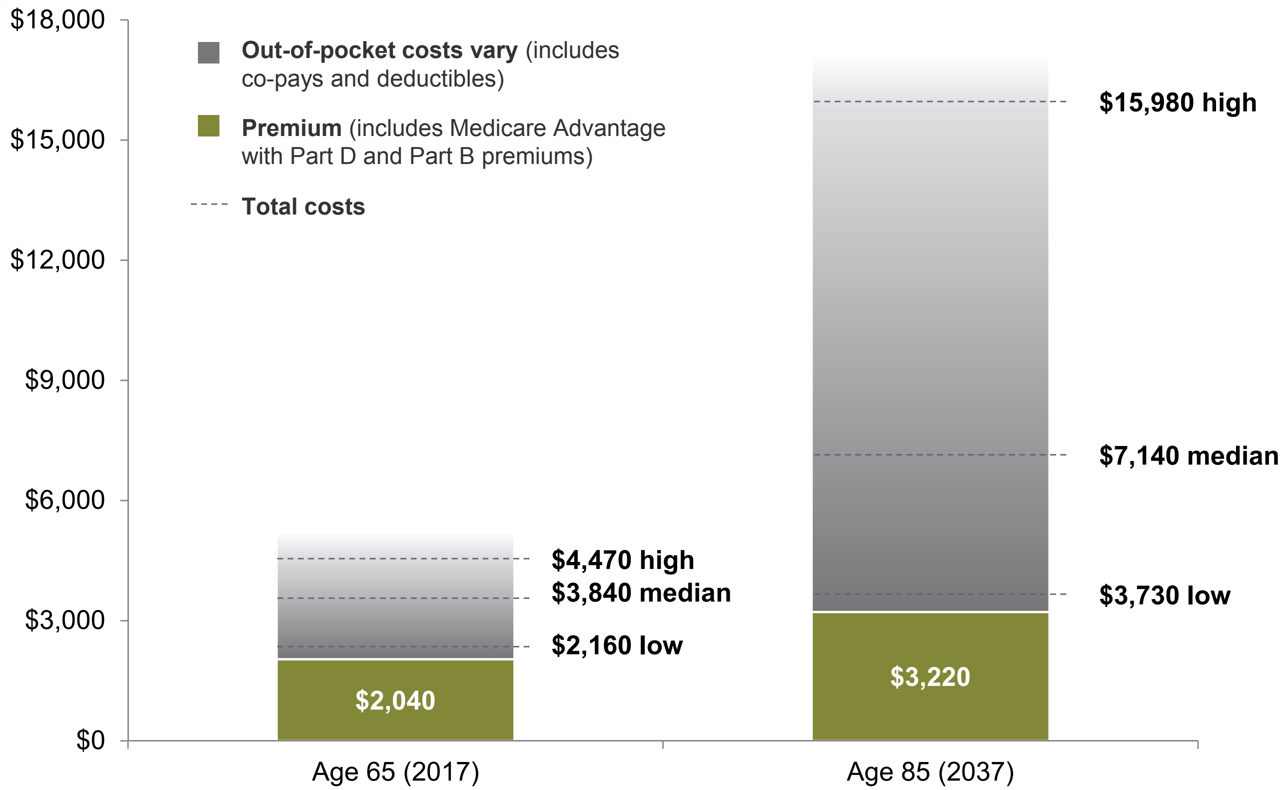
Notes: Age 85 estimated total median cost in 2017 is $7,195. Medigap premiums usually increase due to age, in addition to annual inflation, except for most policies in the following states: AR, CT, MA, ME, MN, NY, VT WA, AZ, FL, ID and MO. Analysis includes Medigap Plan F (the most comprehensive plan).

Parts B and D additional premiums are calculated from federal tax returns two years prior; individuals may file for an exception on form SSA-44 if they reduce or stop work. For the definition of MAGI, please see *Guide to Retirement* slide 36. *Additional premium includes a projection of 2018 costs for a 65-year-old beneficiary in 2018 ($5,076), plus the surcharge percentage specified in the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA / "doc fix bill").

Source: Employee Benefit Research Institute (EBRI) data as of December 31, 2016; SelectQuote data as of January 16, 2017; Centers for Medicare and Medicaid Services website, January 25, 2017; 2016 Medicare Trustees Report, June 22, 2016; J.P. Morgan analysis.

Variation in Medicare Advantage costs

Estimated Medicare Advantage with Part D and out-of-pocket expenses
Annual amount per person



DRAMATIC DIFFERENCES IN COSTS DEPENDING ON HEALTH

Be prepared to pay more for health care in the event you experience a health issue, which becomes more common as one ages.

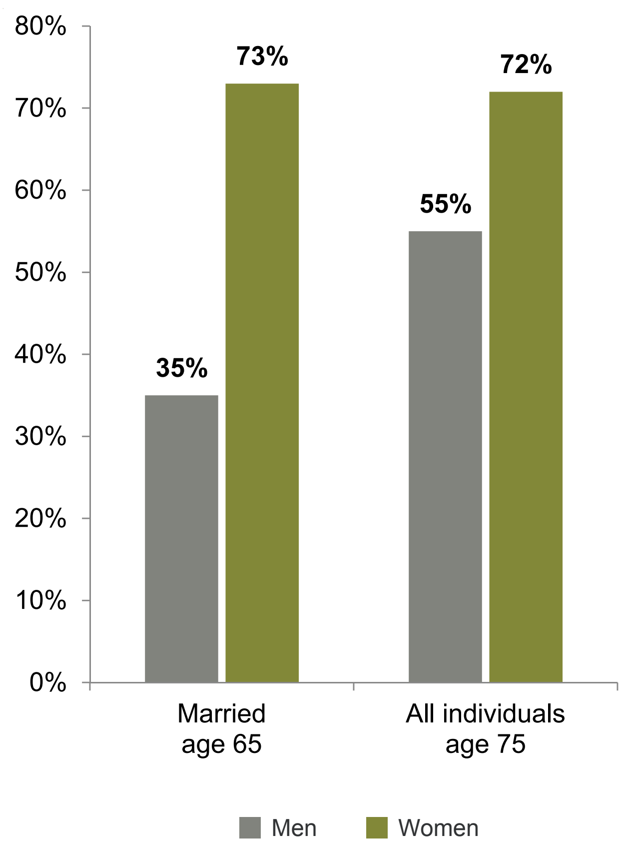
- Be aware: Although Medicare Advantage plans have out-of-pocket caps, those limits do not include prescriptions.
- Consider maintaining an emergency reserve fund for high out-of-pocket cost years.

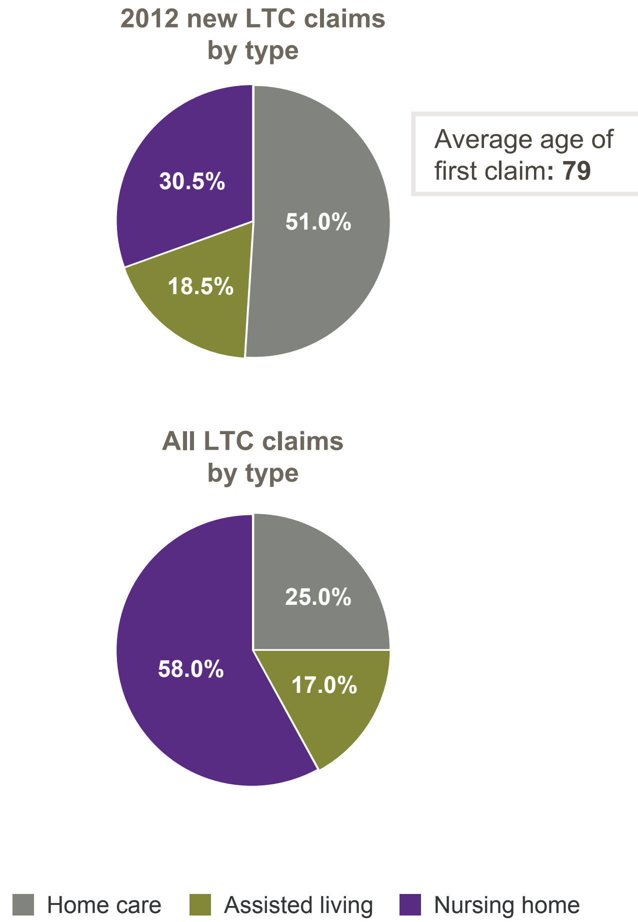
Total costs = annual premium + out-of-pocket costs for those with relatively low costs (those in the lowest third of the cost distribution), median costs and high costs (those in the highest third of the cost distribution).

Age 85 estimated median cost in 2017 is $4,582. Cost estimates above show age 85 in 2037 adjusted for inflation and increased use of medical care at older ages. Since plans are sold by private companies, premiums will vary based on plan characteristics. Out-of-pocket expenses, including out-of-pocket prescription costs, will vary by plan and include co-pays and deductibles. Those with high incomes pay higher premiums (above $85,000 single or $170,000 filing jointly).

Source: Employee Benefit Research Institute (EBRI) data as of December 31, 2016; SelectQuote data as of January 30, 2017; 2016 Medicare Trustees Report, June 22, 2016; J.P. Morgan analysis.

Likelihood of needing long-term care (LTC)





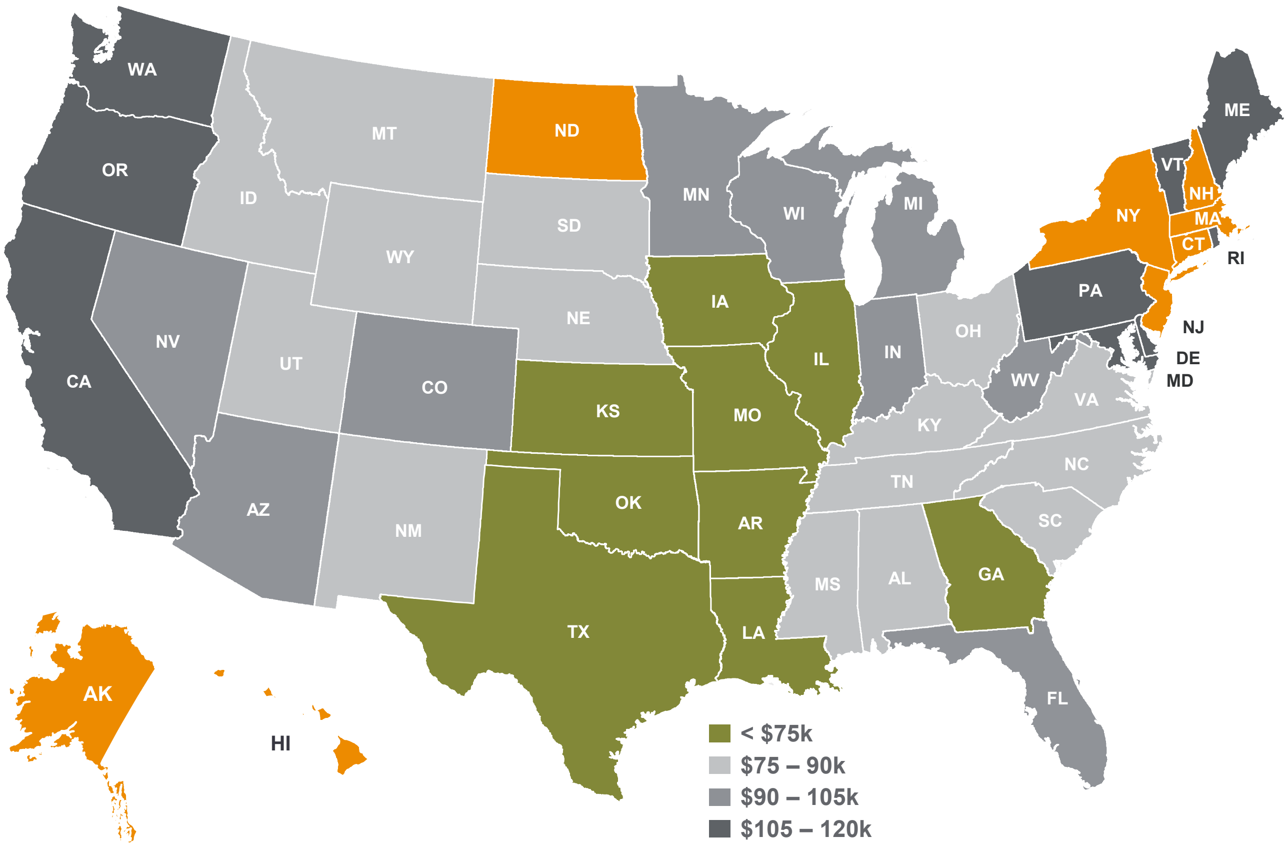
LONG-TERM VISION

Many individuals will need long-term care, which often starts with home care and progresses to a nursing home.

- There is a 1 in 3 chance that a long-term care need will last less than 6 months, but there is a 1 in 10 chance it will last 5 or more years.

Note: Annualized historical inflation for nursing home (private room): 3.5%; assisted living (one-bedroom): 2.2%; home health aide: 1.3%. 5- year CAGR represents the compound annual growth rate based on Genworth Cost of Care Survey. Genworth 2016 Cost of Care Survey, conducted by CareScout®, April 2016. © 2016 Genworth Financial, Inc. All rights reserved. Methodology document: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/48590_050516.pdf

Source: American Association for Long-Term Care Insurance 2014 Sourcebook. www.aaltci.org.



THE COST OF CARE

There can be significant variations in cost depending on where care is utilized – depending on state, city and even the facility.

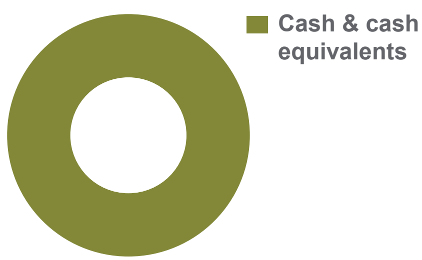
Methodology document: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/48590_050516.pdf

Source: Genworth 2016 Cost of Care Survey, conducted by CareScout®, April 2016. Annual median costs based on 365 days of care.

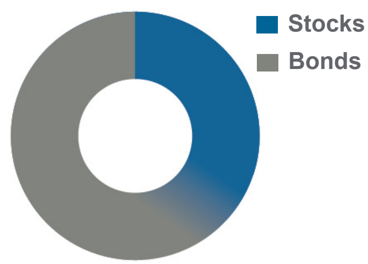
J.P.Morgan Asset Management

Goals-based wealth management

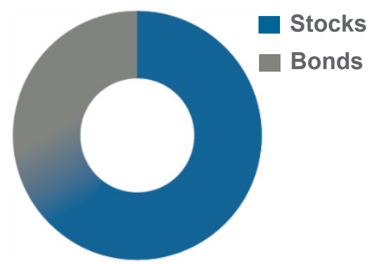
Short-term goals
Includes emergency reserve fund of total spending needs for 3-6 months



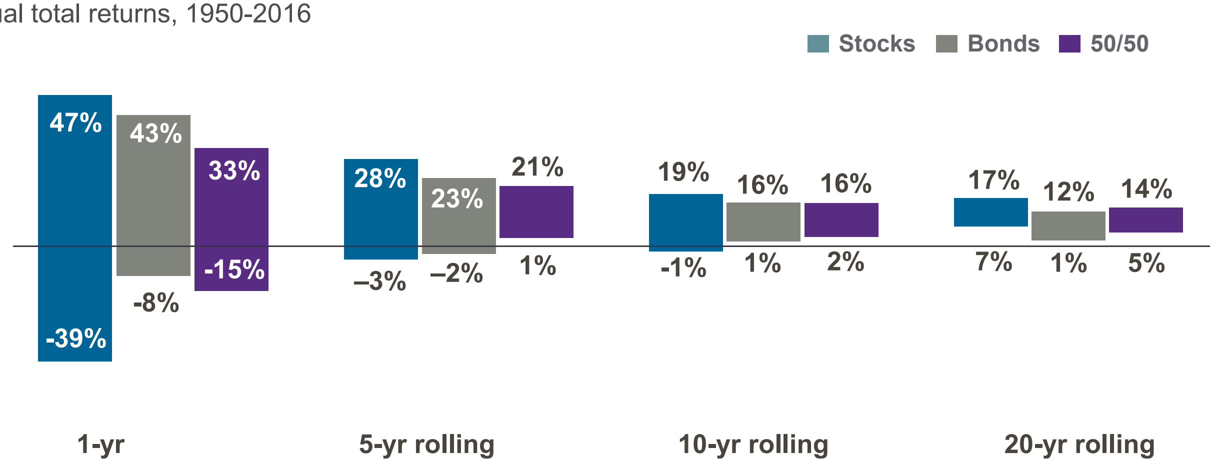
Medium-term goals
5-10 years, e.g. college, home



Long-term goals
15+ years, e.g. retirement



Range of stock, bond and blended total returns
Annual total returns, 1950-2016



DIVIDE AND CONQUER

Aligning your investment strategy by goal can help you take different levels of risk based on varying time horizons and make sure you are saving enough to accomplish all of your goals—not just the ones that occur first.

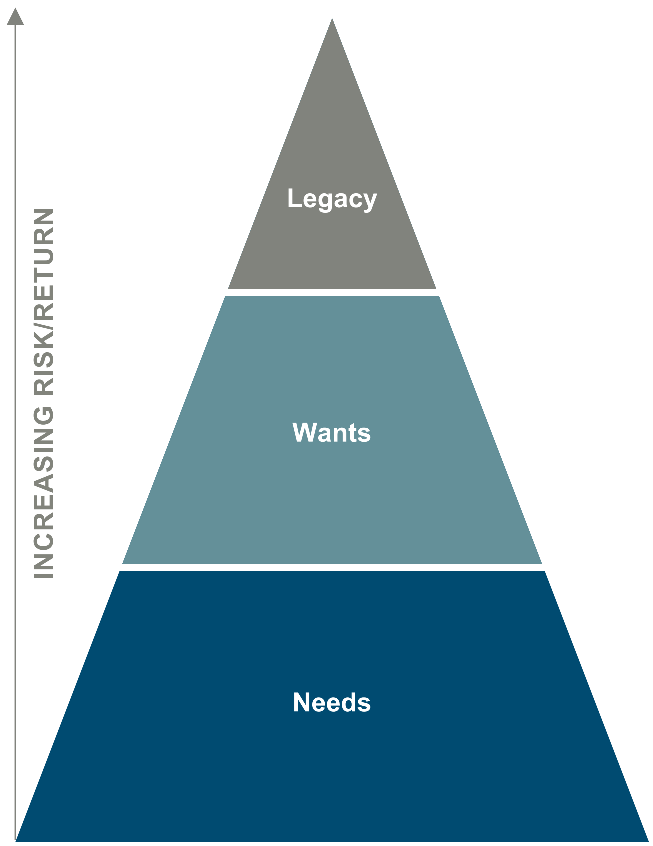
Source (top chart): J.P. Morgan Asset Management.

Source (bottom chart): Barclays Capital, FactSet, Federal Reserve, Robert Shiller, Stategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2016. Stocks represent the S&P 500 Shiller Composite and Bonds represent Stategas/Ibbotson for periods from 1950 to 2010 and Barclays Aggregate thereafter.

Note: Portfolio allocations are hypothetical and are for illustrative purposes only. They were created to illustrate different risk/return profiles and are not meant to represent actual asset allocation.

J.P.Morgan Asset Management

Structuring a portfolio to match investor goals in retirement



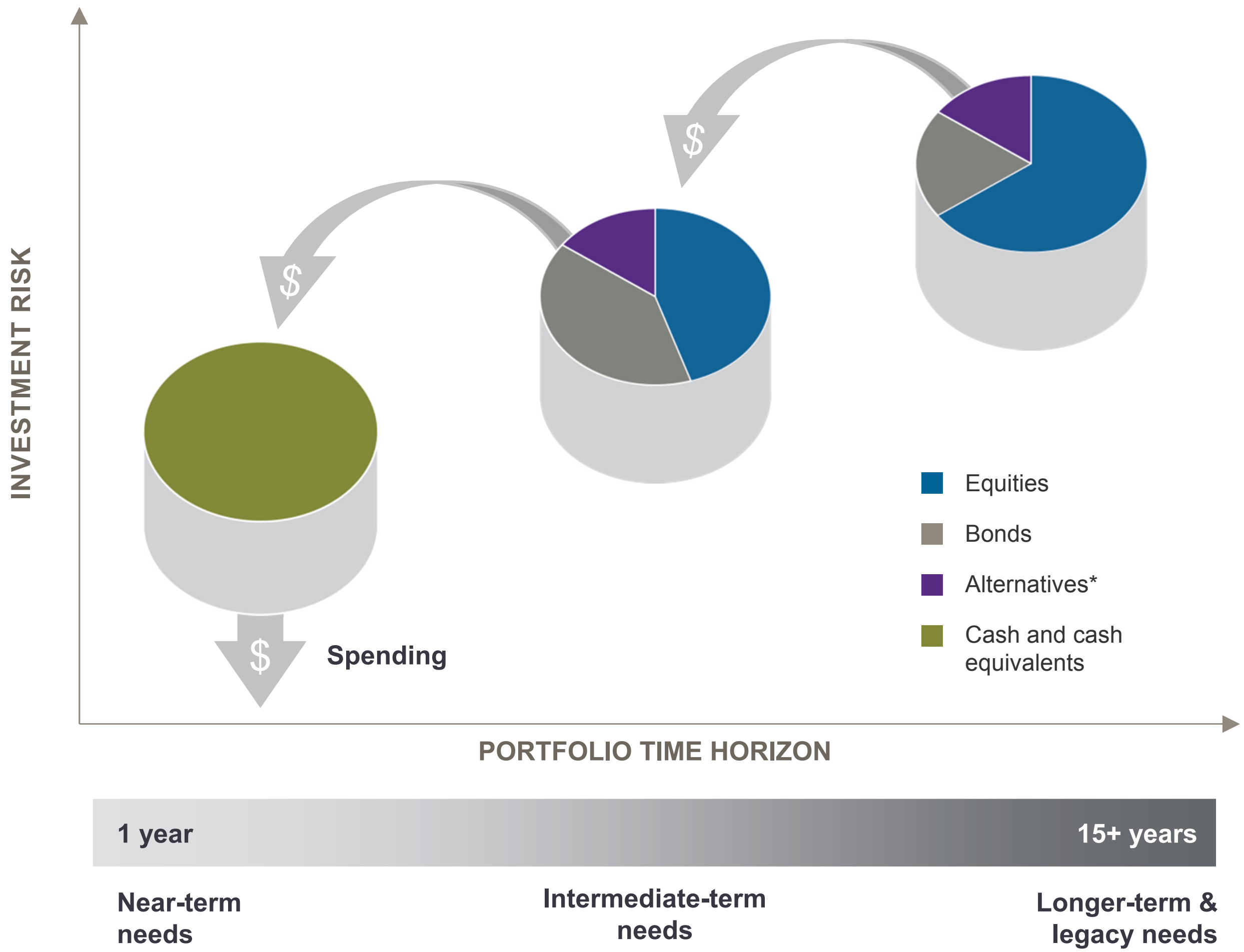
	Considerations	Potential solutions
Legacy	What is the time horizon and appropriate planning vehicle for your heirs and your estate goals?	Equities Alternatives
Wants	What are your desires/wants? How much risk are you willing to take?	Equities Extended sector bonds
Needs	What are your basic needs? What income sources do you have or will you need to create?	Social Security Pension Annuities High quality bonds Cash and cash alternatives

BUILDING YOUR PLAN

It may be useful to match dependable income sources with fixed retirement expenses, while coordinating other investments with more discretionary 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.



TIME-BASED SEGMENTATION

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

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.

10-year asset class returns

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007-2016 Ann.	2007-2016 Vol.
EM Equity 39.8%	Fixed Income 5.2%	EM Equtiy 79.0%	REITs 27.9%	REITs 8.3%	REITs 19.7%	Small Cap 38.8%	REITs 28.0%	REITs 2.8%	Small Cap 21.3%	High Yield 7.3%	REITs 25.2%
Comdty 16.2%	Cash 1.8%	High Yield 59.4%	Small Cap 26.9%	Fixed Income 7.8%	High Yield 19.6%	Large Cap 32.4%	Large Cap 13.7%	Large Cap 1.4%	High Yield 14.3%	Small Cap 7.1%	EM Equity 24.5%
DM Equity 11.6%	Asset Alloc. -25.4%	DM Equity 32.5%	EM Equity 19.2%	High Yield 3.1%	EM Equity 18.6%	DM Equity 23.3%	Fixed Income 6.0%	Fixed Income 0.5%	Large Cap 12.0%	Large Cap 6.9%	Comdty. 20.4%
Asset Alloc. 7.1%	High Yield -26.9%	REITs 28.0%	Comdty. 16.8%	Large Cap 2.1%	DM Equity 17.9%	Asset Alloc. 14.9%	Asset Alloc. 5.2%	Cash 0.0%	Comdty. 11.8%	REITs 5.1%	Small Cap 20.3%
Fixed Income 7.0%	Small Cap -33.8%	Small Cap 27.2%	Large Cap 15.1%	Cash 0.1%	Small Cap 16.3%	High Yield 7.3%	Small Cap 4.9%	DM Equity -0.4%	EM Equity 11.6%	Asset Alloc. 4.9%	DM Equity 19.7%
Large Cap 5.5%	Comdty. -35.6%	Large Cap 26.5%	High Yield 14.8%	Asset Alloc. -0.7%	Large Cap 16.0%	REITs 2.9%	Cash 0.0%	Asset Alloc. -2.0%	REITs 8.6%	Fixed Income 4.3%	Large Cap 16.2%
Cash 4.8%	Large Cap -37.0%	Asset Alloc. 25.0%	Asset Alloc. 13.3%	Small Cap -4.2%	Asset Alloc. 12.2%	Cash 0.0%	High Yield 0.0%	High Yield -2.7%	Asset Alloc. 8.3%	EM Equity 2.2%	High Yield 12.9%
High Yield 3.2%	REITs -37.7%	Comdty. 18.9%	DM Equity 8.2%	DM Equity -11.7%	Fixed Income 4.2%	Fixed Income -2.0%	EM Equity -1.8%	Small Cap -4.4%	Fixed Income 2.6%	DM Equity 1.2%	Asset Alloc. 11.7%
Small Cap -1.6%	DM Equity -43.1%	Fixed Income 5.9%	Fixed Income 6.5%	Comdty. -13.3%	Cash 0.1%	EM Equity -2.3%	DM Equity -4.5%	EM Equity -14.6%	DM Equity 1.5%	Cash 0.7%	Fixed Income 3.4%
REITs -15.7%	EM Equity -53.2%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Comdty. -1.1%	Comdty. -9.5%	Comdty. -17.0%	Comdty. -24.7%	Cash 0.3%	Comdty. -5.6%	Cash 0.8%

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management.

Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Barclays Global HY Index, Fixed Income: Barclays Aggregate, REITs: NAREIT Equity REIT Index. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Barclays Aggregate, 5% in the Barclays 1-3m Treasury, 5% in the Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/06 – 12/31/16. Please see disclosure pages at end for index definitions. All data represents total return for stated period. Past performance is not indicative of future returns.

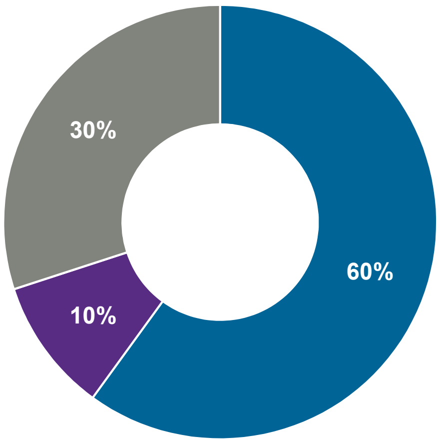
Guide to the Markets – U.S. Data are as of December 31, 2016.

MAINTAIN A DIVERSIFIED APPROACH

The best and worst performing asset classes vary greatly year to year. Failure to rebalance the Asset Allocation portfolio over this time period would have resulted in an average annual return of 4.6%— 0.3% lower than the annually rebalanced one. Consider a balanced investment approach with a clearly defined rebalancing policy.

Maximizing the power of diversification 2001–2016

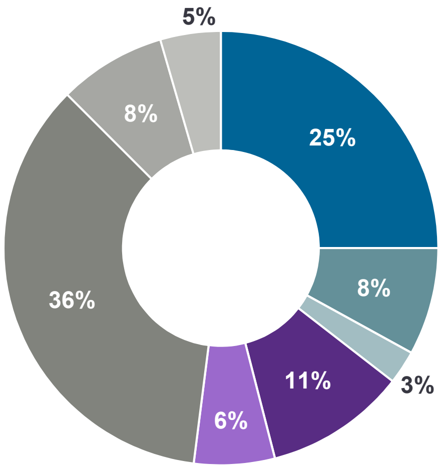
Less diversified portfolio



Return: 6.4%
Volatility: 12.0%

- S&P 500
- EAFE Equity
- Barclays Aggregate

More diversified portfolio



Return: 7.2%
Volatility: 11.1%

- S&P 500
- Russell 2000
- REIT
- EAFE Equity
- Emerging Market Equity
- Barclays Aggregate
- US High Yield
- Emerging Market Debt

MIX IT UP WISELY

Diversification may provide better returns with less risk.

Indexes and weights of the less diversified portfolio are as follows: U.S. stocks: 60.00% S&P 500; International stocks: 10.00% MSCI EAFE; U.S. bonds: 30.00% Barclays Capital Aggregate. More diversified portfolio is as follows: U.S. stocks: 25.00% S&P 500, 8.00% Russell 2000, 2.50% NAREIT Equity REIT Index; International stocks: 10.50% MSCI EAFE, 6.00% MSCI Emerging Markets; U.S. bonds: 35.50% Barclays Capital Aggregate, 8.00% Barclays U.S. High Yield; International bonds: 4.50% J.P. Morgan EMBI Global Diversified. Source: Bloomberg, J.P. Morgan Asset Management.

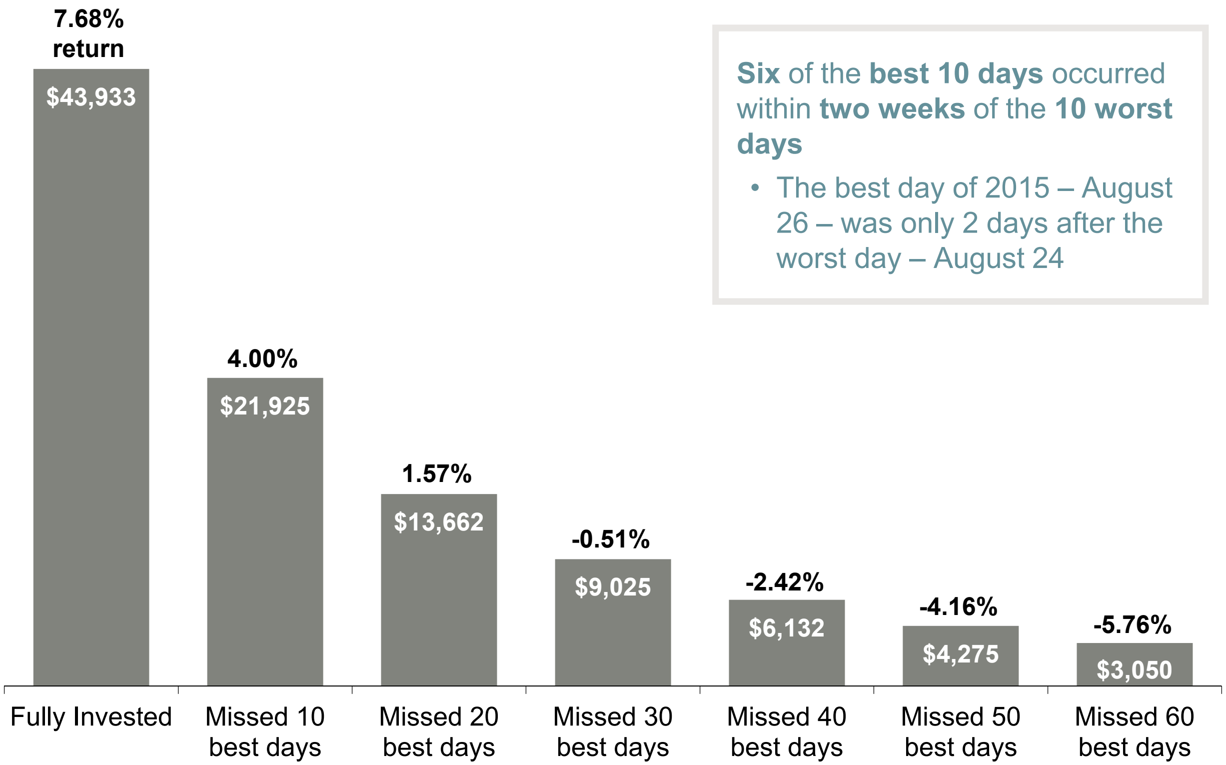
Charts are shown for illustrative purposes only. Percentages may not sum due to rounding. Past returns are no guarantee of future results. Diversification does not guarantee investment returns and does not eliminate risk of loss. Data as of December 30, 2016.

J.P.Morgan Asset Management

Impact of being out of the market

Returns of the S&P 500

Performance of a $10,000 investment between January 1, 1997 and December 30, 2016



Six of the **best 10 days** occurred within **two weeks** of the **10 worst days**

- The best day of 2015 – August 26 – was only 2 days after the worst day – August 24

PLAN TO STAY INVESTED

Trying to time the market is extremely difficult to do. Market lows often result in emotional decision making. Investing for the long term while managing volatility can result in a better retirement outcome.

On August 24, 2015 the Dow Jones Industrial Average closed down 588 pts. On August 26, 2015 it closed up 609 pts.

This chart is for illustrative purposes only and does not represent the performance of any investment or group of investments.

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. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 30, 2016.

A closer look at tax rates — 2017

Federal income tax rates applicable to taxable income

Tax rate	Single filers	Married filing jointly	Capital gains & dividends	Medicare tax on earned income	Medicare tax on investment income	PEP and Pease limitations**
10%	Up to $9,325	Up to $18,650	0%	2.90% (includes 1.45% employer portion and 1.45% employee portion)	0%	$261,500 single/ $313,800 married AGI threshold Pease: Itemized deductions reduced by lesser of a) 3% of AGI above threshold or b) 80% of itemized deductions PEP: Exemption reduced by 2% for every $2,500 above AGI threshold PEP will end at $384,000 (singles)/$436,300 (married)
15%	$9,325-$37,950	$18,650-$75,900				
25%	$37,950-$91,900	$75,900-$153,100	15%			
28%	$91,900-$191,650	$153,100-$233,350				
33%	$191,650-$416,700	$233,350-$416,700		3.80% (includes 2.90% tax referenced above plus additional 0.90% tax for earned income above MAGI* $200,000/250,000 threshold)	3.80% (additional tax will be levied on lesser of i) net investment income or ii) excess MAGI above $200,000/ 250,000 thresholds)	
35%	$416,700-$418,400	$416,700-$470,700				
39.6%	$418,400 or more	$470,700 or more	20%			

* Modified Adjusted Gross Income (MAGI) is AGI plus certain deductions added back such as foreign earned income, tax-exempt interest, taxable IRA contributions and Social Security payments.
** Itemized deduction limitation (Pease) and personal exemption phase out (PEP). Does not apply to medical expenses and casualty or theft losses. Standard deduction is $6,350 single/$12,700 married couples. Personal exemption is $4,050.

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

Type of gain	Maximum rate
Top rate for ordinary income & non-qualified dividends	39.6%/43.4%*
Short-term capital gains (assets held 12 months or less)	39.6%/43.4%*
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	$54,300	$120,700 - $337,900
Married filing jointly	$84,500	$160,900 - $498,900

*Includes top tax rate plus 3.8% Medicare tax on net investment income beyond MAGI threshold.
**The exemption amount is reduced .25 for every $1 of AMTI (income) above the threshold amount for the taxpayer's filing status.

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

Top federal estate tax rate	40%
Federal estate, GST & gift tax exemption	$5.49 million per individual
Annual gift tax exclusion	$14,000 ($28,000 per couple)

	Traditional IRA	Roth IRA	Roth IRA conversion
Maximum contribution	• $5,500 (earned income) • $6,500 (age 50 and over)[1] • Reduced by Roth IRA contributions	• $5,500 (earned income) • $6,500 (age 50 and over)[1] • Reduced by Traditional IRA contributions	No limit on conversions of Traditional IRAs, SEP IRAs, SIMPLE IRAs (if open 2+ years)
Age limits to contribute	Under 70½ in the year of contribution	None	None
Income phase-out ranges for contribution deductibility	**2016** Single: $61,000-$71,000 [2] Married: $98,000-$118,000 [2] **2017** Single: $62,000-$72,000 Married: $99,000-$119,000	All contributions are non-deductible	N/A
Phase-out ranges for Roth contribution eligibility	N/A	**2016** Single: $117,000-$132,000 Married: $184,000-$194,000 **2017** Single: $118,000-$133,000 Married: $186,000-$196,000	N/A
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	Distributions must begin by April 1 of the calendar year following the year the account owner turns age 70½.	None for account owner	None for account owner
Deadline to contribute	**2016:** April 18, 2017 **2017:** April 17, 2018	**2016:** April 18, 2017 **2017:** April 17, 2018	N/A

[1] Must be age 50 or older by December 31 of the contribution year.

[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 MAGI. For the definition of MAGI, please see *Guide to Retirement* slide 36.

[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 advisor. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions.

Type of Retirement Account	Specifics	2016	2017
401(k), 403(b), 457(b)	401(k) elective deferral limit/catch-up contribution (age 50 and over)	$18,000/$24,000	$18,000/$24,000
	Annual defined contribution limit	$53,000	$54,000
	Annual compensation limit	$265,000	$270,000
	Highly compensated employees	$120,000	$120,000
	403(b)/457 elective deferrals/catch-up contribution (age 50 and over)	$18,000/$24,000	$18,000/$24,000
SIMPLE IRA	SIMPLE employee deferrals/catch-up deferral (age 50 and over)[1]	$12,500/$15,500	$12,500/$15,500
SEP IRA	Maximum contribution[2]	$53,000	$54,000
	SEP minimum compensation	$600	$600
	SEP annual compensation limit	$265,000	$270,000
Health Savings Accounts (HSAs)	Maximum contribution amount/over age 55	**Single:** $3,350/$4,350 **Family:** $6,750/$7,750	**Single:** $3,400/$4,400 **Family:** $6,750/$7,750
	Minimum deductible	**Single:** $1,300 **Family:** $2,600	**Single:** $1,300 **Family:** $2,600
	Maximum out-of-pocket expenses	**Single:** $6,550 **Family:** $13,100	**Single:** $ 6,550 **Family:** $13,100
Social Security	Wage base	$118,500	$127,200
	Maximum earnings test exempt amounts under FRA for entire calendar year/during year of FRA[3]	$1,310 p/month ($15,720 p/year)/ $3,490 p/month	$1,410 p/month ($16,920 p/year)/ $3,740 p/month
	Maximum Social Security benefit at FRA	$2,639 p/month	$2,687 p/month
Defined benefit-maximum annual benefit at retirement		$210,000	$215,000

[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 $270,000.

[2] Employer contributions may not exceed $54,000 or 25% of compensation. Other rules apply for self-employed individuals.

[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.

There are typically four options to consider when leaving an employer's retirement plan, each with its benefits and considerations. Converting a portion of tax-deferred assets to a Roth IRA may be a fifth option to consider in certain circumstances described below.

Options	Potential benefits	Considerations
Roll the retirement account into an IRA account (IRA rollover) (May also roll the Roth 401(k) portion of a retirement account into a Roth IRA)	• No income taxes or penalties for a direct rollover[1] • Assets maintain tax-deferred status • Ability to make additional contributions subject to income limitations[2] • Potential for a broader range of investment choices • Opportunity to consolidate multiple retirement accounts • If balance includes employer stock, may be eligible for preferable tax treatment (Net Unrealized Appreciation) if the stock is not rolled over[3]	• Loans are not allowed • Fees may vary, and may be higher than what is charged in an employer plan
Leave the money in former employer plan	• Not a taxable event • Assets maintain tax-deferred status • If you are at least age 55 and are separated from service, you may be able to take withdrawals without penalties • Fees may be lower depending on plan size	• Investment options vary according to the plan and may be more limited • Ability to leave assets in the plan as well as ongoing plan options are subject to policies and contractual terms of the plan • Some plans may not provide periodic payments to retirees
Move the assets into a new employer plan	• No income taxes or penalties for a direct rollover[1] • Assets maintain tax-deferred status • New employer plan may allow loans • Ability to make additional contributions potentially with a company match • Fees may be low based on plan and size of employer (number of participants)	• Investment options vary according to the plan and may be more limited • Assets are subject to policies or terms of new employer plan
Withdraw balance of assets or "cash out" of plan	• Individual may use remaining funds (after taxes and potential penalties) for other purposes	• Upon withdrawal, account balance is subject to ordinary income tax on pre-tax contributions and investment earnings • 20% automatically withheld for taxes upon distribution • Additional 10% withdrawal penalty tax may apply for owners younger than age 59½ • Additional federal, state or local income taxes may apply • Loss of tax-deferred growth of assets
Convert all or part of retirement account into Roth IRA (Roth IRA conversion)	• May provide income tax diversification in retirement • After taxes are paid at conversion, future distributions are tax free[4] • Required minimum distributions do not apply at 70½	• The pre-tax amount is included in gross income in the year of conversion (and is subject to the aggregation rule) • Sufficient taxable assets to pay income taxes owed is strongly recommended

[1] In a direct rollover, qualified retirement assets are transferred directly from the former employer plan to the institution holding the new IRA or plan account, and no taxes or penalties will apply. If an owner chooses to receive the plan assets first, the distribution is subject to 20% mandatory withholding and the entire amount of the distribution must be deposited into a new plan or IRA account within 60 days of receipt to avoid further potential taxes and penalties.

[2] Subject to IRA contribution limits: $5,500 in 2017 ($6,500 if age 50 or older); single filers may make Roth contributions if MAGI is $118,000 or below; married filing jointly if MAGI is $186,000 or below; phase-outs on contributions thereafter.

[3] With the Net Unrealized Appreciation (NUA) strategy, an employee may transfer the employer stock portion of a retirement account to a brokerage account. The employee pays ordinary income tax on the cost basis of the stock at the time of transfer, but will owe capital gains tax when he/she later sells the stock.

[4] Subject to 5-year Roth account holding period and age requirements.

What is Medicare?

Medicare is a government health care program available to those who have paid Medicare taxes while working or to non-working spouses of such individuals. Medicare is available when these individuals reach age 65. Citizens who have never paid Medicare taxes may be eligible if they pay a Medicare premium. Individuals under age 65 may also be eligible if they are considered disabled by Social Security or the Railroad Retirement Board for more than 24 months.

	Traditional Medicare	Medicare Advantage (usually limited to a network of providers)
Part A: inpatient hospital insurance	✓	✓
Part B: doctors, tests and outpatient hospital insurance	✓	✓
Medigap: standardized plans that cover Part A and Part B co-pays and deductibles	✓	Not available
Part D: prescription drug insurance	✓	✓ Most plans include Part D
Prescription drug co-pays and deductibles	Not covered	Not covered
Most vision, dental and hearing expenses	Not covered	✓ Coverage varies by plan
Long-term care*	Not covered	Not covered

* Medicare does not cover most long-term care costs. Medicare does pay for medically necessary skilled nursing facility or home health care on a very limited basis. Custodial care is not covered.

START HERE

Does your workplace employ 20+ people?[1]

Y N

Do you contribute to a Health Savings Account (HSA)?

Y N

Have you filed for Social Security benefits?

Y N

Sign up for Medicare[1]

- Enroll in Parts A, B and D up to 3 months before your 65th birthday month to ensure no gap in coverage and no late enrollment penalties
- Decide on and enroll in Medigap or Medicare Advantage (most Medicare Advantage plans include Part D)

Consider signing up for Part A

- Part A is free for people who paid payroll taxes for 40+ quarters (about 10 years)
- Employer coverage is primary (check with plan administrator about any conflicts)

Consider not signing up for Medicare

- "Creditable" employer insurance benefit is primary (pays first)
- IRS tax penalties apply if you sign up for Medicare and also contribute to an HSA

Stop HSA contributions and consider opting out of Medicare Part B

- Once you start Social Security benefits, you will automatically be enrolled in Part A, retroactive six months back to age 65
- IRS tax penalties apply if you are enrolled in Part A and contribute to an HSA
- You may contact Medicare to opt out of Part B

WHAT IF I HAVE COBRA OR RETIREE COVERAGE?

- You must sign up for Medicare when you are first eligible, or you will face late enrollment penalties for Part B and possible underwriting for Medigap if you sign up for these later.
- Most retiree coverage works with Medicare Parts A and B (check with your plan administrator).
- If your COBRA coverage (a temporary extension of your employer coverage) or retiree prescription plan will continue and is "creditable" (ask your plan administrator for documentation), you may choose to delay enrollment in Part D without penalty.

[1] Most employer coverage for <20 people will end at age 65 or become secondary after Medicare has paid. Late penalties will apply if you don't sign up in your initial enrollment window and Medigap plans may deny coverage or underwrite after the initial enrollment period.

For more information see www.mymedicarematters.org/enrollment/am-i-eligible, sponsored by the National Council on Aging and Medicare.gov.

J.P.Morgan Asset Management

	RISK TOLERANCE	CONTRACT GROWTH AND PAYOUT	TYPE OF ANNUITY	CHARACTERISTICS
INCOME NOW	Risk averse investor	■ Fixed rate of growth ■ Fixed income payout	Single Premium Immediate Annuity (SPIA)	■ Single premium purchase payment
INCOME LATER[4]	Risk averse investor	■ Fixed rate of growth ■ Fixed income payout	Deferred Rate Annuity	■ Purchase payments grow at a fixed or market rate for a specified period of time
INCOME LATER[4]	Risk averse investor	■ Fixed rate of growth ■ Fixed income payout	Deferred Income Annuity (DIA)	■ Often purchased to provide income in late retirement years[1]
INCOME LATER[4]	Risk averse investor	■ Fixed rate of growth ■ Fixed income payout	Qualified Longevity Annuity Contract (QLAC)	■ May transfer 25% or up to $125,000 from retirement account to fund annuity; this amount exempt from RMDs at age 70½ ■ Must begin distributions by age 85 or as specified by contract
INCOME LATER[4]	Risk averse/ moderate investor	■ Variable rate of growth ■ Variable payout with fixed minimum	Fixed Indexed Annuity (FIA)	■ Account growth is tied to a particular index (i.e. S&P 500) with a cap on growth in exchange for downside protection [2] ■ Most contracts provide guaranteed minimum fixed growth
INCOME LATER OR NEVER[4]	Moderate investor	■ Variable rate of growth ■ Variable income with no guaranteed minimum payout[3]	Variable Annuity (VA)	■ Purchase payments are invested in subaccounts like mutual funds ■ Guaranteed living benefits ("GLBs")[3] may be available for additional cost to provide minimum guaranteed account growth and/or minimum guaranteed retirement income
INCOME LATER OR NEVER[4]	Moderate/ aggressive investor	■ Variable rate of growth ■ Variable income with no guaranteed minimum payout[3]	Investment Only Variable Annuity (IOVA)	■ Purchase payments invested in a variety of subaccounts, including alternatives and hedge funds ■ Used for tax deferral, estate planning and asset location

[1] DIAs are also known as longevity annuities and purchased during healthy years to provide income in later years when illness, dementia or other disability may set in and hinder sound income planning decisions.

[2] Some contracts contain caps on growth and limit gains attributable to account based on participation rate or other factors.

[3] Guaranteed living benefits and death benefits may be available with certain fixed and variable annuity products at additional cost.

[4] While non-qualified annuities are not generally subject to RMDs, state laws requiring contract annuitization may apply.

Indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market.

This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

The **Russell 2000 Index®** measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The **MSCI EAFE (Europe, Australia, Far East) Net Index** is recognized as the pre-eminent benchmark in the United States to measure international equity performance. It comprises 21 MSCI country indexes, representing the developed markets outside of North America.

The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. *As* of June 2007, the MSCI Emerging Markets Index consisted of the following 25 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

The **FTSE NAREIT EQUITY REIT Index** is designed to provide the most comprehensive assessment of overall industry performance and includes all tax-qualified real estate investment trusts (REITs) that are listed on the NYSE, the American Stock Exchange or the NASDAQ National Market List.

The **Barclays Capital U.S. Aggregate Index** represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

The **Barclays Global High Yield Index** is a multi-currency flagship measure of the global high yield debt market. The index represents the union of the US High Yield, the Pan-European High Yield and Emerging Markets (EM) Hard Currency High Yield Indices. The high yield and emerging markets sub-components are mutually exclusive. Until January 1, 2011, the index also included CMBS high yield securities.

The **Barclays US High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.

The J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI Global Diversified) tracks total returns for U.S. dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, Eurobonds. The index limits the exposure of some of the larger countries.

The **Bloomberg Commodity Index** is composed of futures contracts on physical commodities and represents 22 separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel and zinc.

Unless otherwise indicated, all illustrations are shown in U.S. dollars.

Past performance is no guarantee of comparable future results.

Diversification does not guarantee investment returns and does not eliminate the risk of loss.

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. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk," meaning that stock prices in general may decline over short or extended periods of time.

Small capitalization investing typically carries more risk than investing in well-established "blue-chip" companies since smaller companies generally have a higher risk of failure. Historically, smaller companies' stock has experienced a greater degree of market volatility than the average stock.

Mid capitalization investing typically carries more risk than investing in well-established "blue-chip" companies. Historically, mid cap companies' stock has experienced a greater degree of market volatility than the average stock.

Real estate investments may be subject to a higher degree of market risk because of concentration in a specific industry, sector or geographical sector. Real estate investments may be subject to risks including, but not limited to, declines in the value of real estate, risks related to general and economic conditions, changes in the value of the underlying property owned by the trust and defaults by borrower.

International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Also, some overseas markets may not be as politically and economically stable as the United States and other nations.

Investments in **emerging markets** can be more volatile. As mentioned above, the normal risks of investing in foreign countries are heightened when investing in emerging markets. In addition, the small size of securities markets and the low trading volume may lead to a lack of liquidity, which leads to increased volatility. Also, emerging markets may not provide adequate legal protection for private or foreign investment or private property.

Investments in **commodities** may have greater volatility than investments in traditional securities, particularly if the instruments involve leverage. The value of commodity-linked derivative instruments may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Use of leveraged commodity-linked derivatives creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

Investing in **alternative assets** involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

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