RETIREMENT INSIGHTS

Guide to Retirement℠

2018 Edition

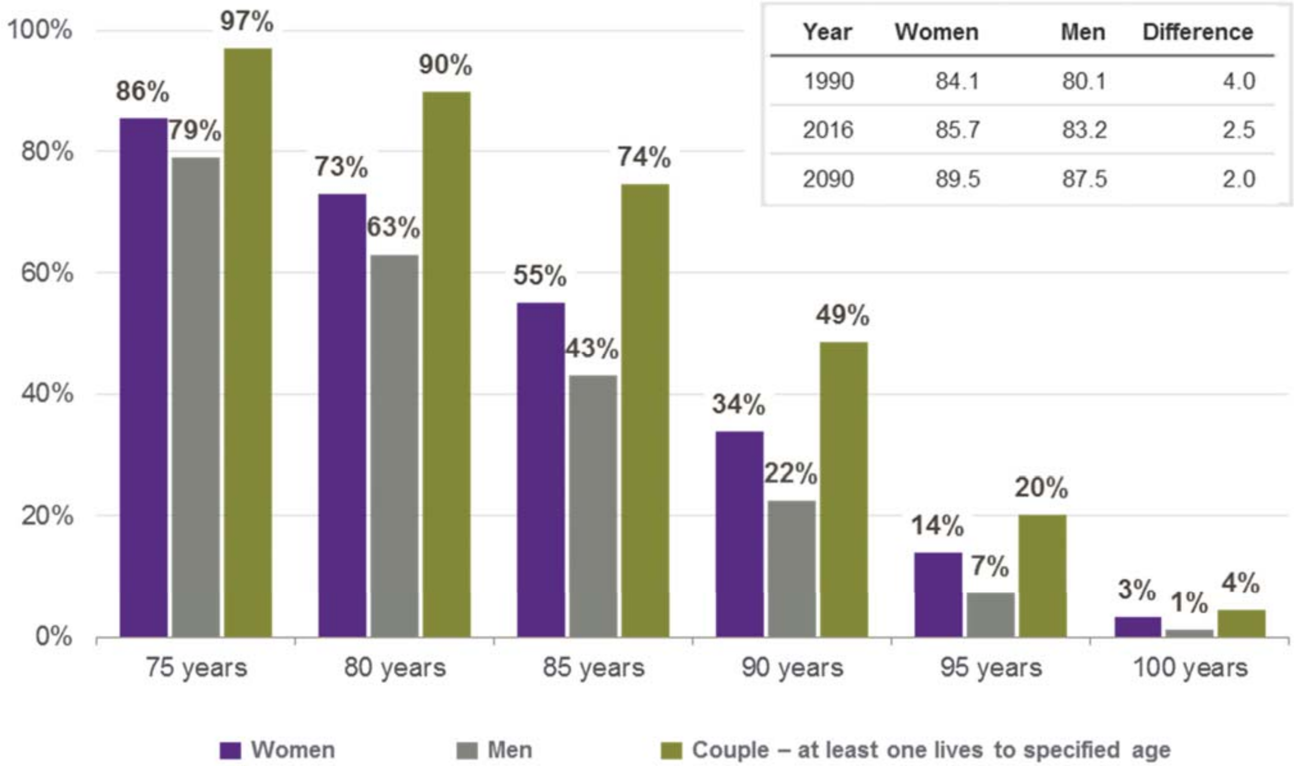
J.P.Morgan
Asset Management

Agenda

- Despite the headlines, **longevity** continues to **increase**…
  …and clients need help figuring out how to spend their **time**.
- **Social Security** is paying less…but **waiting** is still attractive in a **low-return environment.**
- **Health care** costs continue to rise….and **HSAs** are **misunderstood**.
- **Spending volatility** requires **a cushion** at retirement.

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
2016	85.7	83.2	2.5
2090	89.5	87.5	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, 2014 (published in 2017), J.P. Morgan Asset Management.
Table: Social Security Administration 2017 OASDI Trustees Report.
Probability at least one member of a same-sex female couple lives to age 90 is 56% and a same-sex male couple is 40%.

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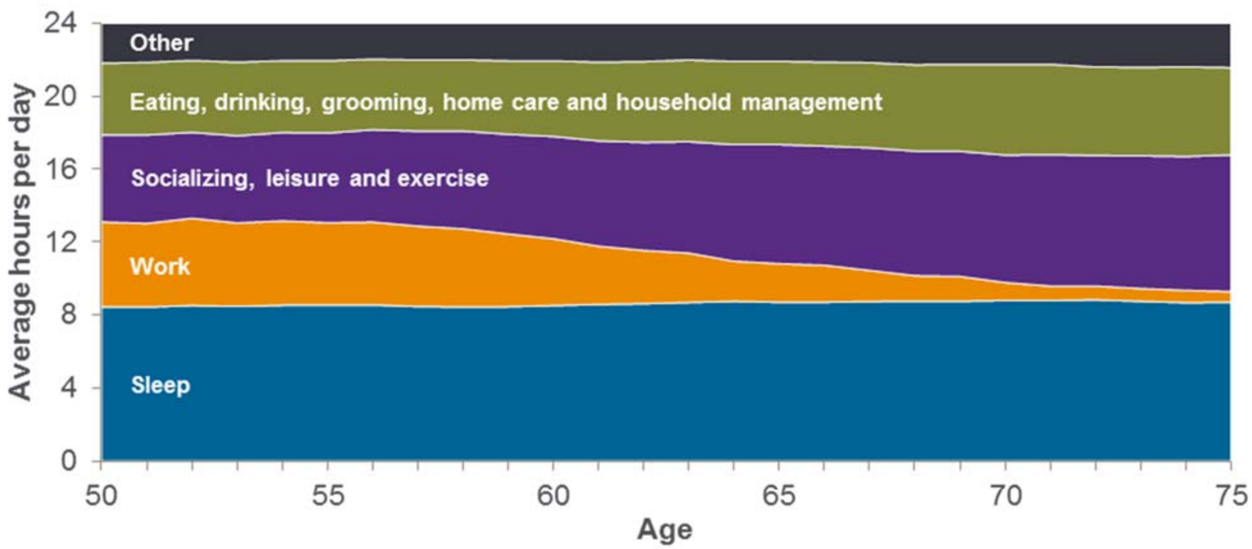
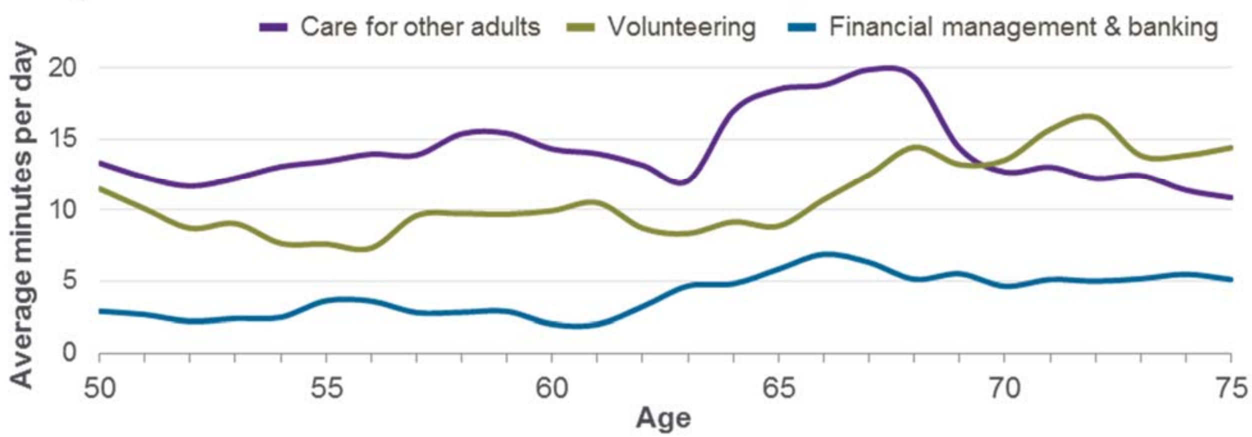
Amount of daily hours spent per activity by age



Activity trends in retirement



SPEND TIME PLANNING YOUR TIME

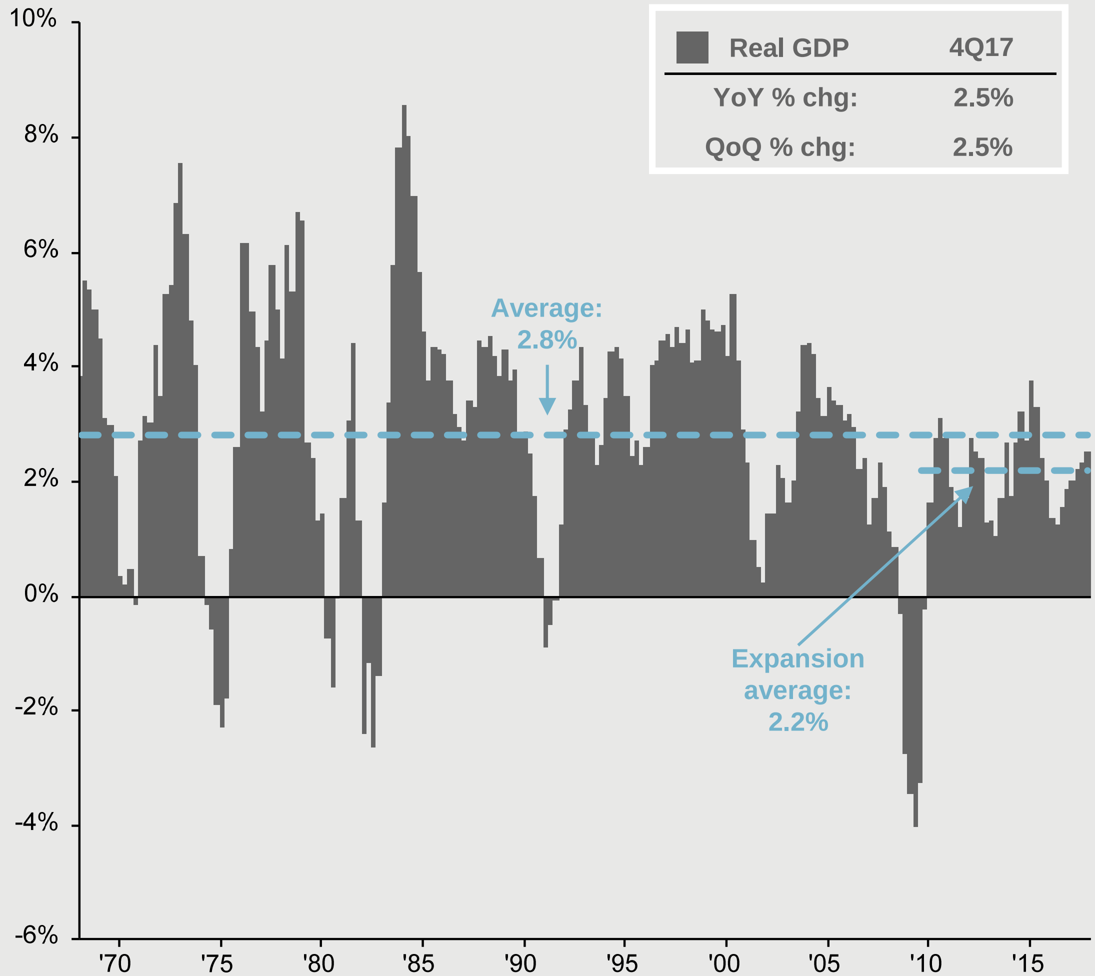
Retirement offers the gift of time to do the things that matter most to you. Knowing what those activities are prior to retiring can ease the transition into this new life stage.

Values include people who do and do not participate in the activities. Values are weighted by the age and then averaged across rolling five-year age groups. Each category includes time spent traveling to and from the activity if applicable.

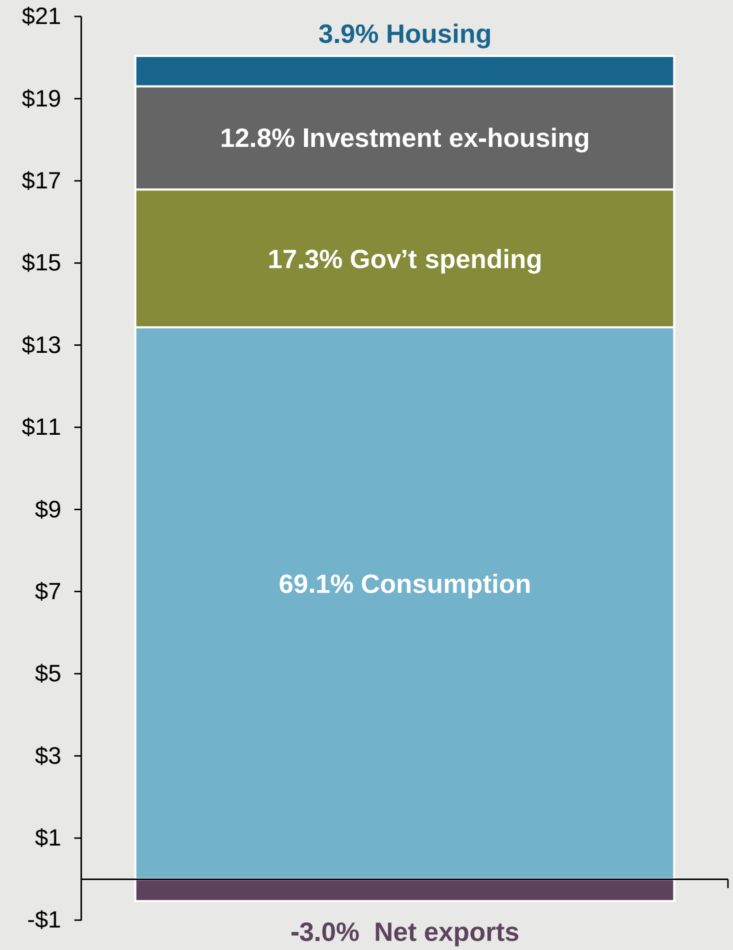
Source: Bureau of Labor Statistics American Time Use Survey 2016, J.P. Morgan Asset Management analysis.

Economic growth and the composition of GDP

Real GDP
Year-over-year % change



Components of GDP
4Q17 nominal GDP, USD trillions



Source: BEA, FactSet, J.P. Morgan Asset Management.
Values may not sum to 100% due to rounding. Quarter-over-quarter percent changes are at an annualized rate. Average represents the annualized growth rate for the full period. Expansion average refers to the period starting in the second quarter of 2009. Past performance is not a reliable indicator of current and future results.
Guide to the Markets – U.S. Data are as of February 28, 2018.

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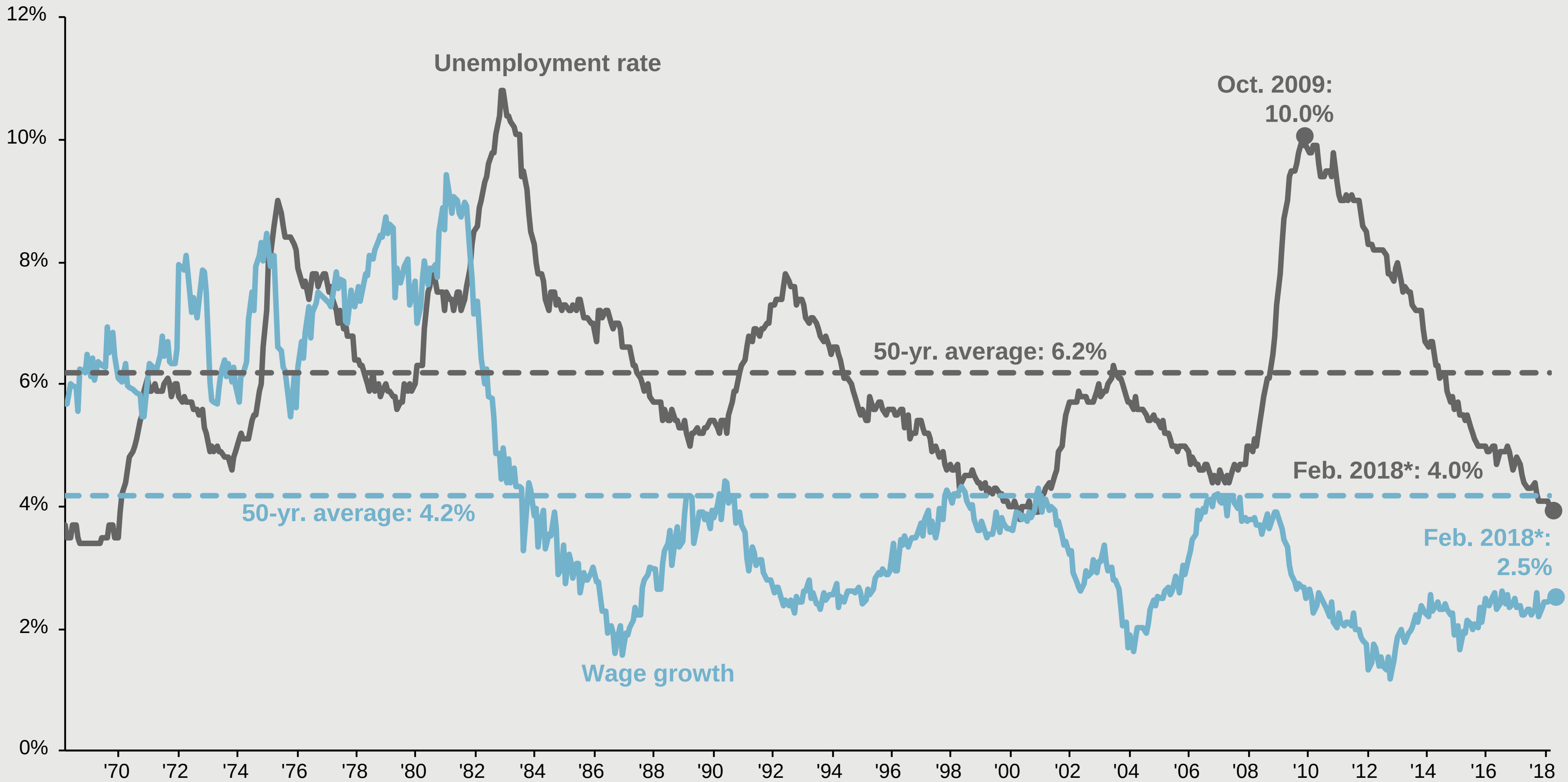
Unemployment and wages

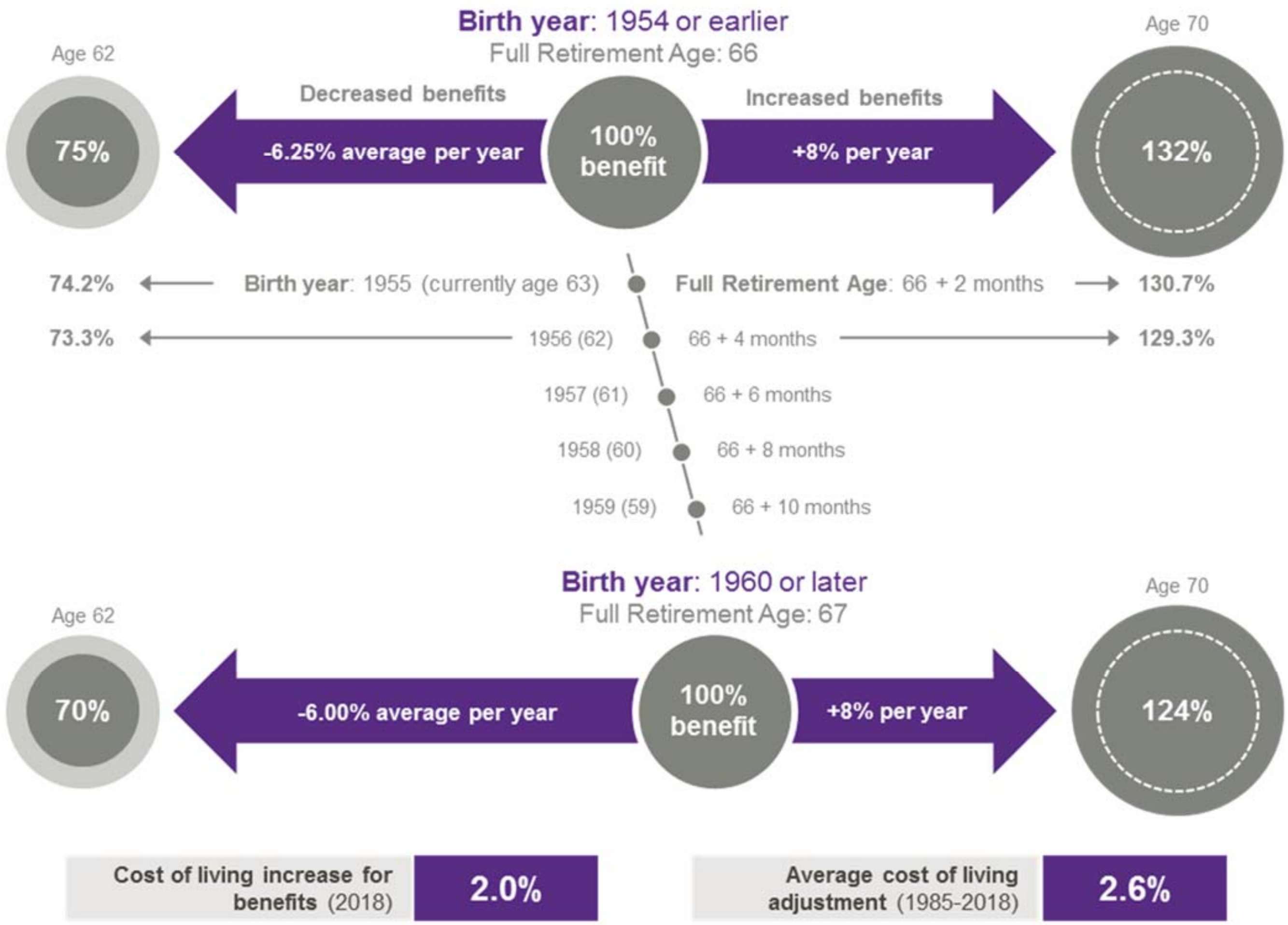
Civilian unemployment rate and year-over-year wage growth for private production and non-supervisory workers
Seasonally adjusted, percent



Source: BLS, FactSet, J.P. Morgan Asset Management. Past performance is not a reliable indicator of current and future results. *February 2018 figures are a J.P. Morgan asset management forecast.
Guide to the Markets – U.S. Data are as of February 28, 2018.

Benefits differ by birth year and claim age

Full Retirement Age = 100% benefit



UNDERSTAND THE TRADEOFFS

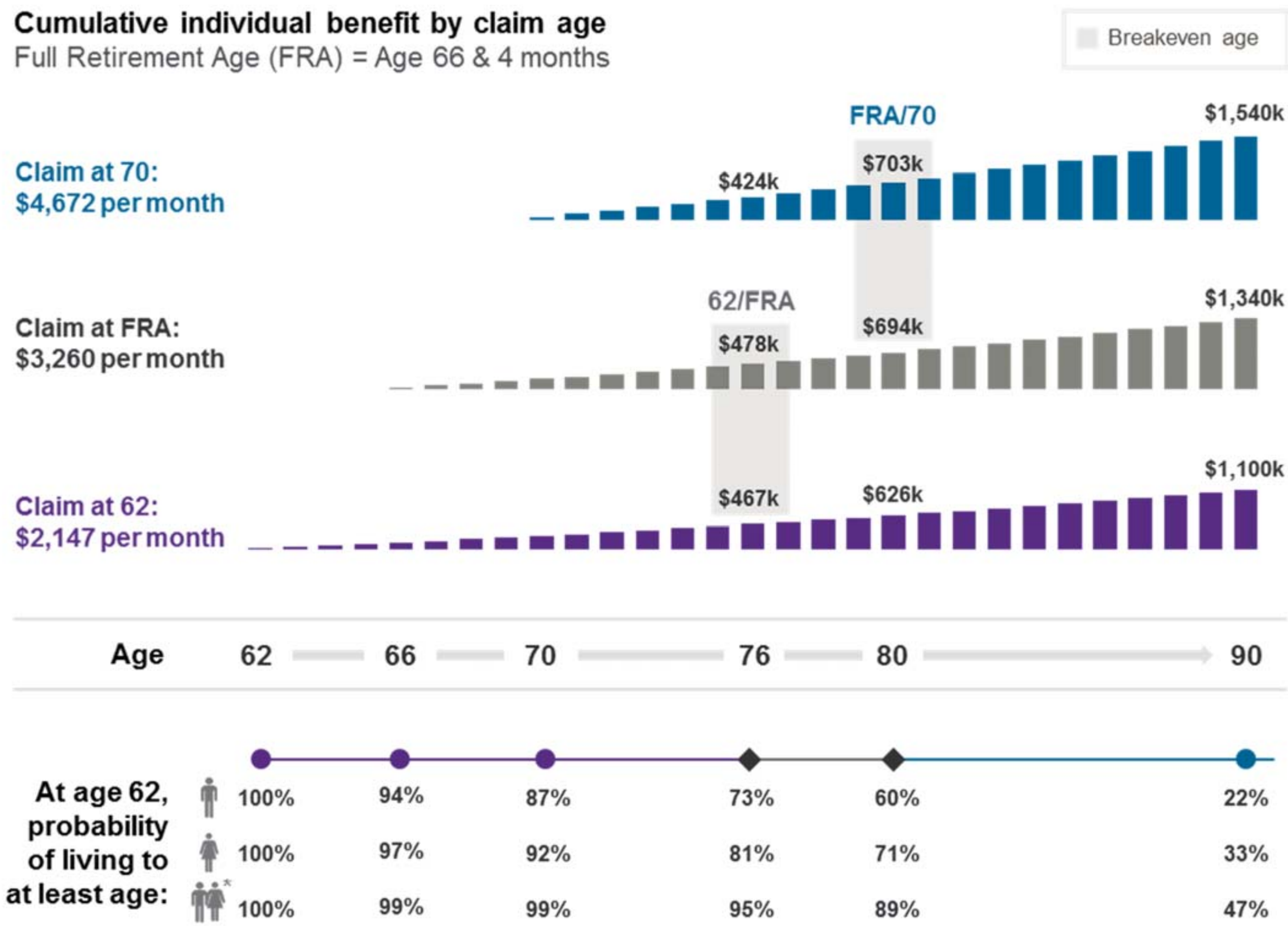
Deciding when to claim benefits will have a permanent impact on the benefit you receive. Claiming before your full retirement age can significantly reduce your benefit, while delaying increases it.

In 2017, full retirement age began transitioning from 66 to 67 by adding two months each year for 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

Maximizing Social Security benefits



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 1956, earns the maximum wage base, retires at the end of age 61 and claims at 62 & 1 month, 66 & 4 months and 70, respectively. Benefits are assumed to increase each year based on the Social Security Administration 2017 Trustee's Report "intermediate" estimates (annual benefit increase of 3.1% in 2019 and 2.6% thereafter). Monthly amounts without the cost of living adjustments (not shown on the chart) are: $2,147 at age 62; $2,928 at FRA; and $3,787 at age 70. Exact breakeven ages are 76 & 3 months and 80 & 5 months.

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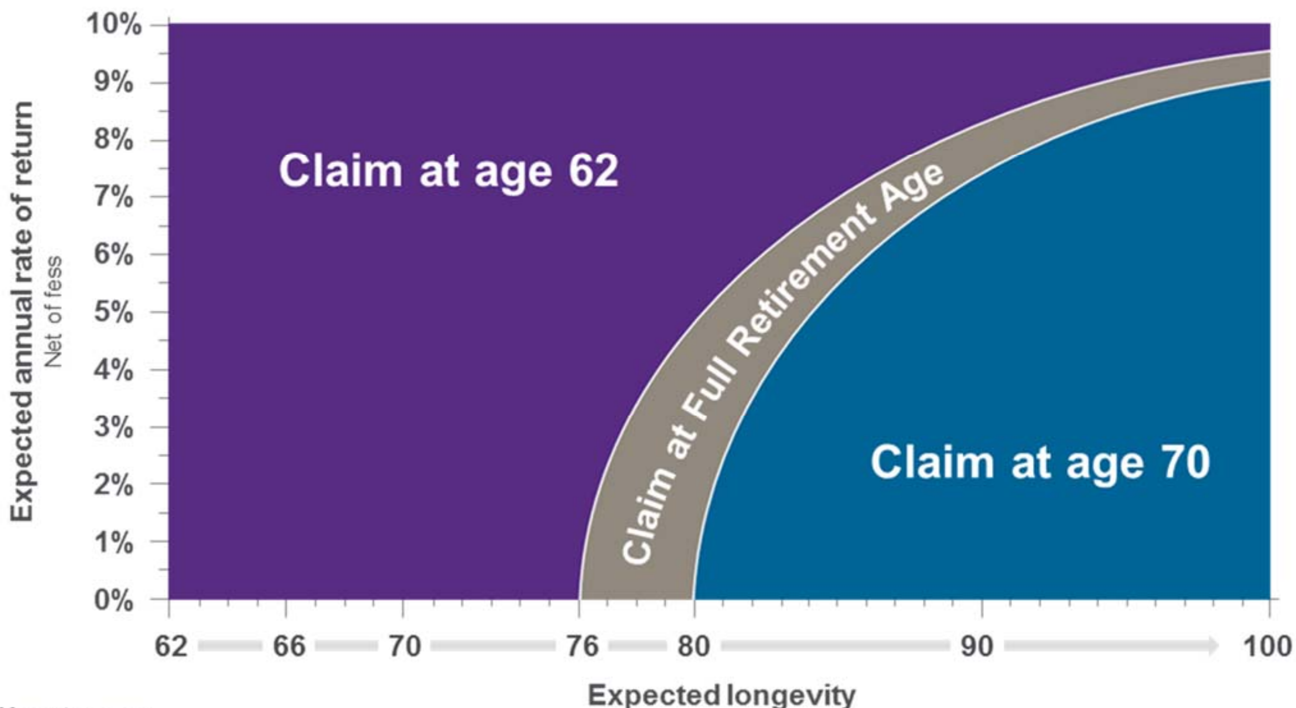
Comparison of claim age based on an individual's expected rate of return and longevity
Color represents the claim age with the highest expected lifetime benefits



How to use:

- Go to the intersection of your expected rate of return and your expected longevity.
- The color at this intersection represents the Social Security claim age that maximizes total Social Security benefits over the course of one's life – given the three options of age 62, Full Retirement Age (age 66 & 4 months) and age 70.
- Example: For an individual invested in a diversified 40/60 portfolio (expected rate of return of 5%) and average expected female longevity (age 86) = Claim at age 70.

CONSIDER PORTFOLIO RETURNS AND YOUR LIFE EXPECTANCY

The lower your expected long-term investment return and the longer your life expectancy – the more it pays to wait to take your benefit.

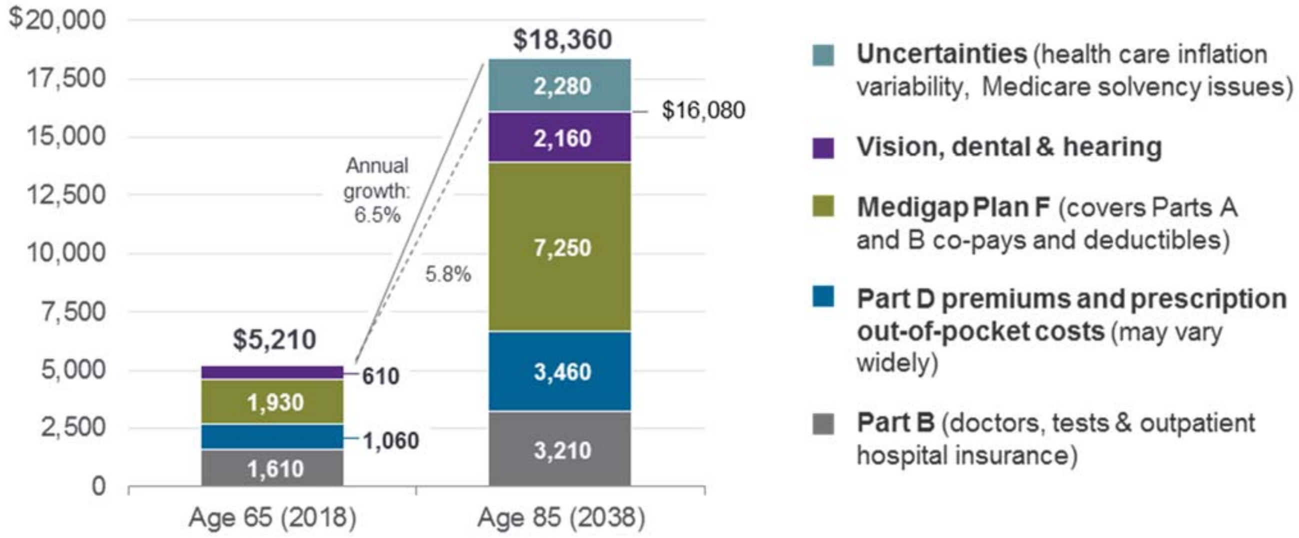
Source (chart): Social Security Administration, J.P. Morgan Asset Management.

Source (longevity at age 62): Social Security Administration, Period Life Table, 2014 (published in 2017), J.P. Morgan Asset Management.

Source (expected returns): J.P. Morgan Asset Management Long-Term Capital Market Assumptions.

Assumes the same individual, born in 1956, retires at the end of age 61 and claims at 62 & 1 month, 66 & 4 months and 70, respectively. Benefits are assumed to increase each year based on the Social Security Administration 2017 Trustee's Report "intermediate" estimates (annual benefit increase of 3.1% in 2019 and 2.6% thereafter). Expected rate of return is deterministic, in nominal terms, and net of fees.

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.

2018 additional premium per person for Modified Adjusted Gross Incomes (MAGI) of:

FILING SINGLE	MARRIED FILING JOINTLY	ADDITIONAL PREMIUM	TOTAL MEDIAN COSTS
$85,001 – $107,000	$170,001 – $214,000	$798	$6,008
107,001 – 133,500	214,001 – 267,000	2,010	7,220
133,501 – 160,000	267,001 – 320,000	3,222	8,432
>160,000	>320,000	4,433	9,643

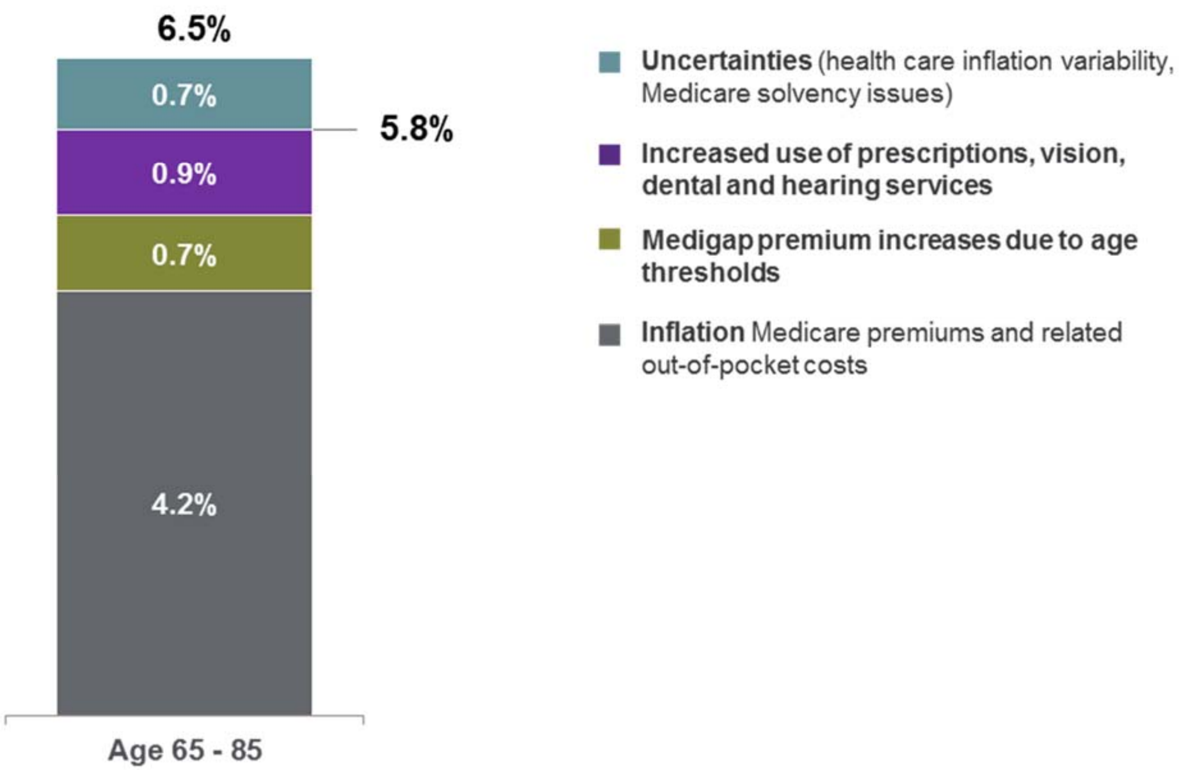
Notes: Age 85 estimated total median cost in 2018 is $7,097. Medigap premiums usually increase due to age, in addition to annual inflation, except for most policies in the following states: AR, CT, MA, ME, MN, NY, VT WA, AZ, FL, ID and MO. Analysis includes the most comprehensive and expensive plan available in each state.

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 slide 41.

Source: Employee Benefit Research Institute (EBRI) data as of December 31, 2017; SelectQuote data as of January 18, 2018; Centers for Medicare and Medicaid Services website, January 22, 2018; CMS Annual Release of Part D National Average Bid Amount, July 31, 2017; 2017 Medicare Trustees Report, July 13, 2017; Consumer Expenditure Survey data as of December 31, 2017; J.P. Morgan analysis.

Projected Medicare cost growth

Long-term projected average annual Medicare cost increases for individuals



GET MEDICARE INFLATION RIGHT

When planning for Medicare costs in retirement, consider using:

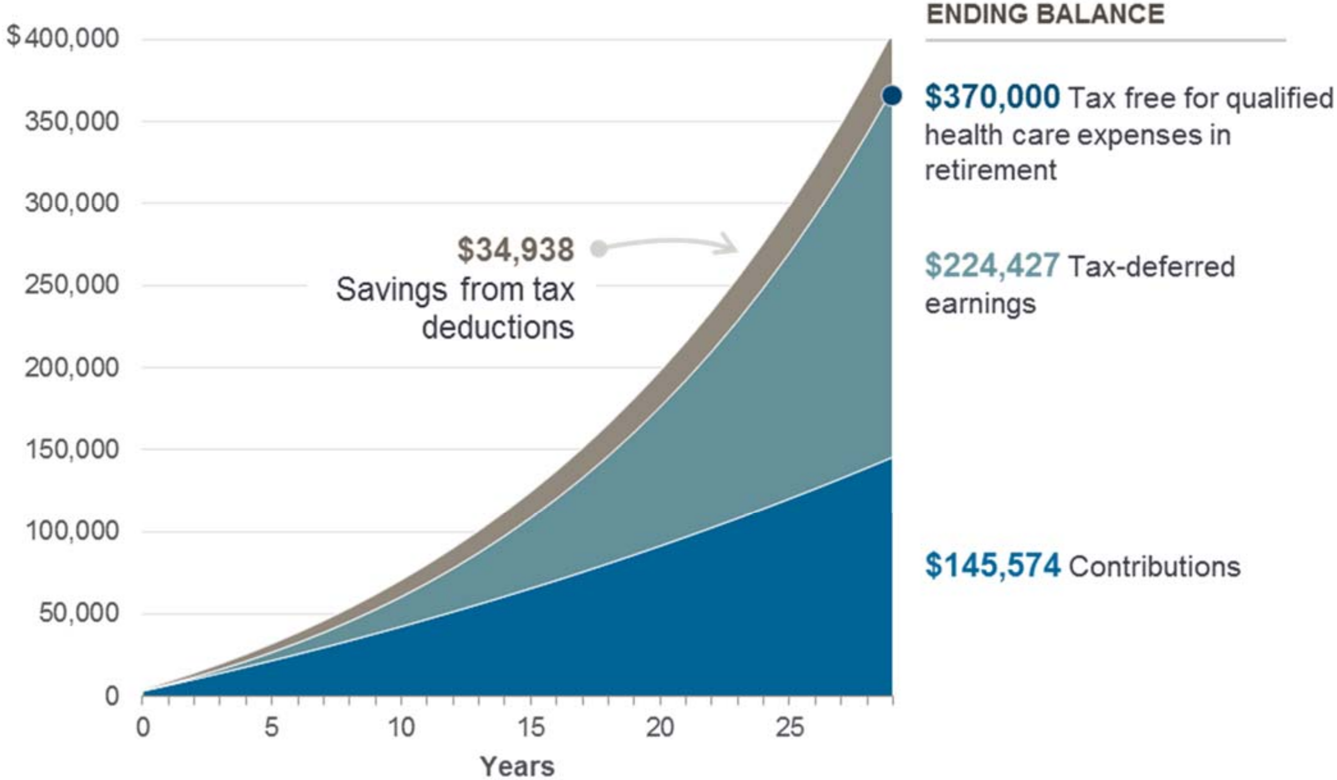
- 4.2% until you start Medicare at age 65 to account for annual cost increases
- 6.5% at age 65 and older to also adjust for increases related to age and uncertainties

Note: Excludes government costs. National weighted average by state population used to estimate Medigap age-related premium increases; these will vary by geography. Medigap premiums usually increase due to age, in addition to annual inflation, except for most policies in the following states, which are community rated (all ages experience the same rates): AR, CT, MA, ME, MN, NY, VT, WA, and the states that are mostly issue-age rated (rates are the same for all who first purchased at a particular age): AZ, FL, GA, ID, MO and NH. Analysis includes the most comprehensive Medigap plan available in each state.

Source: Employee Benefit Research Institute (EBRI) data as of December 31, 2017; SelectQuote data as of January 18, 2018; Centers for Medicare and Medicaid Services website, January 22, 2018; CMS Annual Release of Part D National Average Bid Amount, July 31, 2017; 2017 Medicare Trustees Report, July 13, 2017; Consumer Expenditure Survey data as of December 31, 2017; J.P. Morgan analysis.

Health Savings Account (HSA) savings are triple tax advantaged[1]

Maximum annual individual contributions, 6% return and 24% marginal tax rate



MAKE THE MOST OF IT

If you are enrolled in a high-deductible health plan, be sure to contribute to an HSA.

Investing your HSA contributions for the long term and paying for current health care expenses out of income or short-term savings can provide significant tax-free funds for health care expenses in retirement.

[1] Must have a qualifying high-deductible health plan to make contributions. After age 65 funds in the HSA may be withdrawn tax free for qualified medical expenses or withdrawn at ordinary income tax rates for other expenses. See IRS Publication 502 for details.

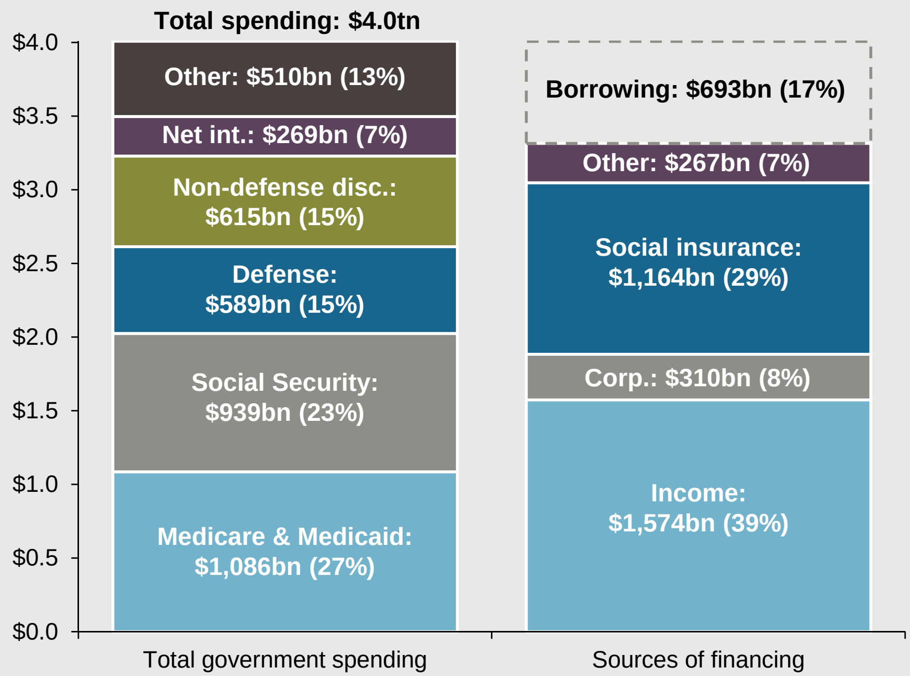
The above example is for illustrative purposes only and not indicative of any investment. Federal taxes; states may differ. Does not include account fees. Present value of illustrated HSA after 30 years is $189,803. If the annual tax deduction is invested with an after-tax return of 4.56%, the cumulative hypothetical return is $34,809. Assumes cash or income used for health care expenses is not withdrawn from an account with a tax liability. The example assumes the HSA is fully invested; if $2,000 was held in a cash account the illustrated cumulative HSA account value would be $360,516. 2018 contribution limit is $3,450 adjusted for inflation of 2.25% for 30 years.

HSA contributions made through payroll deduction or qualified employer 457 cafeteria plans may also avoid federal payroll and unemployment taxes unless you are self-employed. These tax reductions may result in lower Social Security and unemployment insurance benefit amounts. Contributions outside of an employer plan are generally tax deductible but do not avoid payroll and unemployment taxes. This is not intended to be individual tax advice; consult your tax advisor.

Economy

The 2017 federal budget

CBO Baseline forecast, USD trillions

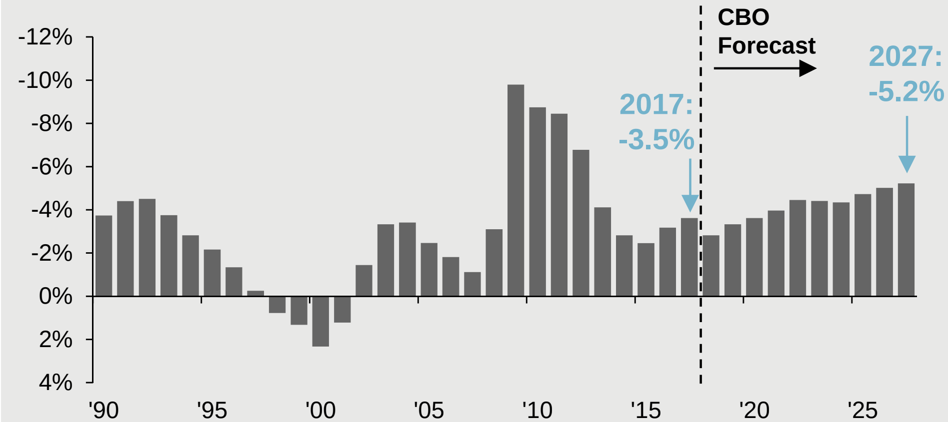


CBO's Baseline assumptions

	2017	'18-'19	'20-'21	'22-'27
Real GDP growth	2.1%	2.0%	1.5%	1.9%
10-year Treasury	2.3%	2.9%	3.5%	3.7%
Headline inflation (CPI)	2.2%	2.2%	2.4%	2.4%
Unemployment	4.5%	4.2%	4.8%	4.9%

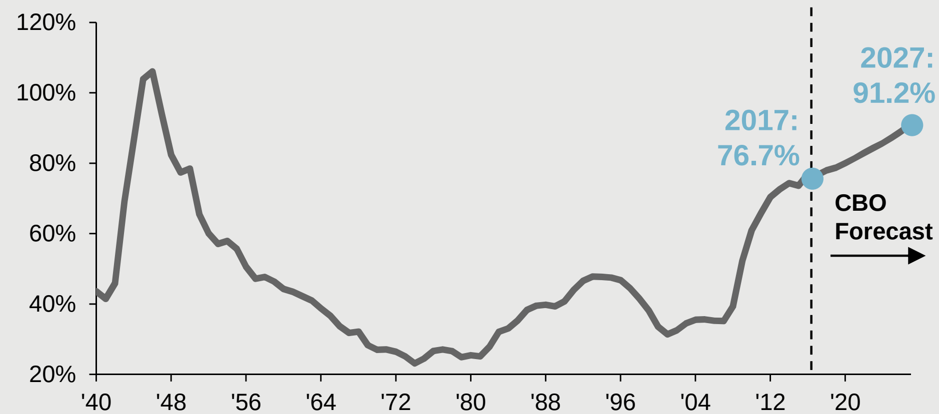
Federal budget surplus/deficit

% of GDP, 1990 – 2027, 2017 CBO Baseline



Federal net debt (accumulated deficits)

% of GDP, 1940 – 2027, 2017 CBO Baseline, end of fiscal year



Source: CBO, J.P. Morgan Asset Management; (Top and bottom right) BEA, Treasury Department.
2017 Federal Budget is based on the Congressional Budget Office (CBO) June 2017 Baseline Budget Forecast. Other spending includes, but is not limited to, health insurance subsidies, income security and federal civilian and military retirement. Please note that these estimates do not include the impacts of the Tax Cuts and Jobs Act of 2017.
Note: Years shown are fiscal years (Oct. 1 through Sep. 30). Past performance is not a reliable indicator of current and future results.
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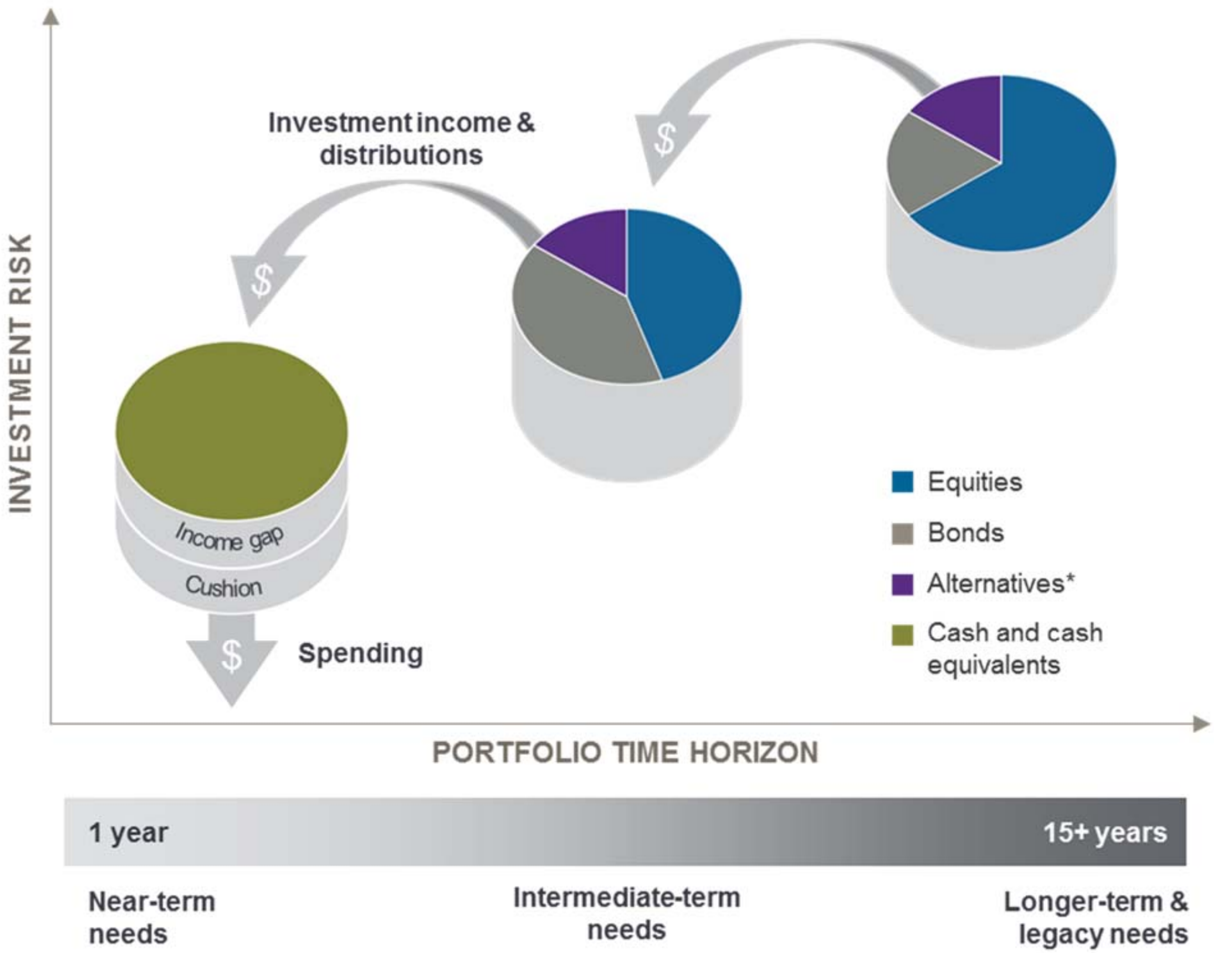


TIME-BASED SEGMENTATION

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

For 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

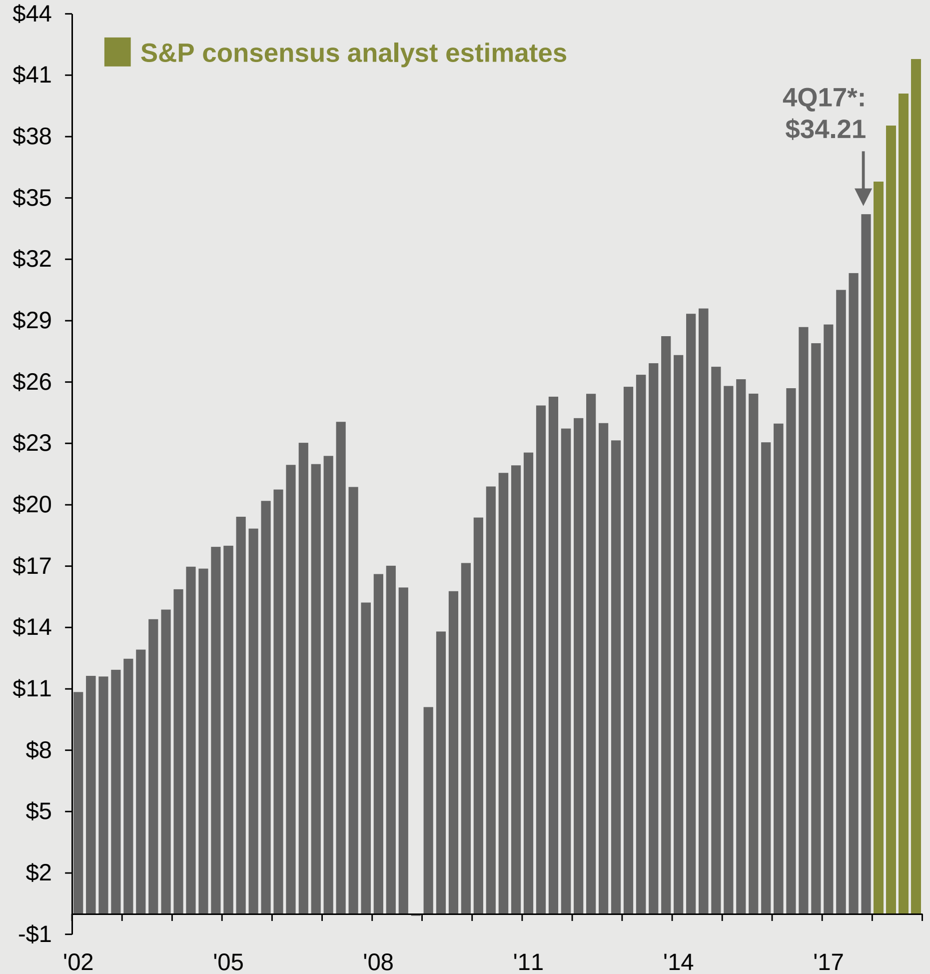
For illustrative purposes only. Source: J.P. Morgan Asset Management. Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes 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.

Equities

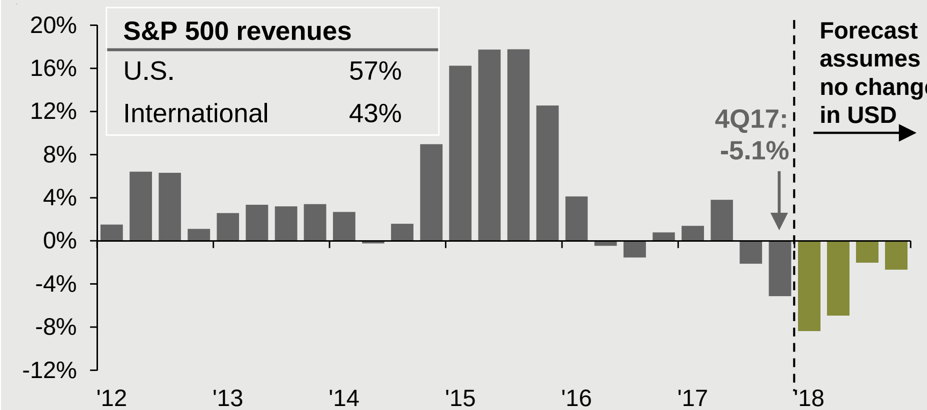
S&P 500 earnings per share

Index quarterly operating earnings



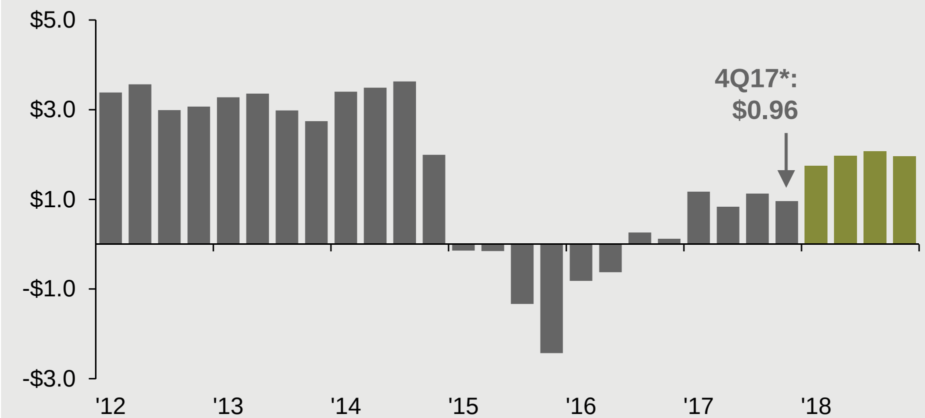
U.S. dollar

Year-over-year % change**, quarterly, USD major currencies index



Energy sector earnings

Energy sector contribution to S&P 500 EPS, quarterly



Source: Compustat, FactSet, Standard & Poor's, J.P. Morgan Asset Management; (Top right) Federal Reserve, S&P 500 individual company 10k filings, S&P Index Alert.
EPS levels are based on operating earnings per share. Earnings estimates are Standard & Poor's consensus analyst expectations. Past performance is not indicative of future returns. Currencies in the Trade Weighted U.S. Dollar Major Currencies Index are: British pound, euro, Swedish krona, Australian dollar, Canadian dollar, Japanese yen and Swiss franc.*4Q17 earnings are calculated using actual earnings for 96.1% of S&P 500 market cap and earnings estimates for the remaining companies. **Year-over-year change is calculated using the quarterly average for each period. USD forecast assumes no change in the U.S. dollar from its February 28, 2018 level. S&P 500 revenue breakdown comes from Standard & Poor's S&P 500 2016: Global Sales report as of June 2017.
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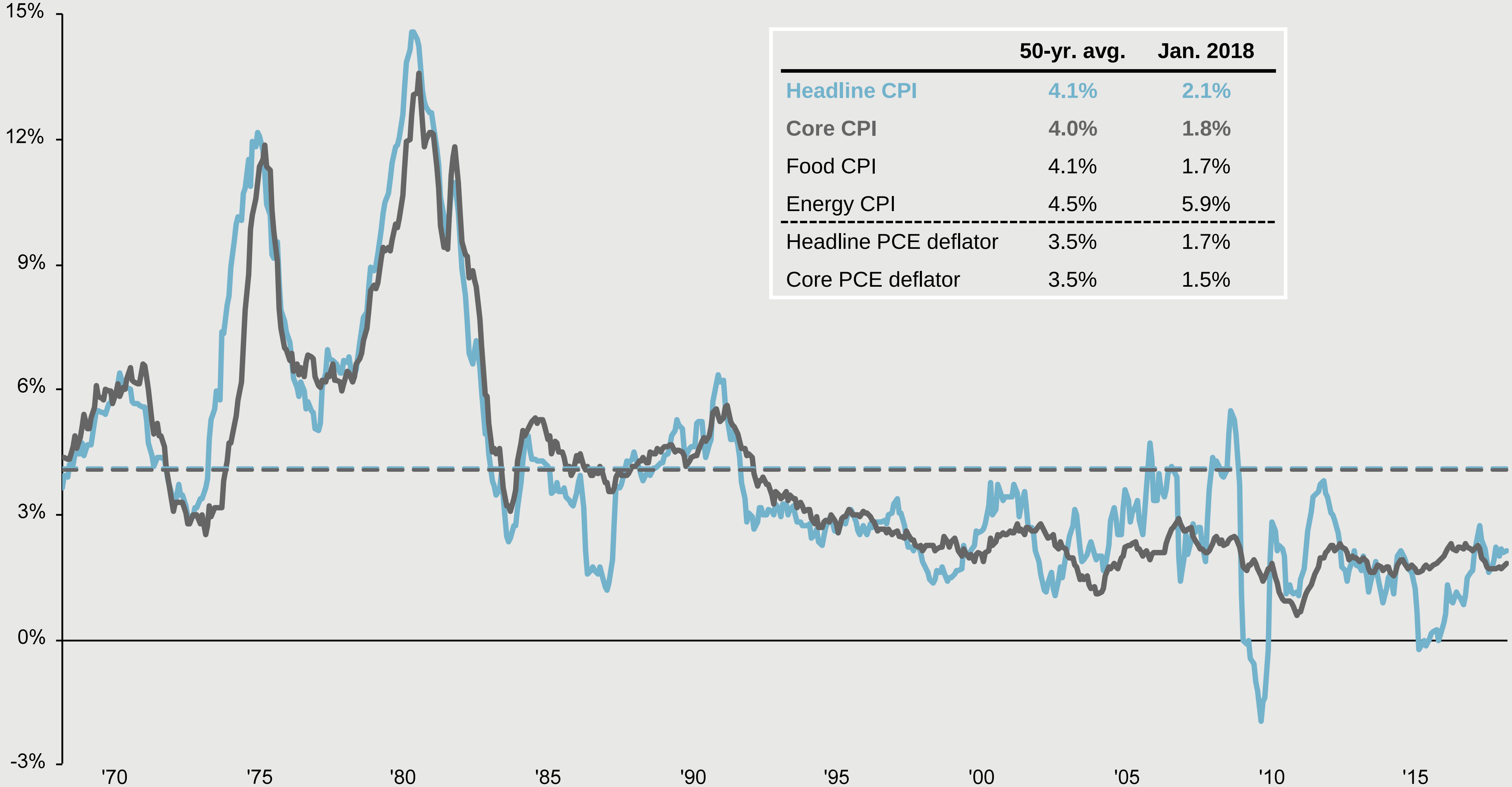
CPI and core CPI

% change vs. prior year, seasonally adjusted



	50-yr. avg.	Jan. 2018
Headline CPI	4.1%	2.1%
Core CPI	4.0%	1.8%
Food CPI	4.1%	1.7%
Energy CPI	4.5%	5.9%
Headline PCE deflator	3.5%	1.7%
Core PCE deflator	3.5%	1.5%

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. Past performance is not a reliable indicator of current and future results.
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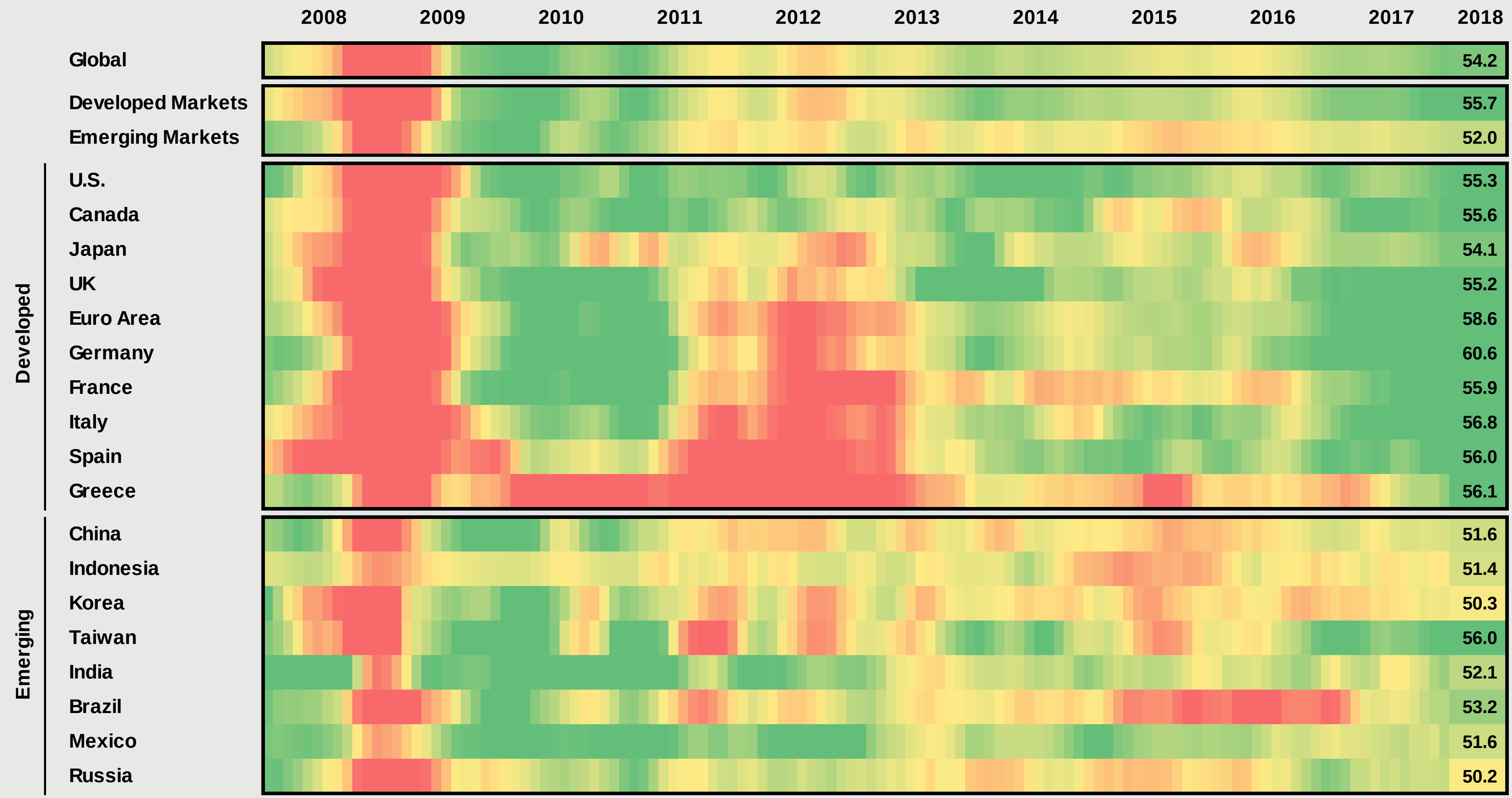
International

Global Purchasing Managers' Index for manufacturing, 3-mo. moving average



Source: Markit, J.P. Morgan Asset Management.
Heatmap colors are based on PMI relative to the 50 level, which indicates acceleration or deceleration of the sector, for the time period shown. Figures are three-month moving averages, with the exception of the most recent, which is for single month February 2018. Data for Canada, Indonesia and Mexico are back-tested and filled in from December 2007 to November 2010 for Canada and May 2011 for Indonesia and Mexico due to lack of existing PMI figures for these countries. Past performance is not a reliable indicator of current and future results.
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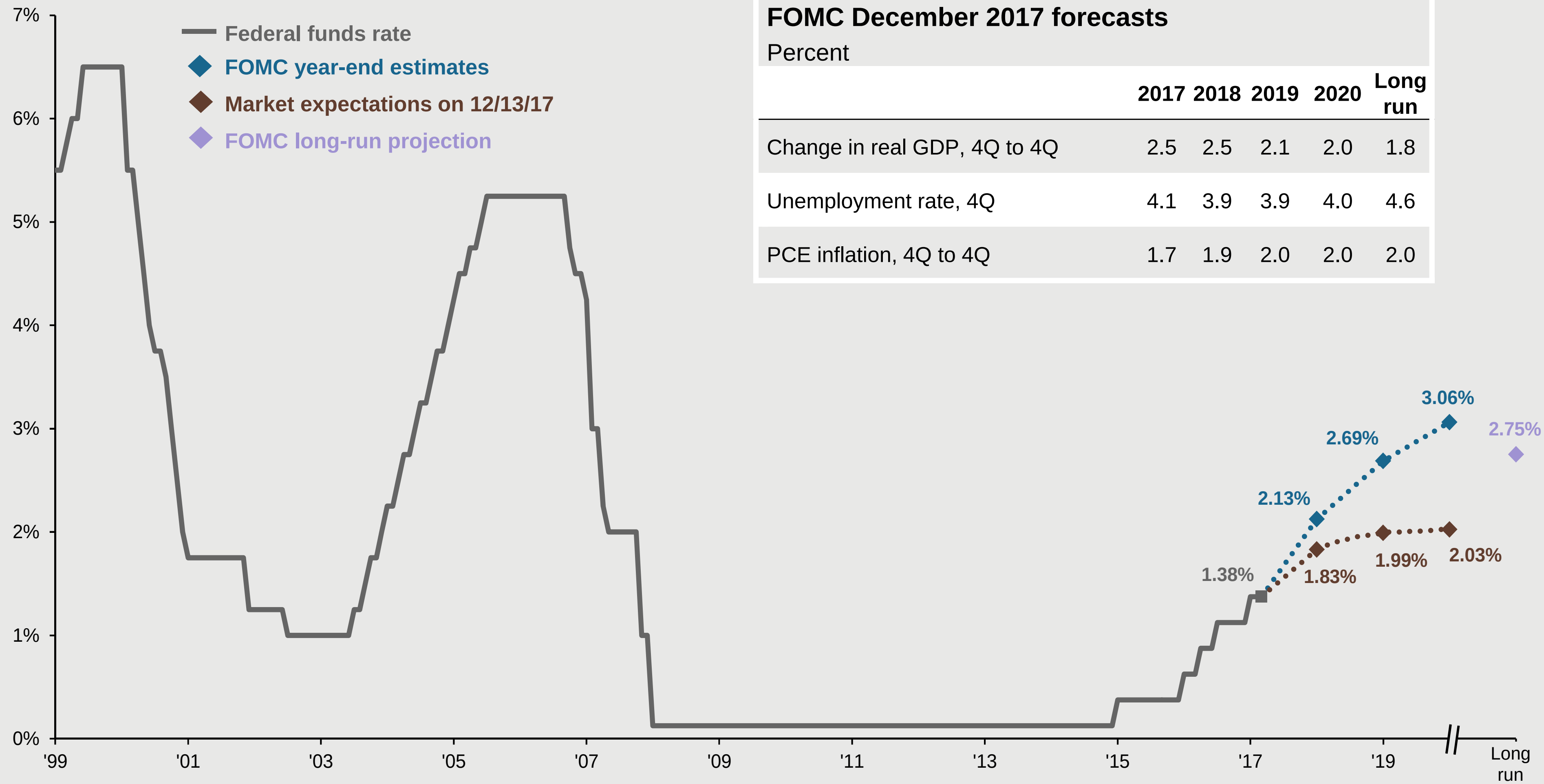
Fixed income

Federal funds rate expectations

FOMC and market expectations for the fed funds rate



FOMC December 2017 forecasts

Percent

	2017	2018	2019	2020	Long run
Change in real GDP, 4Q to 4Q	2.5	2.5	2.1	2.0	1.8
Unemployment rate, 4Q	4.1	3.9	3.9	4.0	4.6
PCE inflation, 4Q to 4Q	1.7	1.9	2.0	2.0	2.0

Source: FactSet, Federal Reserve, Bloomberg, J.P. Morgan Asset Management.
Market expectations are the federal funds rates priced into the fed futures market as of the date of the December 2017 FOMC meeting.
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Thank you

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.

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 **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.

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.

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.

Opinions and estimates offered constitute our judgment and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve.

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Asset Management

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

Equities:

The Dow Jones Industrial Average is a price-weighted average of 30 actively traded blue-chip U.S. stocks.

The MSCI ACWI (All Country World Index) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets.

The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada.

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.

The MSCI Europe Index is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe.

The MSCI Pacific Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the Pacific region.

The Russell 1000 Index® measures the performance of the 1,000 largest companies in the Russell 3000.

The Russell 1000 Growth Index® measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 1000 Value Index® measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

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

The Russell 2000 Growth Index® measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 2000 Value Index® measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

The Russell 3000 Index® measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

The Russell Midcap Index® measures the performance of the 800 smallest companies in the Russell 1000 Index.

The Russell Midcap Growth Index ® measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth index.

The Russell Midcap Value Index ® measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000 Value index.

The S&P 500 Index is widely regarded as the best single gauge of the U.S. equities market. The index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. The S&P 500 Index focuses on the large-cap segment of the market; however, since it includes a significant portion of the total value of the market, it also represents the market.

Fixed income:

The Barclays 1-3 Month U.S. Treasury Bill Index includes all publicly issued zero-coupon US Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have $250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non convertible.

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 Municipal Index: consists of a broad selection of investment- grade general obligation and revenue bonds of maturities ranging from one year to 30 years. It is an unmanaged index representative of the tax-exempt bond market.

The Barclays US Dollar Floating Rate Note (FRN) Index provides a measure of the U.S. dollar denominated floating rate note market.

The Barclays US Corporate Investment Grade Index is an unmanaged index consisting of publicly issued US Corporate and specified foreign debentures and secured notes that are rated investment grade (Baa3/BBB or higher) by at least two ratings agencies, have at least one year to final maturity and have at least $250 million par amount outstanding. To qualify, bonds must be SEC-registered.

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 Barclays US Mortgage Backed Securities Index is an unmanaged index that measures the performance of investment grade fixed-rate mortgage backed pass-through securities of GNMA, FNMA and FHLMC.

The Barclays US TIPS Index consists of Inflation-Protection securities issued by the U.S. Treasury.

The J.P. Morgan Emerging Market Bond Global Index (EMBI) includes U.S. dollar denominated Brady bonds, Eurobonds, traded loans and local market debt instruments issued by sovereign and quasi-sovereign entities.

The J.P. Morgan Domestic High Yield Index is designed to mirror the investable universe of the U.S. dollar domestic high yield corporate debt market.

The J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI Broad Diversified) is an expansion of the J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI). The CEMBI is a market capitalization weighted index consisting of U.S. dollar denominated emerging market corporate bonds.

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 J.P. Morgan GBI EM Global Diversified tracks the performance of local currency debt issued by emerging market governments, whose debt is accessible by most of the international investor base.

The U.S. Treasury Index is a component of the U.S. Government index.

J.P.Morgan Asset Management

Other asset classes:

The Alerian MLP Index is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for the asset class.

The Bloomberg Commodity Index and related sub-indices are composed of futures contracts on physical commodities and represents twenty two separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel, and zinc

The Cambridge Associates U.S. Global Buyout and Growth Index® is based on data compiled from 1,768 global (U.S. & ex – U.S.) buyout and growth equity funds, including fully liquidated partnerships, formed between 1986 and 2013.

The CS/Tremont Hedge Fund Index is compiled by Credit Suisse Tremont Index, LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The Index uses the Credit Suisse/Tremont database, which tracks over 4500 funds, and consists only of funds with a minimum of US$50 million under management, a 12-month track record, and audited financial statements. It is calculated and rebalanced on a monthly basis, and shown net of all performance fees and expenses. It is the exclusive property of Credit Suisse Tremont Index, LLC.

The HFRI Monthly Indices (HFRI) are equally weighted performance indexes, utilized by numerous hedge fund managers as a benchmark for their own hedge funds. The HFRI are broken down into 4 main strategies, each with multiple sub strategies. All single-manager HFRI Index constituents are included in the HFRI Fund Weighted Composite, which accounts for over 2200 funds listed on the internal HFR Database.

The 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 NFI-ODCE, short for NCREIF Fund Index - Open End Diversified Core Equity, is an index of investment returns reporting on both a historical and current basis the results of 33 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted.

Definitions:

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.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise.

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.

Derivatives may be riskier than other types of investments because they may be more sensitive to changes in economic or market conditions than other types of investments and could result in losses that significantly exceed the original investment. The use of derivatives may not be successful, resulting in investment losses, and the cost of such strategies may reduce investment returns.

Distressed Restructuring Strategies employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings.

Investments in emerging markets can be more volatile. 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.

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.

Equity market neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Global macro strategies trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets.

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. Some overseas markets may not be as politically and economically stable as the United States and other nations.

There is no guarantee that the use of long and short positions will succeed in limiting an investor's exposure to domestic stock market movements, capitalization, sector swings or other risk factors. Using long and short selling strategies may have higher portfolio turnover rates. Short selling involves certain risks, including additional costs associated with covering short positions and a possibility of unlimited loss on certain short sale positions.

Merger arbitrage strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction.

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.

Price to forward earnings is a measure of the price-to-earnings ratio (P/E) using forecasted earnings. Price to book value compares a stock's market value to its book value. Price to cash flow is a measure of the market's expectations of a firm's future financial health. Price to dividends is the ratio of the price of a share on a stock exchange to the dividends per share paid in the previous year, used as a measure of a company's potential as an investment.

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.

Relative Value Strategies maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities.

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.

The Market Insights program provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions.

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Unless otherwise stated, all data are as of December 31, 2017 or most recently available.

Guide to the Markets – U.S.

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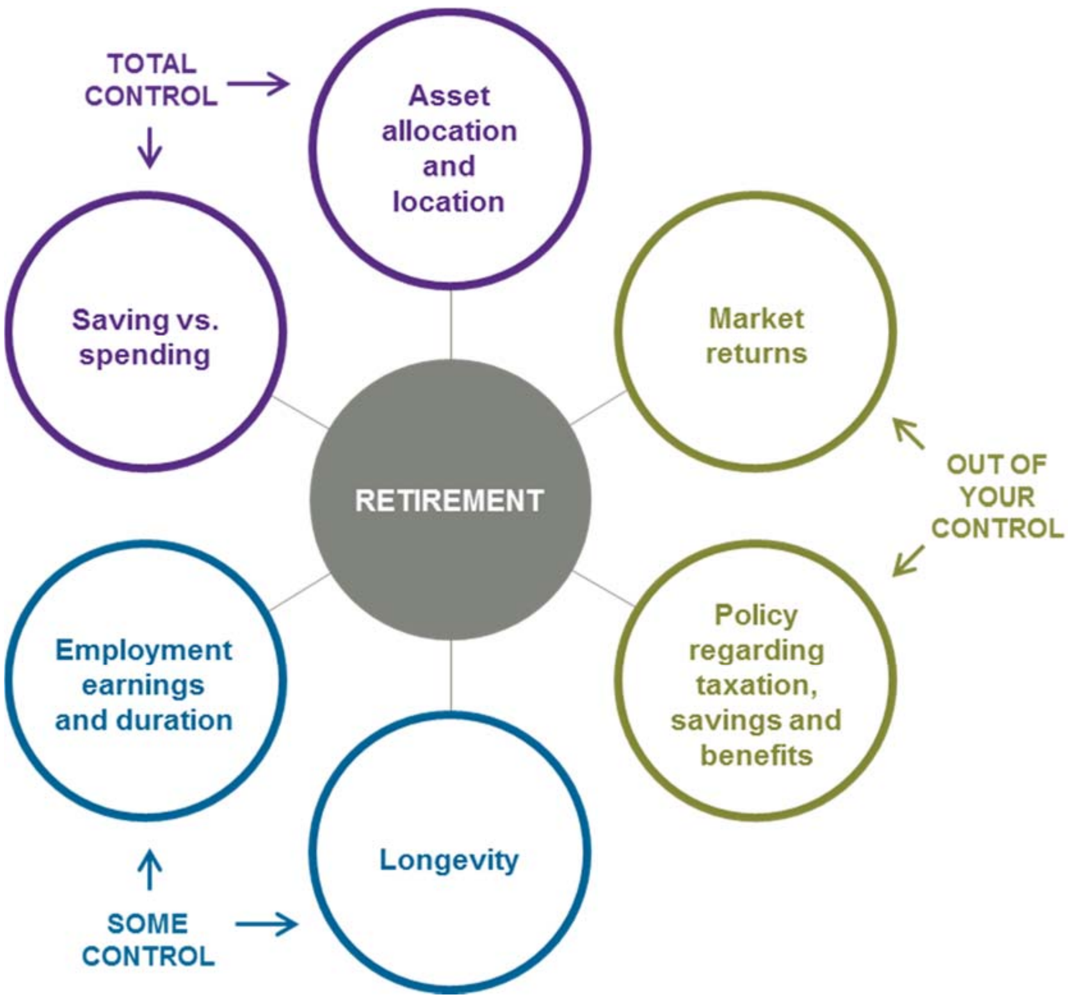
J.P.Morgan
Asset Management

Appendix

The retirement equation

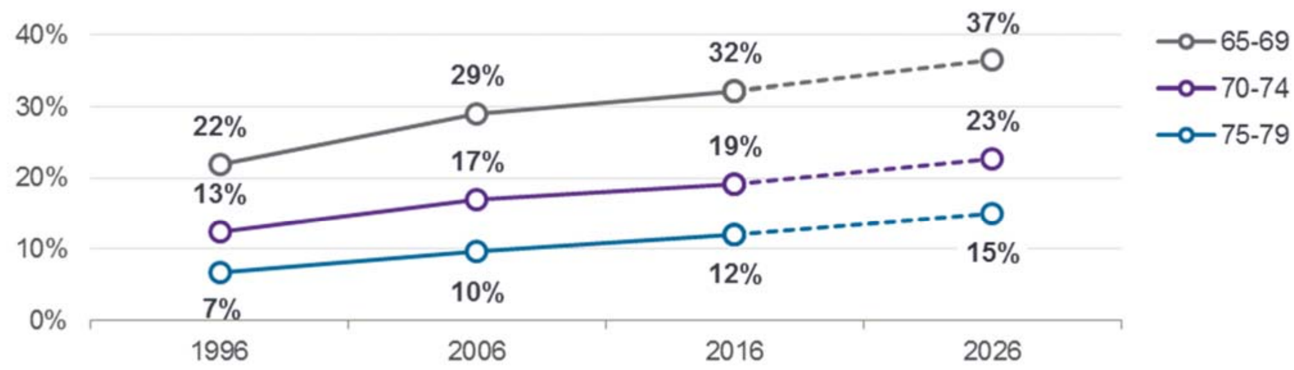


A SOUND RETIREMENT PLAN

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.

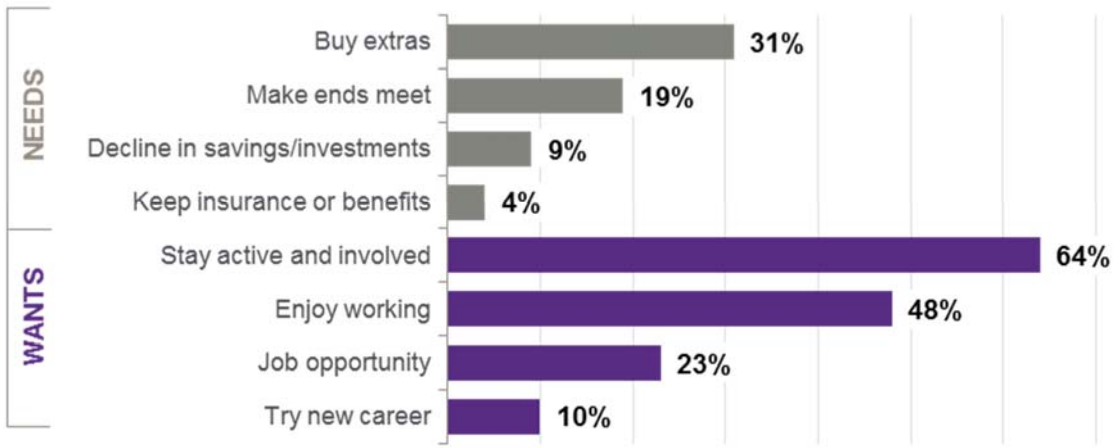
Source: The Importance of Being Earnest, J.P. Morgan Asset Management, 2013.

Percent of people in the civilian labor force 1996-2026



Total civilian population 65+	32mm	36mm	48mm	67mm

Major reasons people work in retirement



IT'S STILL OFF TO WORK I GO

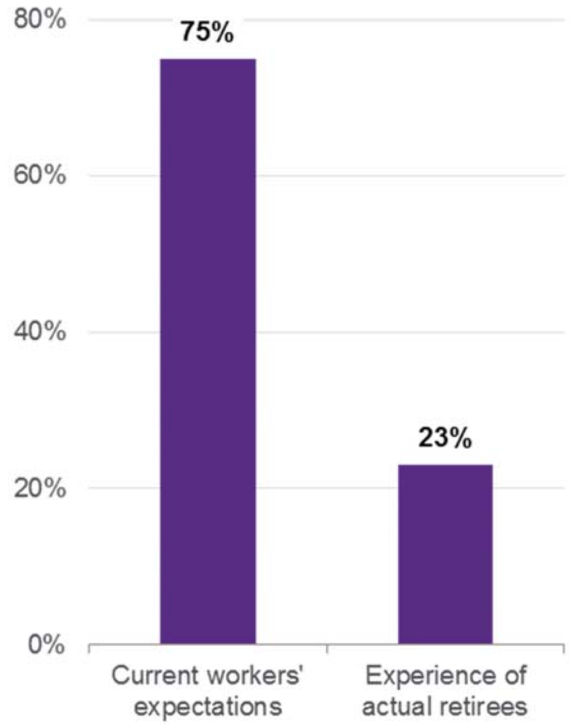
More people are working later in life, motivated by the desire to do so.

Source (top chart): Bureau of Labor Statistics, Employment Projections, Table 3.2 and Table 3.3. Actual data to 2016 and projection to 2026. Civilian population age 65+ is non-institutionalized population.
Source (bottom chart): Employee Benefit Research Institute, Mathew Greenwald & Associates, Inc., 2017 Retirement Confidence Survey. Data as of March 2017. Latest available data through December 31, 2017.

Managing expectations of ability to work

Expectations of workers vs. retirees

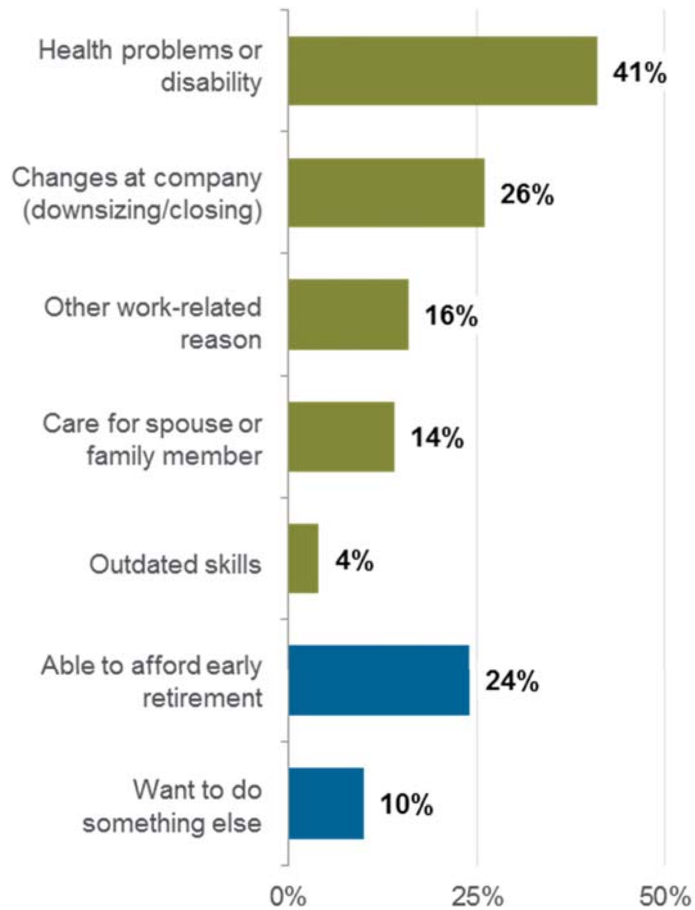
To retire at age 65 or older



Median retirement age

Expected:	65
Actual:	62

Reasons cited for retiring earlier than planned

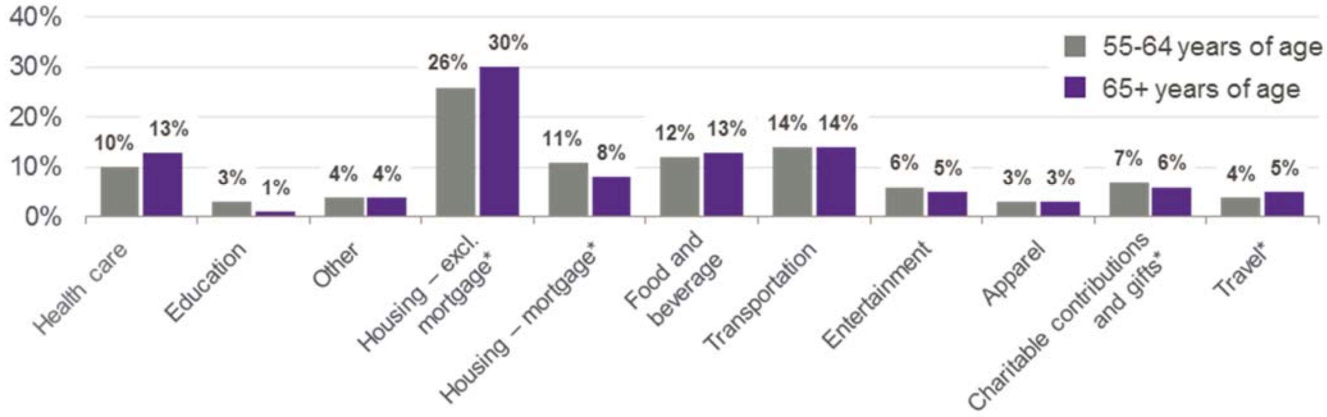


EARLY RETIREMENT

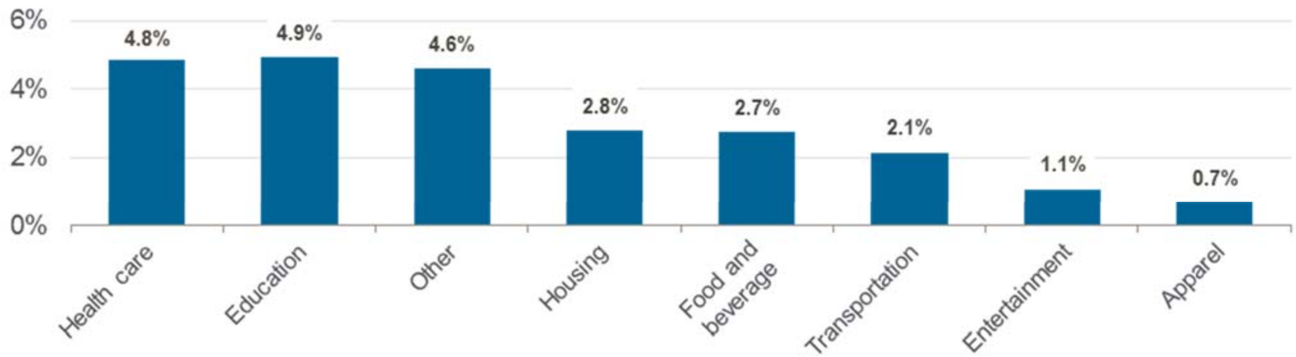
You may not have complete control over when you retire, so you should consider having a back-up plan. You may have to draw income earlier and make your portfolio last longer than you anticipate.

Source: Employee Benefit Research Institute, Mathew Greenwald & Associates, Inc., 2017 Retirement Confidence Survey. Data as of March 2017.

Spending by age and category



Average inflation by spending category 1982-2017



LOSING GROUND

Inflation can disproportionately affect 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, 2016 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 2017 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 7% inflation since 1986 but each age group only spends 0.4%-0.7% on tobacco (21%-37% of combined personal care products and tobacco), which is a lower proportion than represented in the Other inflation rate.

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Retirement savings checkpoints

Modest 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	-	0.3	0.6	1.0	1.3	1.5	1.7
30	0.3	0.9	1.2	1.7	2.1	2.4	2.5
35	0.9	1.6	2.0	2.6	3.0	3.4	3.5
40	1.6	2.4	2.9	3.6	4.2	4.6	4.8
45	2.5	3.4	4.0	4.8	5.5	6.0	6.2
50	3.5	4.6	5.3	6.3	7.1	7.7	8.0
55	4.7	6.0	6.9	8.1	9.1	9.7	10.1
60	6.2	7.7	8.8	10.2	11.4	12.2	12.6
65	8.1	10.0	11.3	13.0	14.5	15.5	16.0

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 2.9 = $290,000.

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**

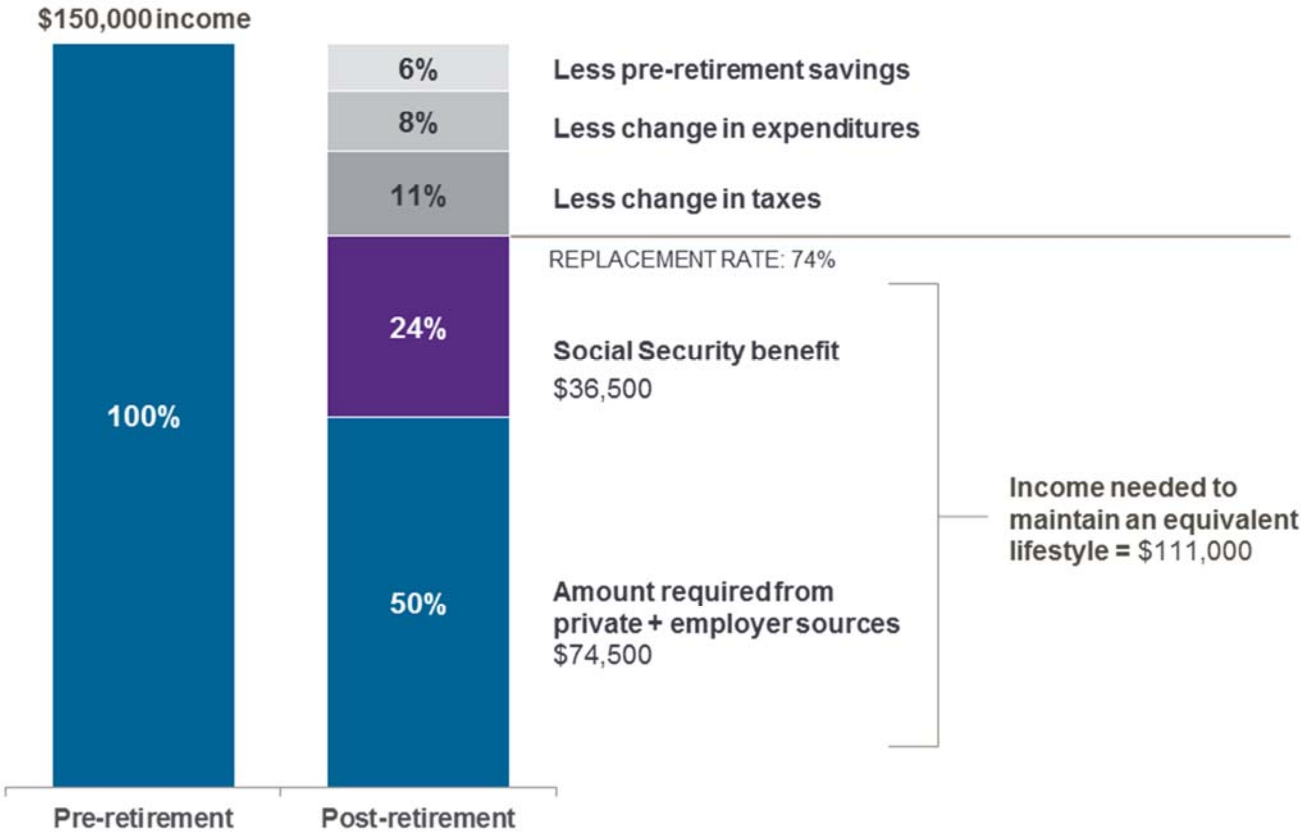
*10% is approximately twice the U.S. average annual savings rate

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 15.

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.

Saving

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, 2017. Household income replacement rates are derived from an inflation-adjusted analysis of: Consumer Expenditure Survey (BLS) data (2013-2016); 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; and 2017 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.

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Replacement rate detail by household income

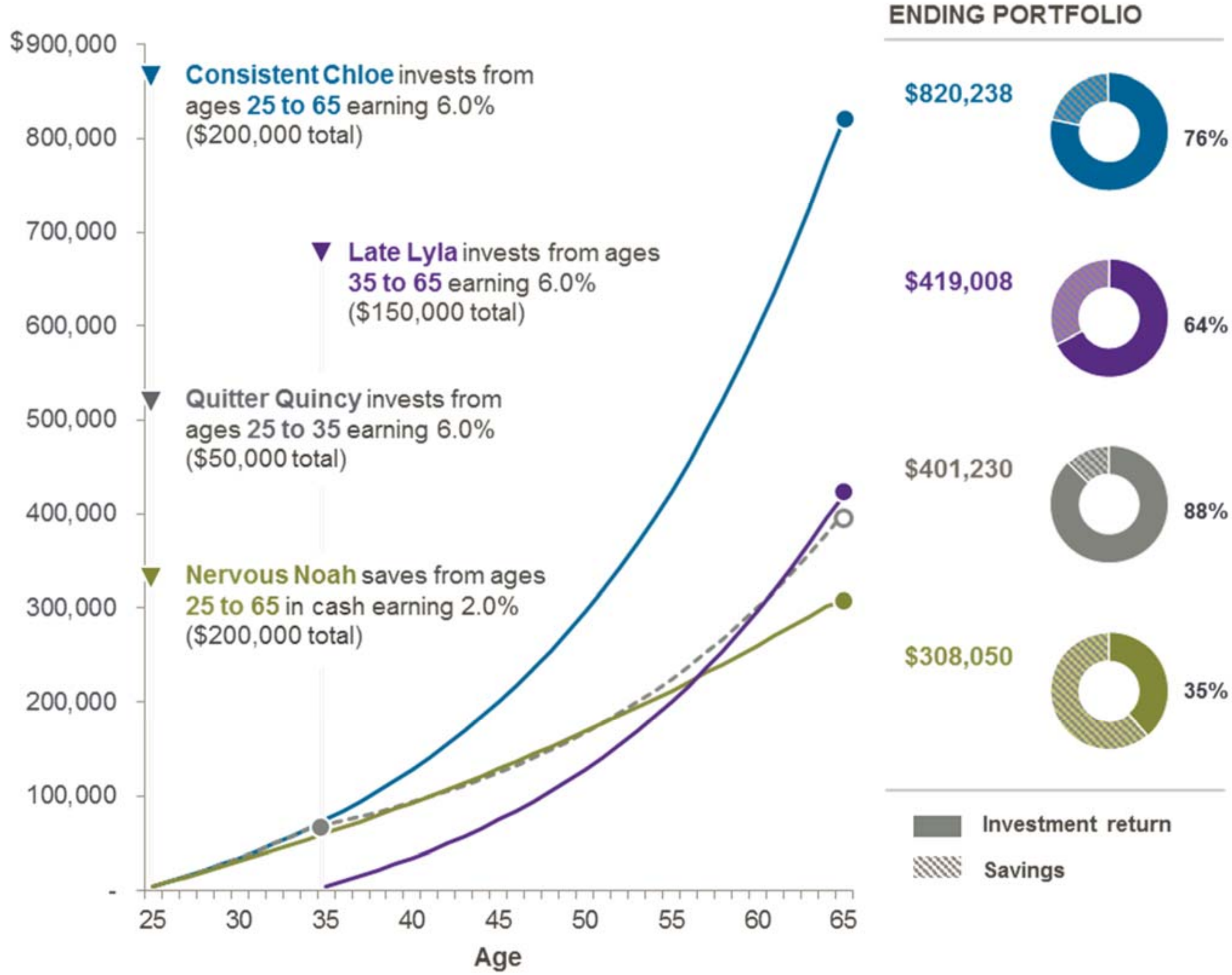
SPENDING NEEDS BY INCOME

Estimated income replacement needs range from 72%-82% 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, 2017. Household income replacement rates are derived from an inflation-adjusted analysis of: Consumer Expenditure Survey (BLS) data (2013-2016); 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; and 2017 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.

J.P.Morgan Asset Management

	$50,000	$75,000	$100,000	$150,000	$200,000	$250,000	$300,000
Start saving age	Savings rate (x current household income)						
25	9%	11%	13%	15%	16%	18%	18%
30	12	15	16	19	21	22	23
35	15	19	21	25	27	29	30
40	20	25	28	33	36	29	40
45	28	35	39	45	50	54	55
50	41	51	58	67	74	79	82

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 28% every year until retirement.

Important things you need to know:

- Modest 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).

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**

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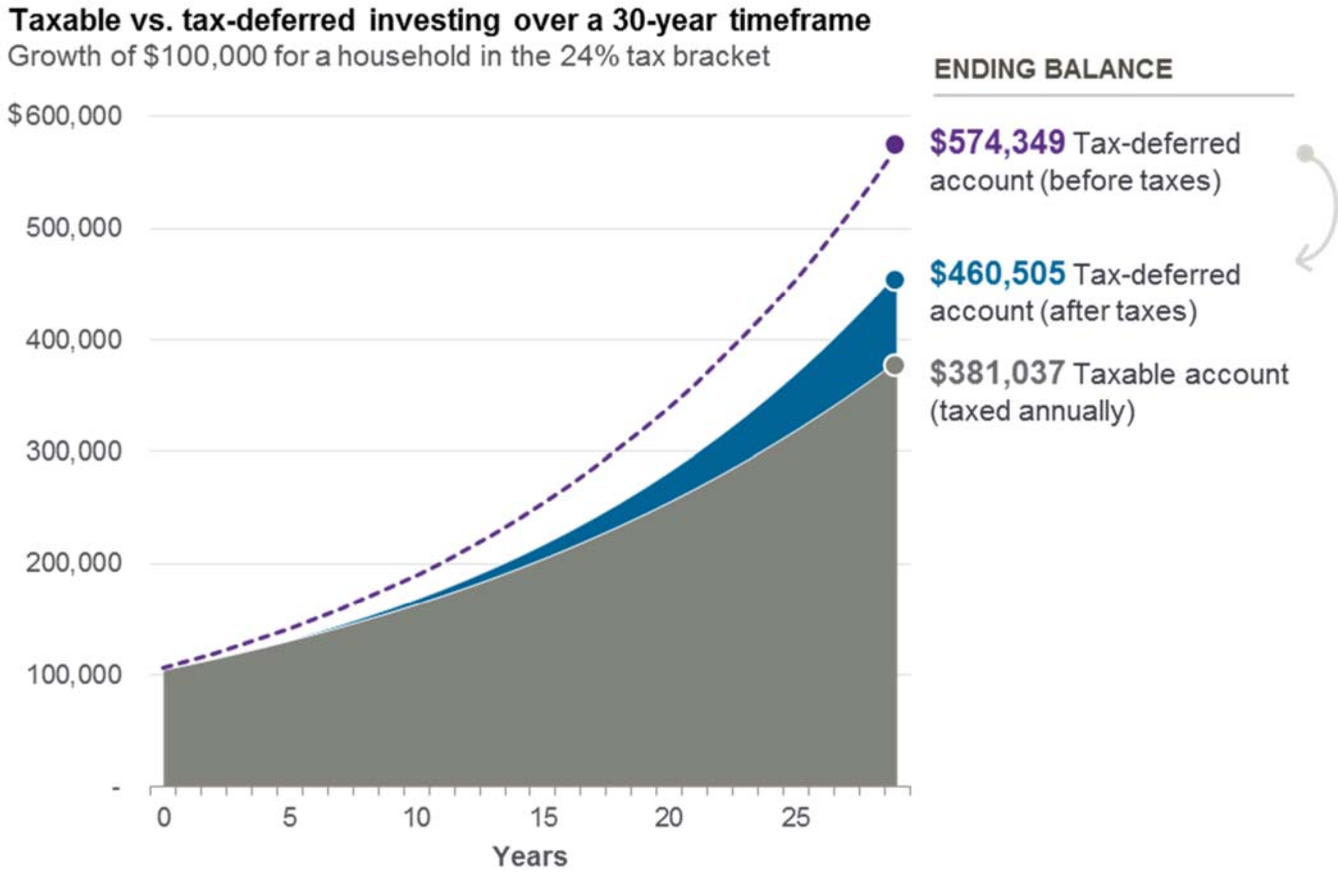


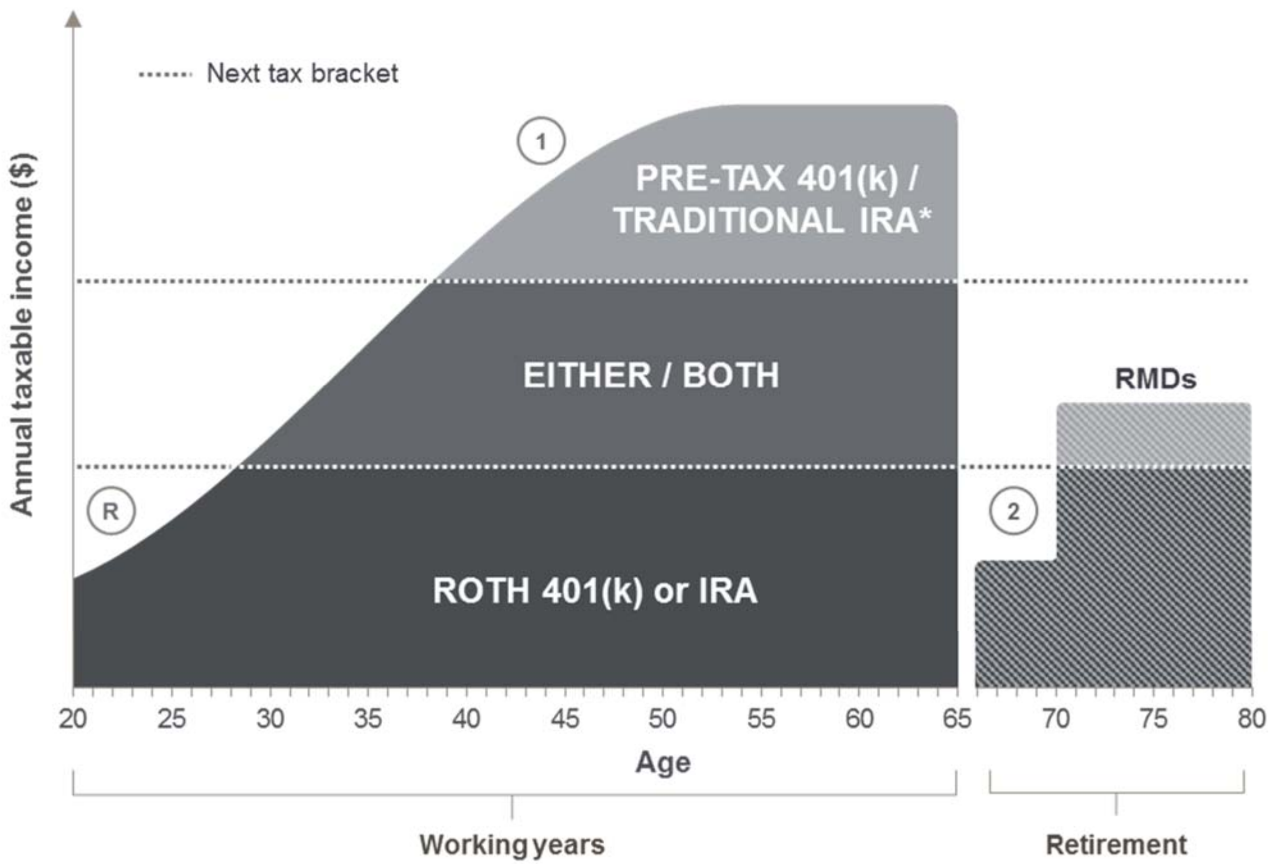
TAXES CAN WAIT

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 a 0.7% 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 24% (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 24% federal tax rate. If tax-deferred account is taken as lump sum at other tax rates, after-tax balance will be $517,427 (12%), $469,992 (22%), $422,557 (32%), $408,327 (35%), $398,840 (37%). 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.

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 a focus on income tax diversification. Consider:

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

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

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

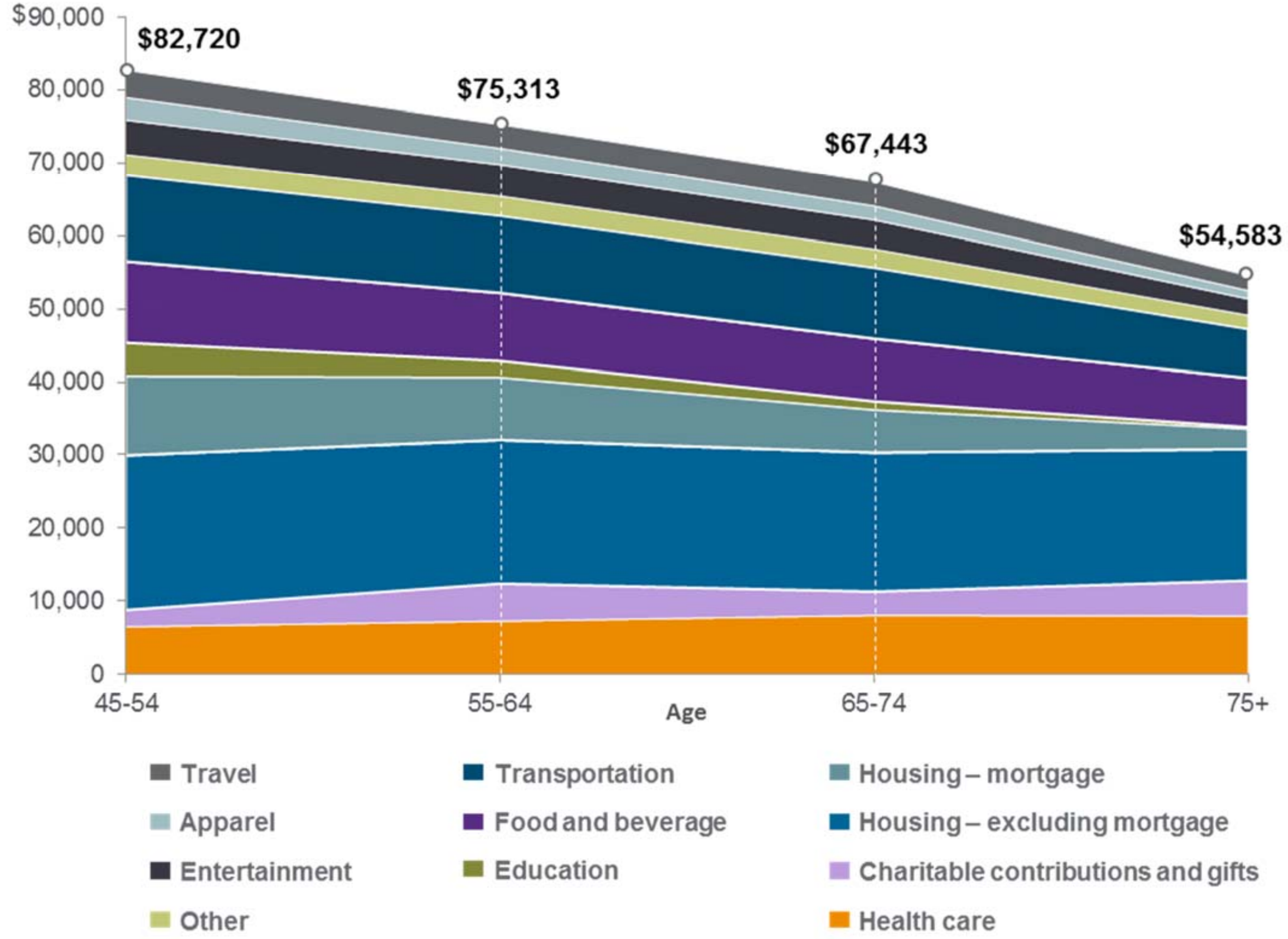
*If eligible to make a deductible contribution (based on your MAGI). The illustration reflects savings options into Traditional and Roth IRA accounts, as well as into pre-tax retirement and Roth 401(k) accounts.

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.

Average household spending patterns by various age groups

For those with a bachelor's degree or higher



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 2016 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 2.0 and age 75+ is 1.7.

Spending

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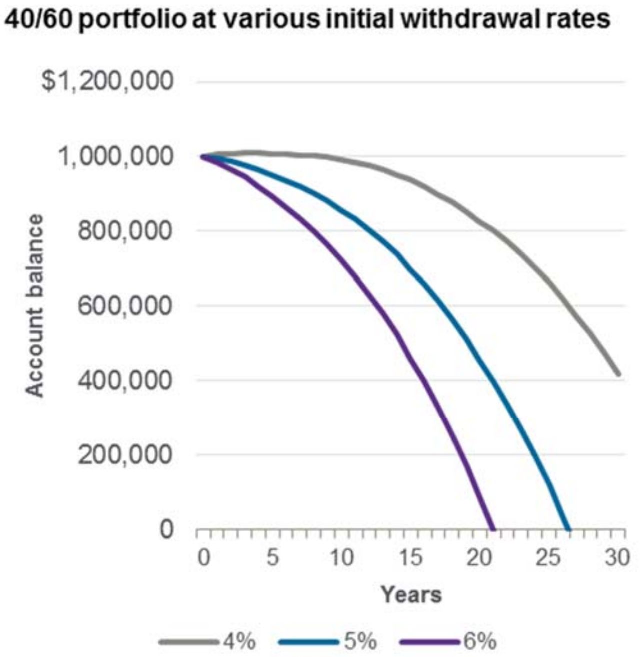
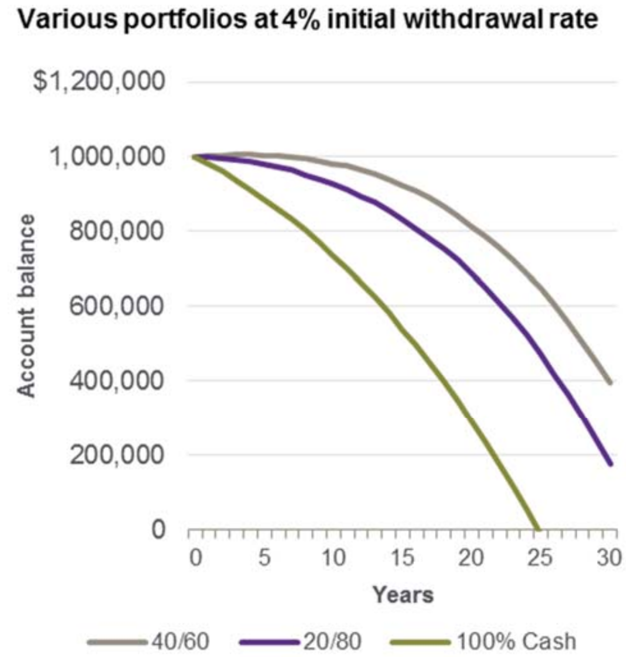
Years of sustainable withdrawals for a portfolio for typical markets
Projected nominal outcomes, 50th percentile





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.

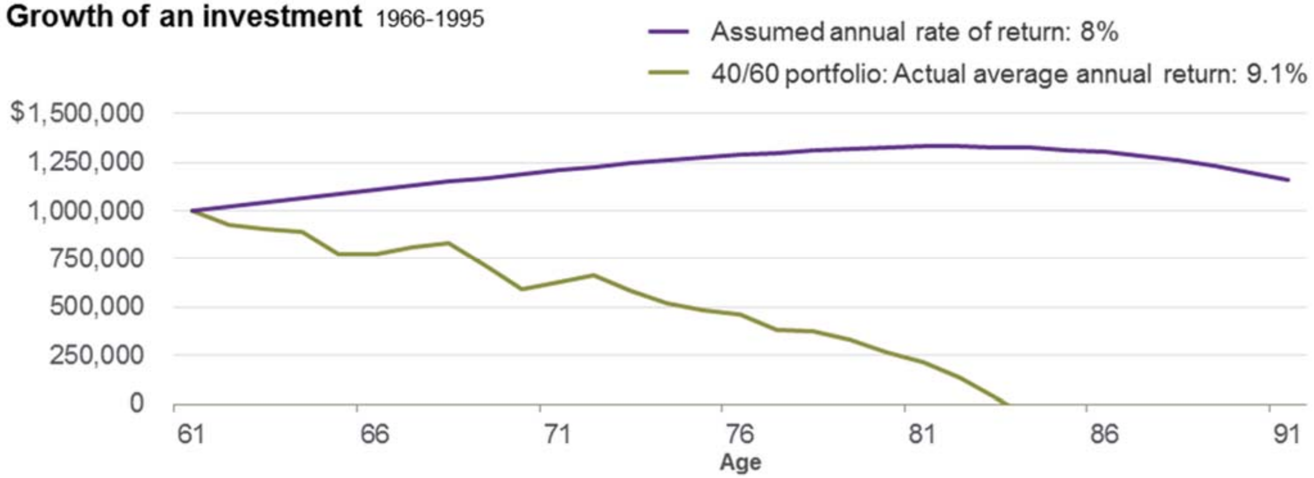
Spending

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 $214,164 vs. $417,489 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 5.50%, 3.25% and 2.00%, respectively. J.P. Morgan's model is based on J.P. Morgan Asset Management's (JPMAM) proprietary Long-Term Capital Market 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.

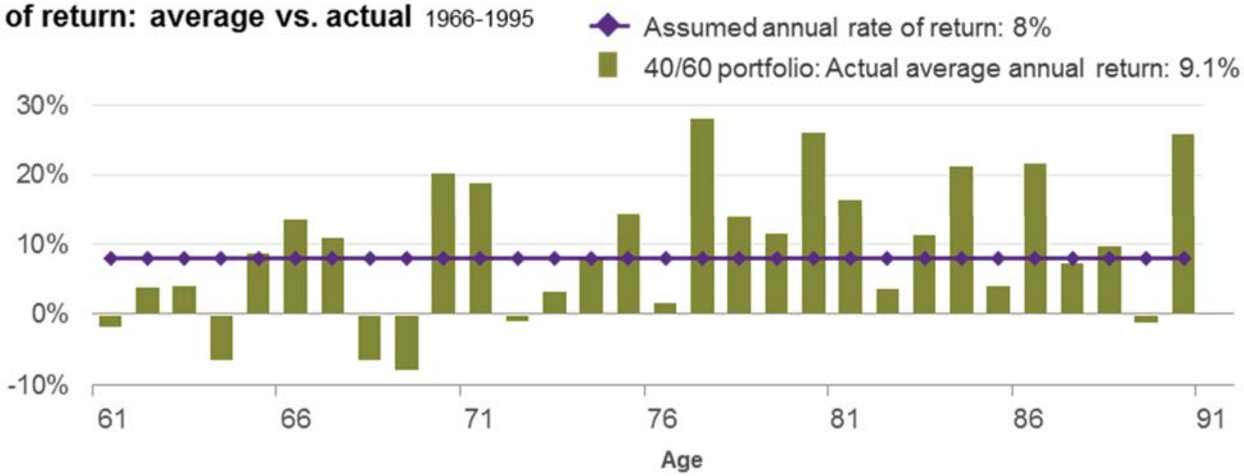
J.P.Morgan
Asset Management

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 OF RETURN RISK

Withdrawing assets in down markets early in retirement can ravage a portfolio. Consider investment solutions that incorporate downside protection such as:

- Greater diversification among non-correlated asset classes
- Investments that use options strategies for defensive purposes
- Annuities with guarantees and/or protection features

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.

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	2017	2018
Individual income tax brackets[1]	• Seven income tax brackets • Top bracket: 39.6% at $418,400 individual / $470,700 married	• Seven income tax brackets • Top bracket: 37% at $500,000 individual / $600,000 married
Alternative Minimum Tax	• Exemption: $54,300 / $160,900 • Phase-out threshold: $120,700 / $160,900	• Exemption: $70,300 / $109,400 • Phase-out threshold: $500,000 / $1mm
Standard Deduction	• $6,350 / $12,700	• $12,000 / $24,000
State and local tax deduction	• Deductible[2]	• Capped at $10,000 on state / local income, property and sales tax
Mortgage interest deduction	• Interest deductible up to $1mm for primary and secondary homes; $100k home equity debt	• Limited to $750,000 debt on primary and secondary homes; no deduction for home equity debt
Estate, gift and Generation Skipping Transfer (GST) tax	• $5.49mm / $10.98mm	• $11.2mm / $22.4mm[3]
Tax rate for owners of pass-through entities	• Business income taxed at individual rate (max 39.6%)	• May deduct 20% of qualified business income[4]; 29.6% effective rate

HOW DOES THE NEW TAX LAW IMPACT YOUR BOTTOM LINE?

Comprehensive tax reform through the Tax Cuts and Jobs Act of 2017 (TCJA) may affect almost every taxpayer beginning in 2018.

Spending

[1] 2018 top income tax bracket 40.8% inclusive of 3.8% Medicare Surtax on unearned/investment income; for 2017, top rate was 43.4%.
[2] Deduction was limited or phased-out for AMT filers. [3] Subject to IRS guidance. [4] The 20% deduction phases out for individuals earning $157,500/$315,000 (married) and disappears entirely for individuals with income exceeding $207,500/$415,000 (married) engaged in a "specific service business." These are businesses that focus on health, law, consulting, athletics, financial services, brokerage service or where the main asset is the skill or reputation of employees/owners. For business owners in other businesses and with income above the thresholds, the deduction may not exceed 50% of owner's share of W-2 employee wages paid by the business or 25% of W-2 wages paid by the business plus 2.5% of original purchase price of long-term property used in production of income. Further IRS guidance to follow.

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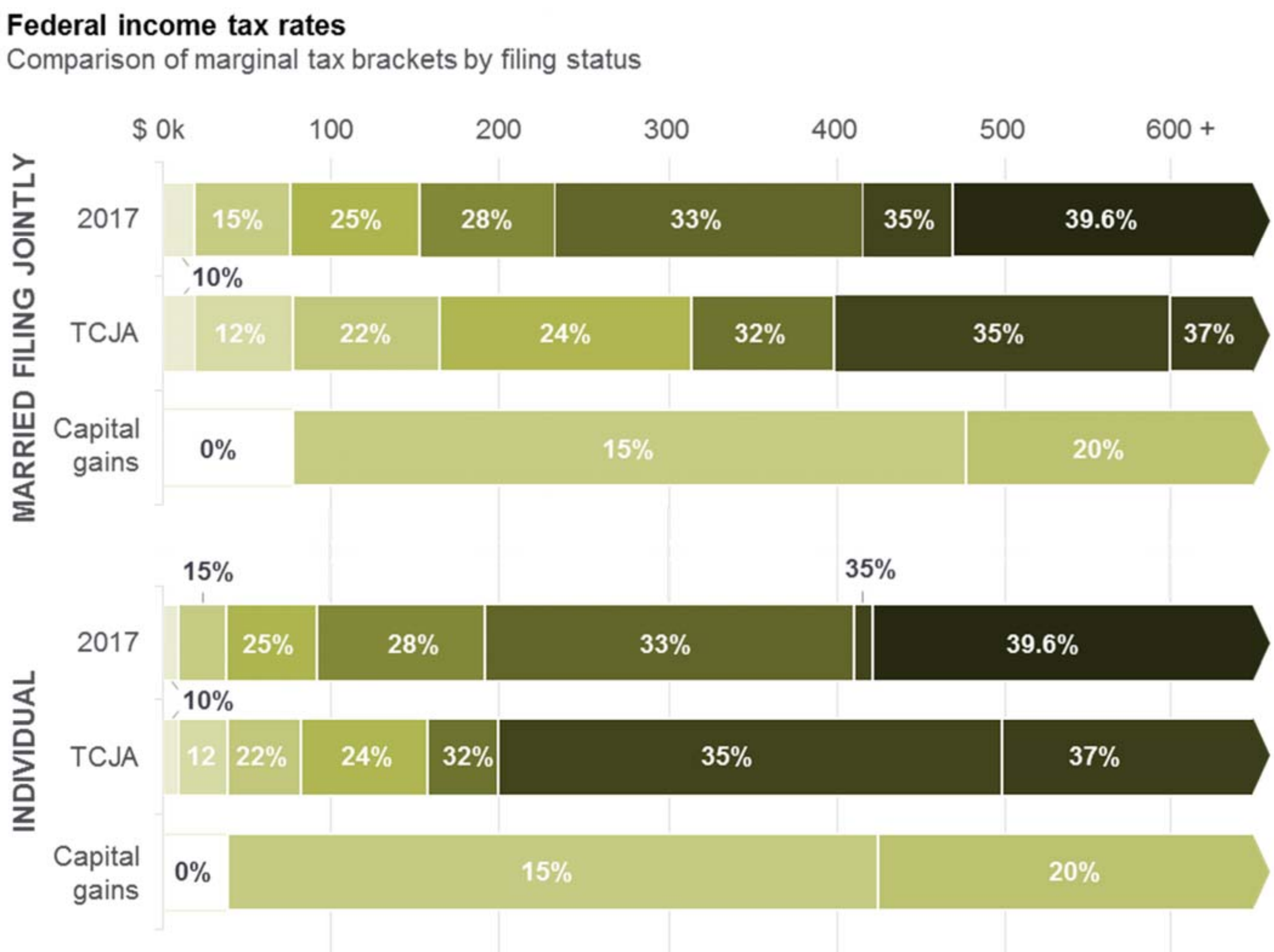


OUT WITH THE OLD, IN WITH THE NEW

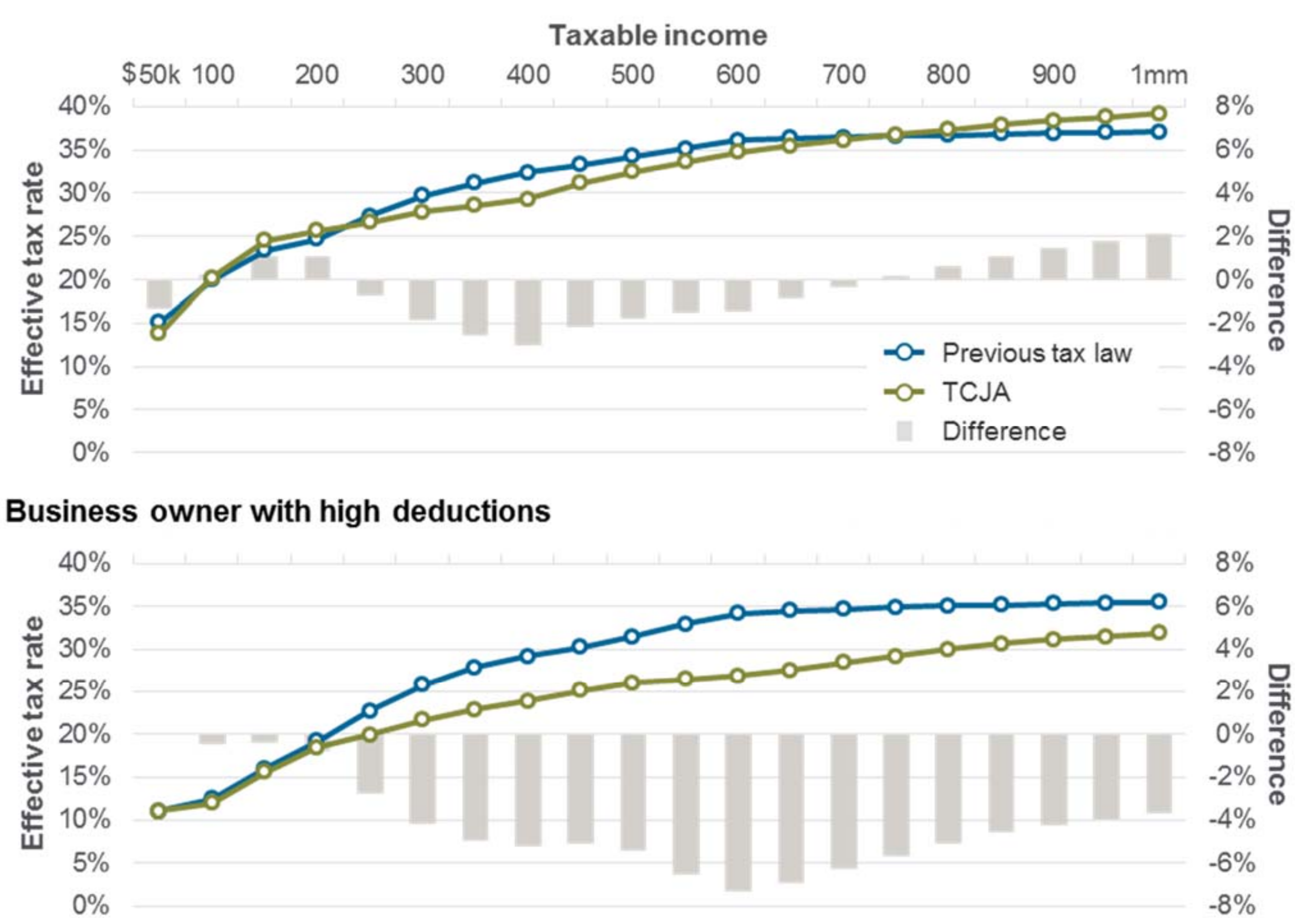
While the number of tax brackets remains the same with the Tax Cuts and Jobs Act (TCJA), income ranges and marginal rates are significantly modified.

Income thresholds for capital gains and qualified dividends remain unchanged.

Top tax rate not reflective of additional 3.8% Medicare Surtax on unearned/investment income for individuals/married couples with MAGI at or exceeding $200,000/$250,000. Marginal tax brackets under TCJA will sunset after 2025. Note that capital gains and qualified dividends are aligned to income thresholds and not marginal brackets under the new law. In the future, tax brackets will be adjusted for inflation using chained-CPI (also known as C-CPI-U); this is a permanent feature under TCJA.

Salaried worker with high deductions

Effective federal and state tax rate, 2018



YOU TAKE THE GOOD, YOU TAKE THE BAD

While the Tax Cuts and Jobs Act (TCJA) is expected to benefit many taxpayers, it is unclear how some households who previously had high itemized deductions may fare, as they balance the benefit of lower marginal rates with new limits on itemized deductions.

Be sure to work with a tax professional to understand how the changes may affect your overall tax bill.

Example assumes income for a married couple filing jointly. Effective tax rates are computed as total federal, state and local income taxes paid as a percentage of gross income, which includes all forms of earned and unearned income. Analysis does not reflect the impact of tax credits, although this example assumes taxpayers will receive two child tax credits. Home values were estimated as a multiple of income from data based on the Home Mortgage Disclosure Act. Home loan to value ratio is 80% and mortgage interest rate of 5%. See slide 24 for explanation of how 20% deduction is applied to taxable income of certain pass-through business owners. In this scenario, we assume the pass-through entity pays out 50% of its income as W-2 wages and qualifies for the full deduction.

Source: Michael Cembalest, J.P. Morgan Asset Management, 2017. For more information, please see: https://am.jpmorgan.com/private-bank/public/gl/en/eotm-tcja-implications-am

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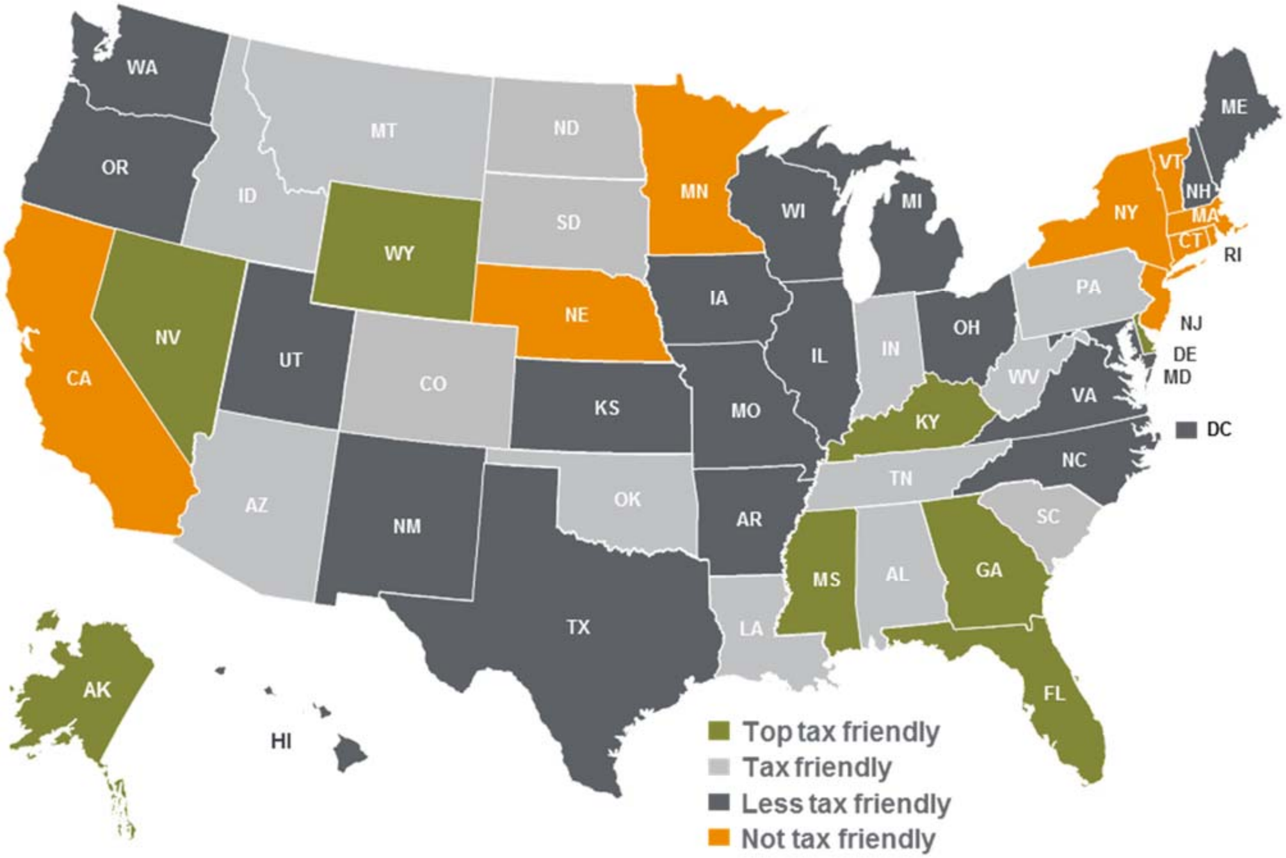
Comparison of state taxes paid by a retiree household



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

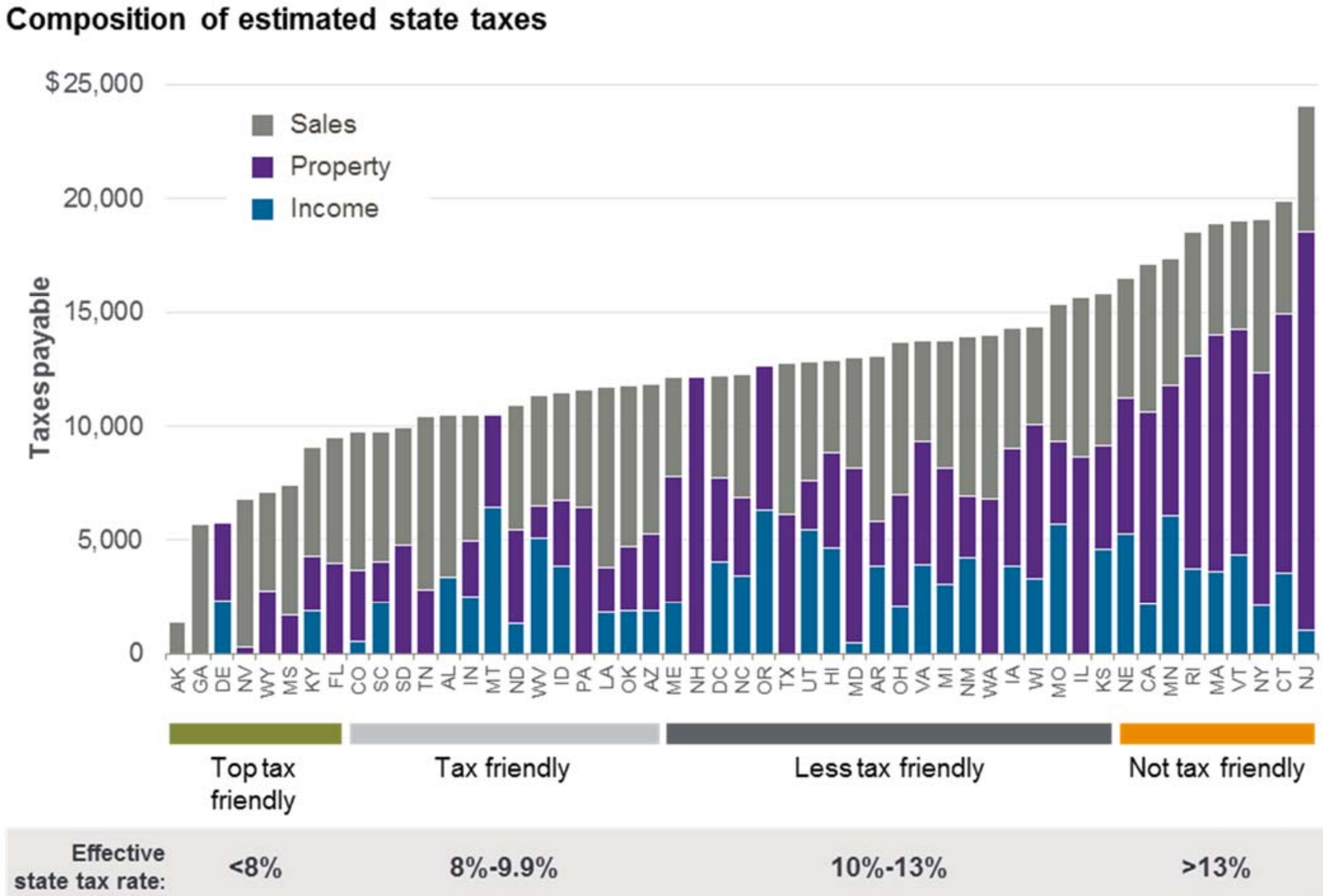
Sales/average local sales tax on[3]: Remaining income net of federal & state income and property tax

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 $1mm ($1,074,996 married) for a top marginal tax rate of 13.3%. NYC levies an additional 3.078-3.876% on taxable income. From 2018 to 2025, certain New York tax rates will be incrementally reduced. HI top marginal income tax rate reduced to 8.25% in 2017 and increased to 11% in 2018. Illinois tax rate increased to 4.95% on all income in 2018.

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.

A closer look at state taxes paid by a retiree household



MODEL ASSUMPTIONS

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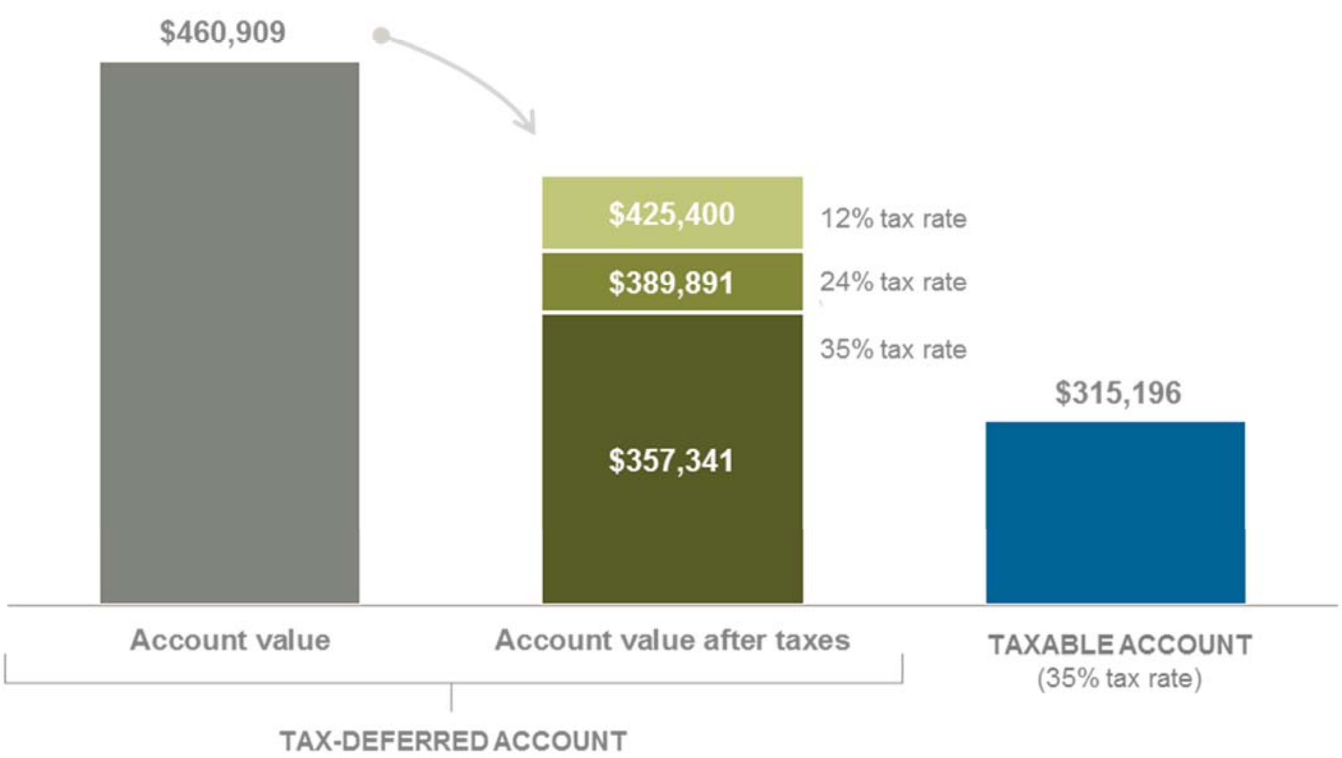
Taxable vs. tax-deferred investing over a 30-year timeframe



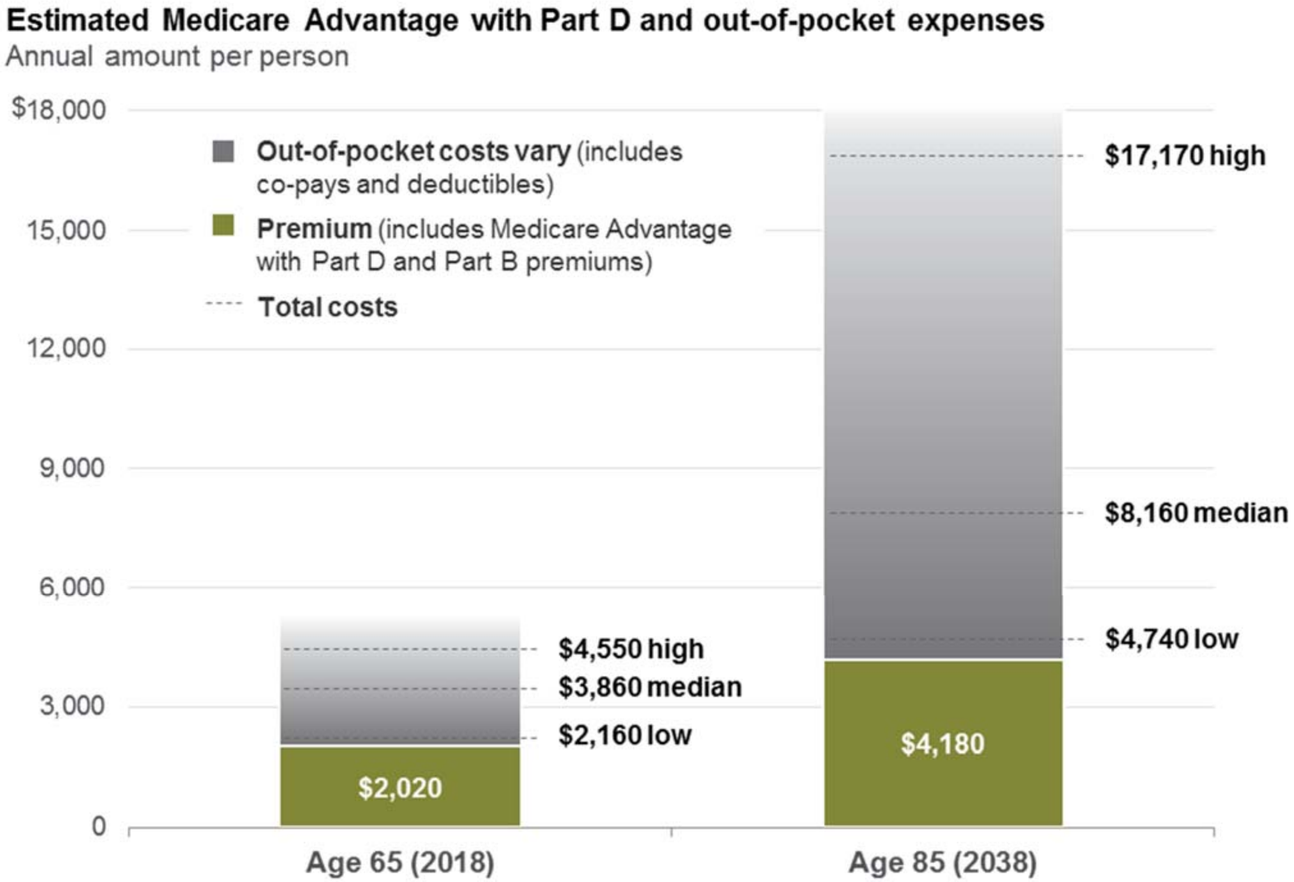
KEEP A BIGGER SLICE

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.

Spending

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 12%, 24% and 35% federal tax rate, respectively, at time of withdrawal. Taxable account contributions are after tax and assume a 35% 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.

Variation in Medicare Advantage costs



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.

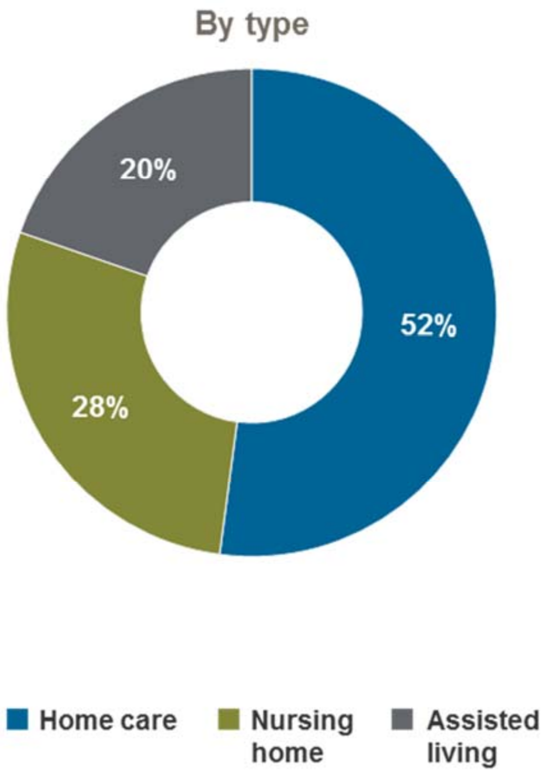
- Be aware: Although Medicare Advantage plans have out-of-pocket caps, those limits do not include prescriptions
- Consider maintaining an emergency reserve fund for high out-of-pocket cost years

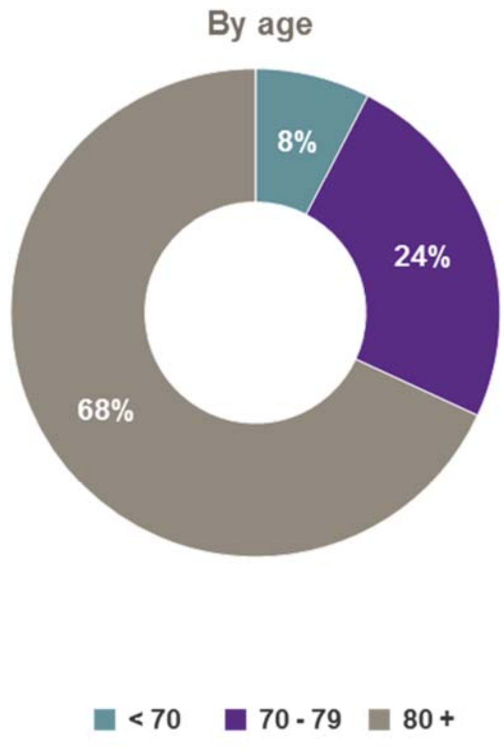
Total costs = annual premium + out-of-pocket costs for those with relatively low costs (those in the lowest third of the cost distribution), median costs and high costs (those in the highest third of the cost distribution).

Age 85 estimated median cost in 2018 is $4,617. Cost estimates above show age 85 in 2038 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, 2017; SelectQuote data as of January 18, 2018; 2017 Medicare Trustees Report, July 13, 2017; J.P. Morgan analysis.

New long-term care insurance claims





LONG-TERM CARE: NOT JUST NURSING HOMES

Many individuals will need long-term care, which often starts with home care and may progress to assisted living or care in a nursing home.

While the majority had care needs at age 80 or older, nearly one-third experienced a care need before then.

Source (charts): American Long-Term Care Association for Long-Term Care Insurance, 2015 LTC Sourcebook.

Annualized historical inflation for nursing home (private room): 3.8%; assisted living (one-bedroom): 2.6%; home health aide: 2.5%. 5-year CAGR represents the compound annual growth rate based on Genworth Cost of Care Survey. Source for cost of care inflation information: Genworth 2017 Cost of Care Survey, conducted by CareScout®, June 2017. © 2017 Genworth Financial, Inc. All rights reserved. Methodology document for inflation information: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/131168_081417.pdf

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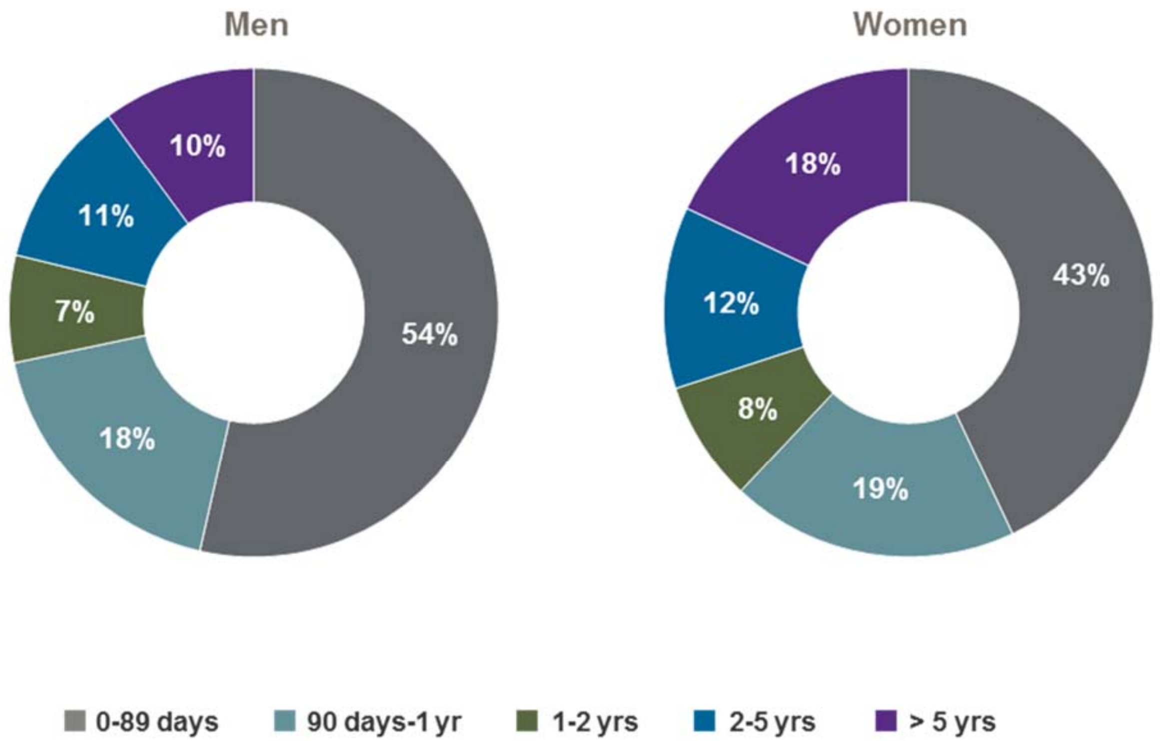
Projected lifetime need for significant long-term care for individuals at age 65[1]



HOW LONG MIGHT YOU NEED CARE?

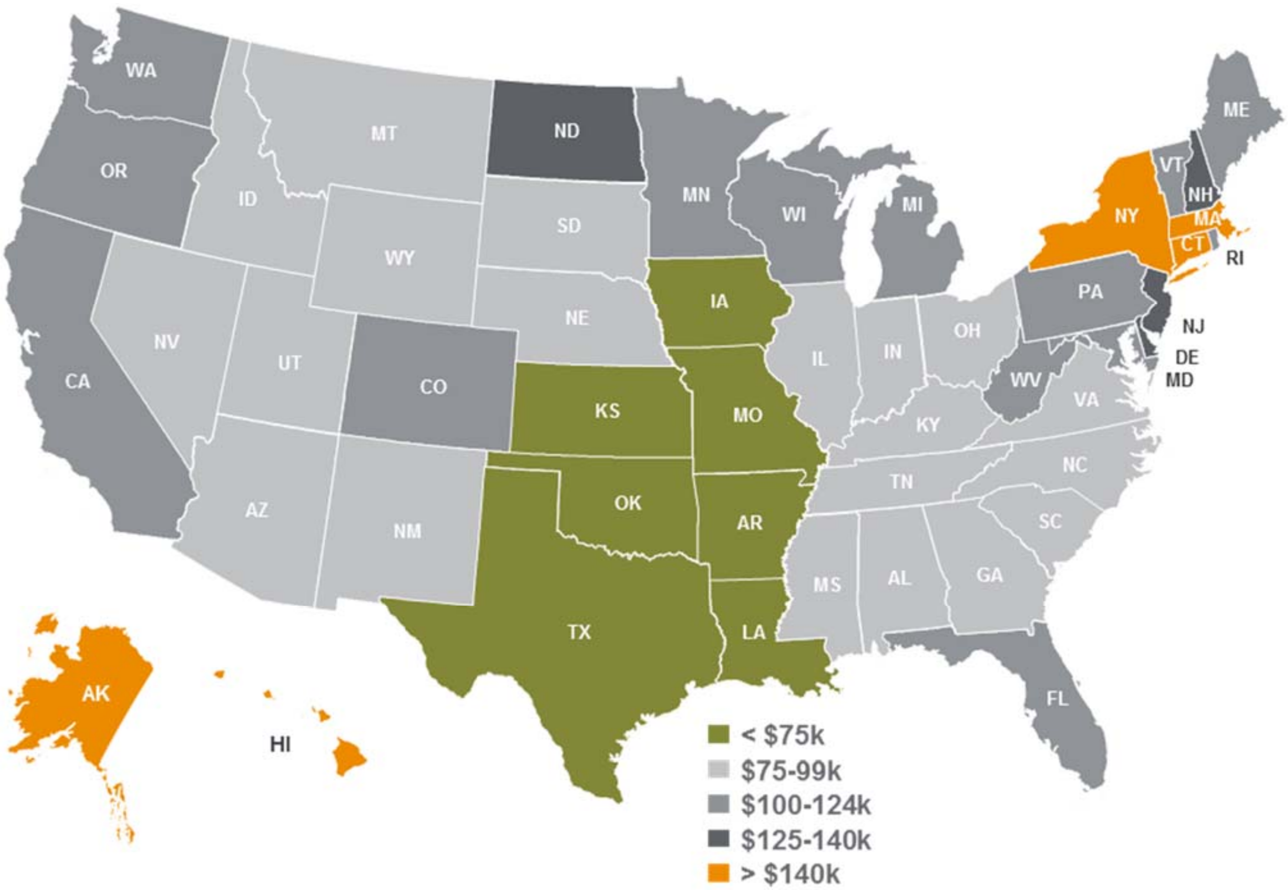
Average care needs don't tell the whole story since some individuals won't need care, some have a short-term need and others will need significant care for more than 5 years.

[1] Significant long-term care needs include requiring assistance with at least 2 or more activities of daily living that are expected to last at least 90 days or the need for substantial supervision for health and safety threats due to severe cognitive impairment. Activities of daily living include eating, dressing, bathing, transferring and toileting. Those who meet the cognitive impairment criteria who require care for less than 90 days are included in the 90 days – 1 year category above.

Not included: non-acute care for rehabilitation; less severe impairment such as requiring assistance with 1 activity of daily living; needing assistance with incidental activities of daily living such as shopping, cooking, taking medication, using transportation and paying bills.

Source: U.S. Department of Health and Human Services, ASPE Issue Brief, Revised February 2016, Table 1.

Median annual cost of nursing home care (private room)



THE COST OF CARE

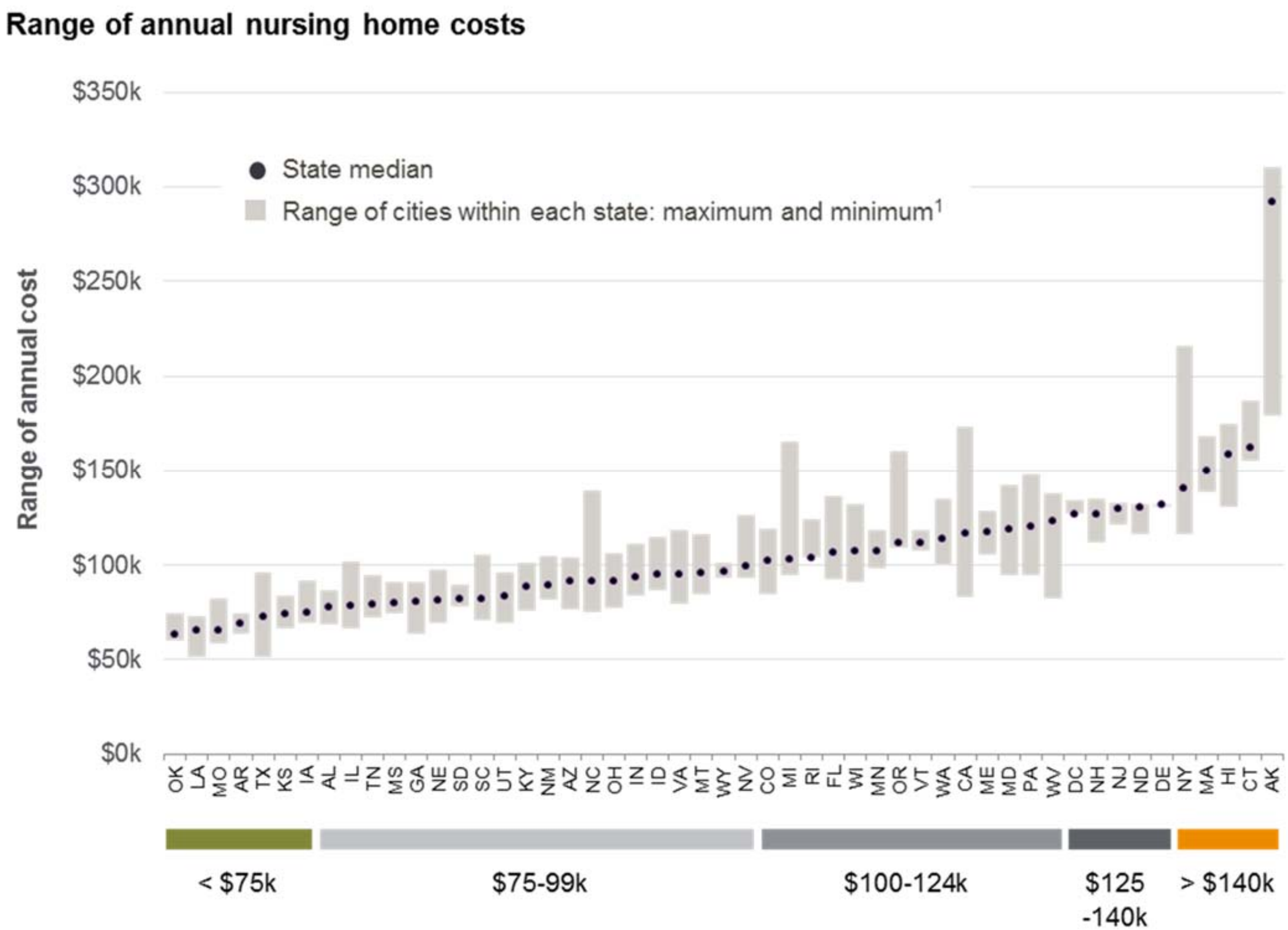
There can be significant variations in cost depending on where care is utilized.

Methodology document: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/48590_081417.pdf

For more information on cost of care from Genworth see: https://www.genworth.com/about-us/industry-expertise/cost-of-care.html

Source: Genworth 2017 Cost of Care Survey, conducted by CareScout®, June 2017. Annual median costs based on 365 days of care.

Spending



THE COST OF CARE

Cost of care will depend on state, city and the facility chosen.

[1] The range is representative of the maximum and minimum average costs by surveyed city within each state. Data is limited to the availability of the surveyed cities so every city within each state may not be represented.

Methodology document: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/48590_081417.pdf

For more information on cost of care from Genworth see: https://www.genworth.com/about-us/industry-expertise/cost-of-care.html

Source: Genworth 2017 Cost of Care Survey, conducted by CareScout®, June 2017. Annual median costs based on 365 days of care.

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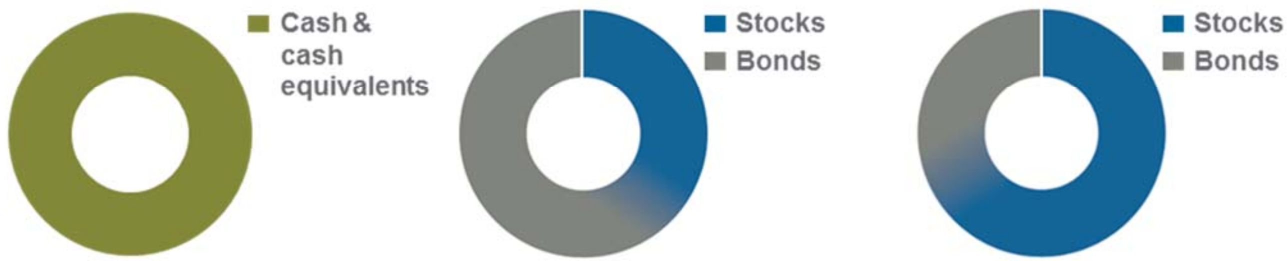
Investing

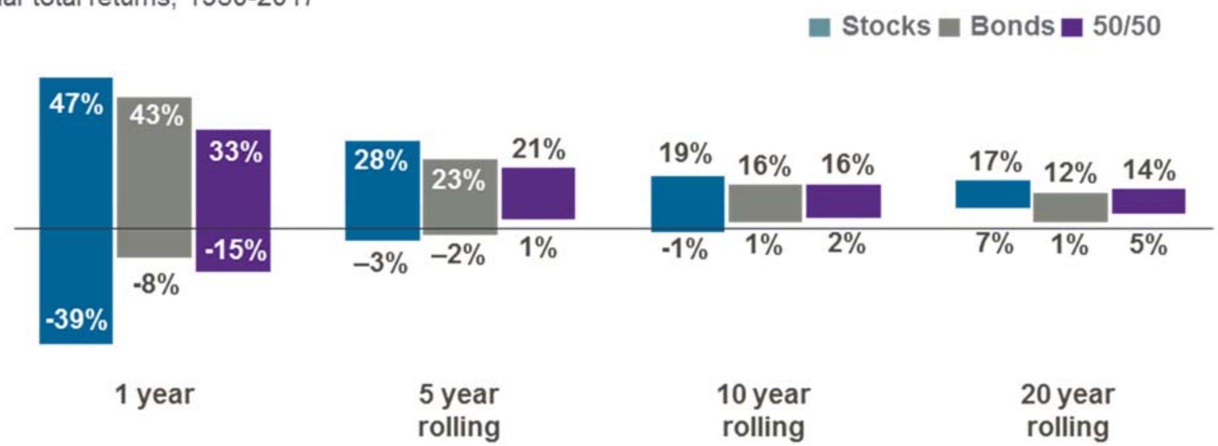
Short-term goals
Includes emergency reserve fund of total spending needs for 3-6 months

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, 1950-2017



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, Strategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2017. 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.

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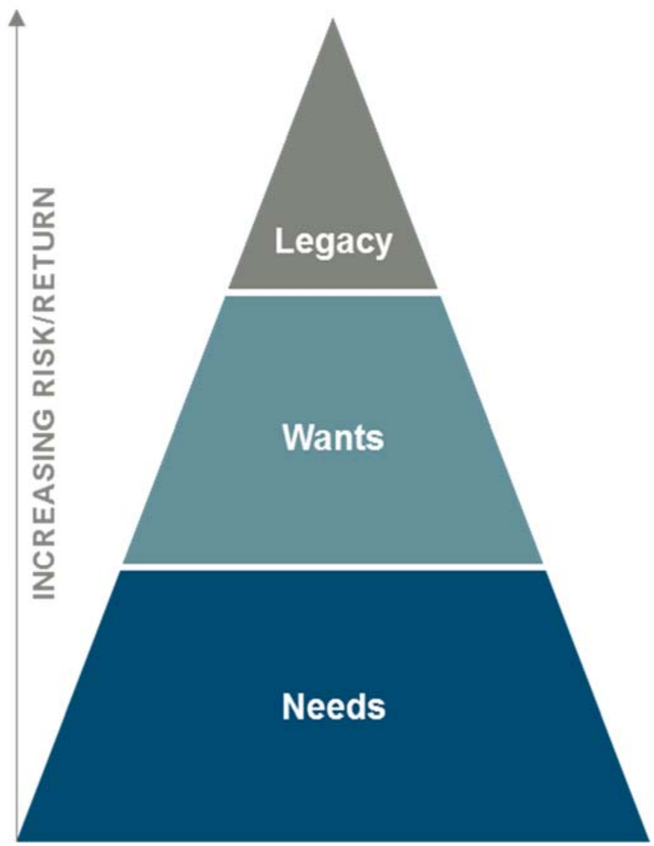
Structuring a portfolio to match investor goals in retirement



Considerations	Potential solutions
What is the time horizon and appropriate planning vehicle for your heirs and your estate goals?	Equities Alternatives*
What are your desires/wants? How much risk are you willing to take?	Equities Extended sector bonds Multi-asset solutions
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

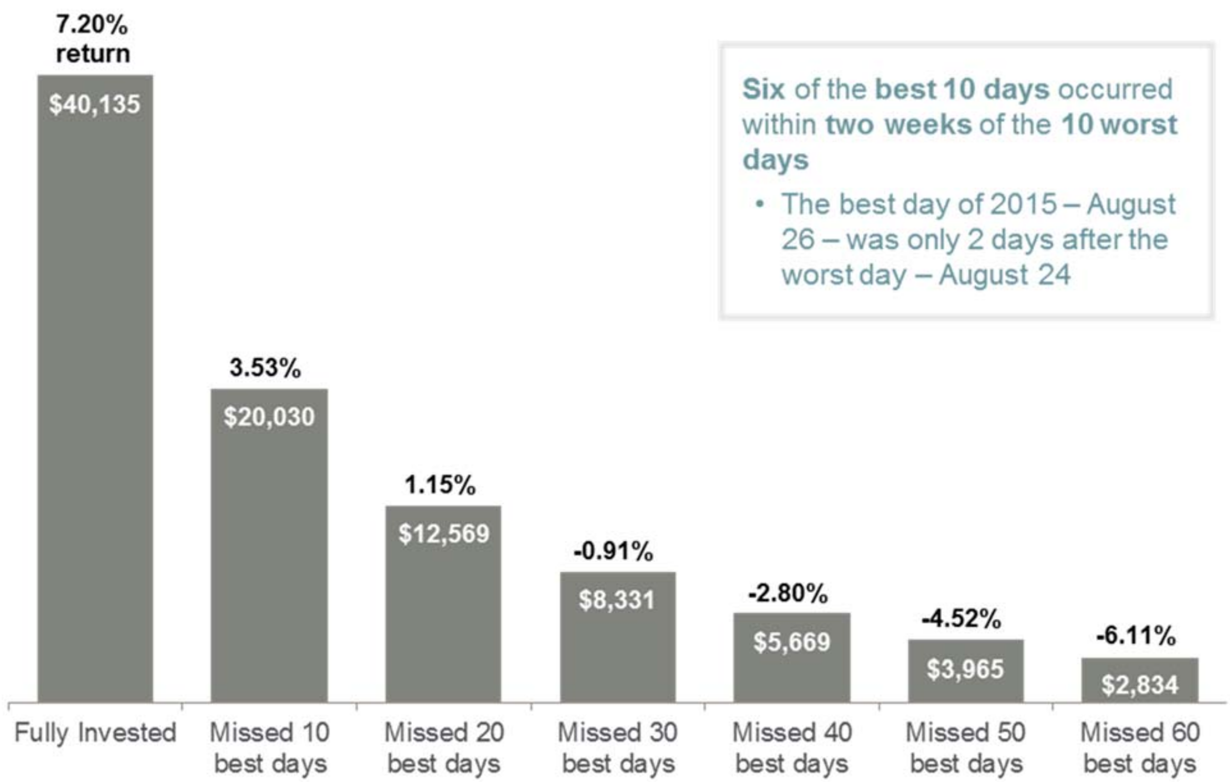
It may be useful to match dependable income sources with fixed retirement expenses, while coordinating other investments with more discretionary expenses.

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.

Returns of the S&P 500

Performance of a $10,000 investment between January 1, 1998 and December 29, 2017



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.

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 for the respective strategies 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 29, 2017.

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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	Limits to itemized deductions
10%	Up to $9,525	Up to $19,050	0% [up to $38,600 (single) / $77,200 (married)]	2.90% (includes 1.45% employer portion and 1.45% employee portion)	0%	-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 debt; no deduction for home equity debt --Cash charitable gifts deductible up to 60% of AGI -Misc. expenses subject to 2% AGI floor repealed
12%	$9,525-$38,700	$19,050-$77,400				
22%	$38,700-$82,500	$77,400-$165,000	15% [up to $425,800 (single) / $479,000 (married)]			
24%	$82,500-$157,500	$165,000-$315,000				
32%	$157,500-$200,000	$315,000-$400,000				
35%	$200,000-$500,000	$400,000-$600,000		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)	
37%	$500,000 or more	$600,000 or more	20%			

The personal exemption has been repealed and individual tax rates and personal deductions sunset after 2025 as per the TCJA 2017.
*Modified adjusted gross income (MAGI) is AGI plus amount excluded from income as foreign earned income, tax-exempt interest and Social Security benefit. **For tax years 2017/2018.

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	$70,300	$500,000-$781,200
Married filing jointly	$109,400	$1,000,000-$1,437,600

*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	$11.21 million per individual/$22.42 million per couple*
Annual gift tax exclusion	$15,000 ($30,000 per couple)

*Increased levels expire after 2025. Exact exemption amount to be confirmed by IRS.

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Traditional IRAs vs. Roth IRAs—2017/2018

	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	**2017** Single: $62,000-$72,000[2] Married: $99,000-$119,000[2] **2018** Single: $63,000-$73,000 Married: $101,000-$121,000	All contributions are non-deductible	N/A
Phase-out ranges for Roth contribution eligibility	N/A	**2017** Single: $118,000-$133,000 Married: $186,000-$196,000 **2018** Single: $120,000-$135,000 Married: $189,000-$199,000	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	**2017:** April 17, 2018 **2018:** April 15, 2019	**2017:** April 17, 2018 **2018:** April 15, 2019	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 slide 41.

[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	2017	2018
401(k), 403(b), 457(b)	401(k) elective deferral limit/catch-up contribution (age 50 and over)	$18,000/$24,000	$18,500/$24,500
	Annual defined contribution limit	$54,000	$55,000
	Annual compensation limit	$270,000	$275,000
	Highly compensated employees	$120,000	$120,000
	403(b)/457 elective deferrals/catch-up contribution (age 50 and over)	$18,000/$24,000	$18,500/$24,500
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]	$54,000	$55,000
	SEP minimum compensation	$600	$600
	SEP annual compensation limit	$270,000	$275,000
Health Savings Accounts (HSAs)	Maximum contribution amount/over age 55	**Single:** $3,400/$4,400 **Family:** $6,750/$7,750	**Single:** $3,450/$4,450 **Family:** $6,850/$7,850[3]
	Minimum deductible	**Single:** $1,300 **Family:** $2,600	**Single:** $1,350 **Family:** $2,700
	Maximum out-of-pocket expenses	**Single:** $6,550 **Family:** $13,100	**Single:** $ 6,550 **Family:** $13,300
Social Security	Wage base	$127,200	$128,400
	Maximum earnings test exempt amounts under FRA for entire calendar year/during year of FRA[4]	$1,410 p/month ($16,920 p/year)/ $3,740 p/month	$1,420 p/month ($17,040 p/year)/ $3,780 p/month
	Maximum Social Security benefit at FRA	$2,687 p/month	$2,788 p/month
Defined benefit – Maximum annual benefit at retirement		$215,000	$220,000

[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 $275,000.

[2] Employer contributions may not exceed $55,000 or 25% of compensation. Other rules apply for self-employed individuals.

[3] Limit to be confirmed by IRS.

[4] 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 2018 ($6,500 if age 50 or older); single filers may make Roth contributions if MAGI is $120,000 or below; married filing jointly if MAGI is $189,000 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.

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Power of attorney and asset transfer considerations

Principal: Individual who directs another to act for his/her own benefit | **Agent:** Individual appointed to fulfill specified directives of principal

	APPOINTS OR INSTRUCTS				TIMING	
	Appoints an agent to manage the day-to-day affairs of the principal	Appoints an agent to manage the health care of the principal	Provides instruction to manage the health care of the principal	Provides instructions for managing and transferring principal's assets	Powers/instructions applicable during *life of principal*	Powers/instructions applicable at *death of principal*
General power of attorney (POA)[1]	✓				✓	
Durable power of attorney[1]	✓	✓ Used in place of General POA			✓	
Health care proxy		✓			✓	
Advance health care directive / Living will[2]			✓		✓	
Will				✓	Review/update periodically	✓
Revocable trust[3]				✓	✓	✓
Irrevocable trust[4]				✓	✓	✓

[1] Terminates when the principal becomes incapacitated or unable to make decisions about finances and health, whereas Durable POA continues when principal becomes incapacitated. [2] Principal provides written instructions in advance to ensure specific medical care in case he/she becomes incapacitated; many states combine the living will with durable power of attorney. Some states may not recognize heath care directive of another state. [3] Provides instructions in the event of principal's mental disability and to avoid probate of his/her assets; principal is the owner and beneficiary of the trust; the trust may be revoked at any time during life and becomes irrevocable at death. [4] Principal/grantor gifts assets to trust during life to remove from his/her estate, or at death, assets are moved to the trust. Trust becomes owner of assets and any future growth is removed from grantor's taxable estate.

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.

65 and working: Should I sign up for Medicare?

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.

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	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]			Deferred Rate Annuity	▪ Purchase payments grow at a fixed or market rate for a specified period of time
			Deferred Income Annuity (DIA)	▪ Often purchased to provide income in late retirement years[1]
			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
	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
	Moderate/ aggressive investor		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.

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