

In Retirement

High risk

Clients in the **Orange Zone** face a material risk of not maintaining their retirement lifestyle. They should take action and understand the potential impact of the available levers on the success of their retirement goals.



Orange Zone

Situation assessment

On the basis of the analysis from the Client Analyzer, this client is in the Orange Zone.

Retired investors who are in the Orange Zone have only a 70%–80% probability of meeting their spending goals in retirement with a diversified portfolio.¹ This means they could be at risk of having insufficient assets to meet their future desired spending goals, and they face a **material risk of not** maintaining their retirement lifestyle.

Since they are no longer working full-time, they may need to rely more heavily on the Spending Lever to improve their funding status.

Investors in this zone **should** take action and understand the potential impact of the available levers on the success of their retirement goals.

Potential actions

Spending Lever (Potential Flexibility: Moderate)

Reduce planned retirement spending.

Assess ability and willingness to delay, or possibly eliminate, large expenditures.

Income Lever (Potential Flexibility: Moderate)

Seriously consider working part time during retirement, particularly if reduced spending cannot sufficiently repair the plan.

Investment Lever (Potential Flexibility: Low)

For investors in the Orange Zone, consider decreasing their equity and increasing their fixed-income allocations to help manage further downside risk. While fixed income has recently offered less capital preservation benefit than at other times, it may still help insulate against the higher volatility of equities. Note that this could come at the cost of giving up future lifestyle potential if markets recover.

Along with altering spending and income, the situation may require the annuitization of some or all of the anticipated income need in order to provide a safety net for some of these clients' living expenses. (The

¹ When determining probabilities of success and corresponding color zones for portfolio, the Client Analyzer models portfolios ranging from 20% Equity and 80% Fixed Income to 80% Equity and 20% Fixed Income. Each portfolio is assumed to be broadly diversified at both the asset class and security levels.

guarantee of income, however, is subject to the claims-paying ability of the issuing insurance company.)

One way to approach this is to calculate the cost of annuitizing a minimum spending floor and to invest the remaining assets. Depending on the cost of the annuity, this could reduce the withdrawal strain on the non-annuitized portion of the portfolio. For example, if an annuity can generate income of 6% for half of the portfolio and the goal is an overall spending rate of 4%, then the non-annuitized portion would need to generate 2% cash flow to maintain the 4% overall rate. Consider this in the context of the other levers' effects.

These potential actions represent only some of the possibilities an investor could choose to manage their retirement plan.

Discussion suggestions

Investors in the Orange Zone need to clearly understand the material gap between their retirement spending plans and what is prudently sustainable. They may have less flexibility with their portfolio since they have less of a wealth cushion, which means they should first take advantage of other options to improve their plan's potential for success.

Given the timing of the market decline in light of their retired status, these clients may wonder about the impact on their portfolio. You can help address which levers to pull and how hard they should be pulled.

For these clients, conversations should focus on the benefit of making tough decisions now, while there may be greater flexibility. Keep in mind, the long-term impact those decisions can make on achieving their desired lifestyle. These conversations should be less about what they may ideally want and more about the choices they need to make.

Follow-up conversations and priorities will depend on the availability of specific levers (i.e., can they adopt part-time work or spend less), along with the potential impact of each decision. For example, if your client is able and willing to work part time for a few years, this extra income may give them a higher probability of meeting their retirement goals without drastically reducing spending.

To be prudent, these clients should take action to make up their investment shortfall by pulling the available levers as necessary. Instead of having a conversation about desired spending goals, focus the discussion on planning for their more basic needs.

If returning to work isn't possible or palatable, investors in this group will need to spend less now, as well as during part or all of retirement. Spending less during retirement can have a dramatic impact on potential ending wealth.

Future actions

Follow a detailed client engagement road map to closely monitor the impact of market changes on portfolio value, ability to reduce or defer spending, the effect of additional income from re-entering the workforce, and any other material changes to personal situations.

For additional assurance, it might help to run a more detailed cash-flow analysis in a planning tool with current portfolio values as a base plan. You can create a plan focused on needs first, to determine the potential impact of different asset-allocation options; or based on risk tolerance, to assess the feasibility of their spending goals. Utilize Monte Carlo projections to illustrate potential ending wealth ranges. On the basis of the outcome, consider adjusting desired income (withdrawals), savings rate (contributions), portfolio allocations, or some combination of all three to increase the viability of the plan.

Disclosures

IMPORTANT: The Client Analyzer application used to help determine which of the advice profiles most closely approximates a client's situation relies on various statistical and modeling techniques, including Monte Carlo simulation, to produce hypothetical projections. The projections or other information generated by the Client Analyzer regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results.

Monte Carlo Simulation generates a broad range of hypothetical investments scenarios designed to better reflect the actual volatility and randomness of the financial markets which are not fully addressed by using simple average return assumptions. In this approach, each scenario randomly models one potential investment path containing a string of positive or negative, small-to-large hypothetical investment returns.

The modeling used by the Client Analyzer considers 5,000 scenarios for each year simulated. These simulations model investment performance for a set of asset classes to estimate how each might impact a portfolio over a specified time period. These simulations are designed to reflect the forecasted volatility of investment markets and other economic variables. This analysis is not meant to serve as a direct prediction regarding the future performance of your clients' investments or the income and capital gains that they might produce. Similarly, it is not intended to predict or guarantee future investment performance of any sort. It is important to remember that this process is based on assumptions that may not reflect the behavior of actual events. For example, Monte Carlo Simulation may not fully account for certain rare and extreme market catastrophes which fall outside normal expectations.

Monte Carlo Simulation relies upon key assumptions about the risk and return behavior of asset classes. The asset class forecasts used for simulation data shown in this calculator are created using Russell Investments' proprietary models that incorporate historical data from market and economic indexes. The historical index data used are from the CRSP Market Cap Series (US Equity), Barclays Capital Aggregate Bond Index (Fixed Income), MSCI All Country World Index (Non-US Equity), and the NAREIT Equity REIT Index (Real Estate). Indexes are unmanaged and do not reflect the deduction of management fees, and cannot be invested in directly. Index return information is provided by vendors and although deemed reliable, is not guaranteed by Russell or its affiliates. Russell's capital markets forecasts are typically updated twice a year in January and July. Because assumptions about the capital markets evolve over time, results of the calculations may vary over time. Your actual experience may be different than the Russell capital markets forecast.

The simulation process uses the following assumptions:

- The portfolio is invested in one of the following asset allocations, as selected by the advisor:
 - Conservative**—20% equities and 80% fixed income (12.4% U.S. Equity, 6.2% Non-U.S. Equity, 1.4% Real Estate, and 80% Fixed Income)
 - Moderate**—40% equities and 60% fixed income (24.8% U.S. Equity, 12.4% Non-U.S. Equity, 2.8% Real Estate, and 60% Fixed Income)
 - Balanced**—60% equities and 40% fixed income (37.2% U.S. Equity, 18.6% Non-U.S. Equity, 4.2% Real Estate, and 40% Fixed Income)

Growth—80% equities and 20% fixed income (49.6% U.S. Equity, 24.8% Non-U.S. Equity, 5.6% Real Estate, and 20% Fixed Income)

- The portfolio is based on December 31, 2008 asset class assumptions and is rebalanced annually. As of the most recent update, the 20-year expected annualized return for each portfolio are: Conservative 5.0%, Moderate 5.8%, Balanced 6.7%, and Growth 7.6%. Your actual investment results may be better or worse than those shown. The broad asset classes above are used because they represent typical asset categories used in diversified investing. Other investment mixes not considered may have characteristics similar or superior to those being analyzed.
- The portfolio consists of well-diversified investments within the various asset classes. Diversification does not assure a profit and does not protect against loss in declining markets.
- All withdrawals are considered to be pre-tax without regard to the investors' tax situation. Any taxes owed (if any) are assumed to be paid out of the withdrawals and/or any Income from Other Sources that is entered.
- Spending Gap is funded by withdrawals from the portfolio. These withdrawals are indexed to consumer price inflation each year.
- Time horizon is assumed to be the rest of investor's life and is modeled in two stages to account for mortality risk. Stage 1 incorporates a fixed time horizon based on median life expectancy according to actuarial tables. Stage 2 incorporates a variable time horizon also based on actuarial tables. Source of actuarial tables: Society of Actuaries, U.S. Basic Individual Annuitant 2000 Table.
- In Stage 1 the simulation process models the inflation-indexed withdrawals from the portfolio. Then at the end of Stage 1 it models the cost to purchase an immediate life annuity providing inflation-indexed income over the second stage.
- The Probability of Success measure is based on the percentage of scenarios for which the portfolio value at the end of the first stage is greater than or equal to the estimated second-stage annuitization cost.

The length of the first stage is determined as follows: If the investor Age is less than 80, then the first-stage horizon is 20 years; otherwise it is 10 years. The length of the second stage depends on the Marital Status of the investor. If single, it is for the lifetime of the individual. If married, it is for the lifetime of both individuals (i.e., the last to die). Married individuals are both assumed to be the same age. If they are of different ages, it is generally recommended to enter the younger person's age for the analysis.

Similarly, the Future Portfolio Balance is computed at the first-stage horizon. If the investor Age is less than 80, this is 20 years; otherwise it is 10 years.

The use of this methodology is not a recommendation for annuitization at any particular time, but rather is simply a means for measuring the likelihood of sustainability of a spending plan.

Percentile values, including the Median which is the 50th Percentile, are solely for comparison purposes. These values can be used to compare

Disclosures *continued*

20-year annualized asset class assumptions as of December 31, 2008

Asset Classes	Expected Return	Standard Deviation	Correlation*				
			US Equity	Non-US Equity	Real Estate	Fixed Income	Inflation
US Equity	8.5%	17.6%	1.00				
Non-US Equity	8.5%	20.1%	0.74	1.00			
Real Estate	7.3%	15.4%	0.52	0.43	1.00		
Fixed Income	4.1%	4.2%	0.20	0.18	0.10	1.00	
Inflation	2.0%	3.4%	0.14	0.15	0.00	0.61	1.00

*Correlation coefficients, which can range from 1.0 to -1.0, measure the degree to which the movements of two variables are related. A correlation coefficient of 1.0 means that two variables move in a completely synchronized manner, while -1.0 means they move completely opposite. A coefficient of zero means that the movements are completely unrelated. Combining asset classes with lower or negative correlations may help reduce the volatility of a portfolio's returns over time.

relative probabilities of different outcomes. 80% of the simulated outcomes fall between the 10th and 90th percentiles. The 10th Percentile corresponds to wealth values in which 90% of the simulated cases exceed this level and only 10% fall below. It reflects simulated results assuming a series of extremely poor market conditions. Remember that it is possible to lose the entire value of a portfolio. A different set of assumptions would create a different probability distribution. Expert opinion regarding expected returns, volatility and market trends vary widely.

- The color-coded labels associated with these percentage ranges are based on Russell's judgment of what constitutes a reasonable probability of success for different profiles.

Asset Class Assumptions

Expectations are created with proprietary models incorporating historical index data for the CRSP Market Cap Series (U.S. Equity), Barclays Capital Aggregate Bond Index (Fixed Income), MSCI All Country World Index (Non-U.S. Equity) and NAREIT Equity REIT Index (Real Estate).

Indexes are unmanaged, and do not reflect the deduction of any management fees, and cannot be invested in directly. They are provided for general comparison purposes only. Index performance is not indicative of any specific investment, and should not be viewed as a representation of future results. Deductions for fees and expenses are not reflected in index returns. If they were deducted, returns would be lower. Index return information is provided by vendors and although deemed reliable, is not guaranteed by Russell or its affiliates.

Asset Class and Index definitions

Asset Classes

U.S. Equity—Investment in U.S. company stocks. Stock represents ownership and control in a corporation and may pay dividends as well as appreciate or depreciate in value. The value of a stock will rise and fall in response to the activities of the company that issued it, general market conditions, and economic conditions.

Non-U.S. Equity—Investment in non-U.S. stocks. Investments in non-U.S. markets can involve risks of currency fluctuation, political and economic instability, different accounting standards and foreign taxation. Such securities may be less liquid and more volatile. Investments in emerging or developing markets involve exposure to economic structures that are generally less diverse and mature than, and political systems with less stability than those in more developed countries.

Fixed Income—A government, municipal or corporate bond that pays a fixed rate of interest until the bond matures, or a preferred stock that pays a fixed dividend. Bond investors should carefully consider risks such as interest rate, credit, repurchase and reverse purchase transaction risks. Greater risk, such as increased volatility, limited liquidity, prepayment, non-payment and increased default risk, is inherent in portfolios that invest in high-yield ("junk") bonds or mortgage-backed securities, especially mortgage-backed securities with exposure to sub-prime mortgages.

Real Estate—A Real Estate Investment Trust (REIT) invests in real estate loans (mortgages and trust deeds) and/or has equity interests in real estate. Specific sector investing, such as real estate, can be subject to different and greater risks than more diversified investments. Declines in the value of real estate, changes in economic conditions, property taxes, tax laws, and interest rates all present potential risks to real estate investments.

Indexes

Market Index—A market index is a group of assets traded on a particular investment market, and a statistic reflecting the composite value of those component assets. It is used as a tool to represent the characteristics of its components, all of which bear some commonality such as trading on the same exchange, belonging to the same industry, or having similar capitalizations. Many indexes compiled by news or financial services firms are used to benchmark the performance of investment portfolios.

Center for Research in Security Prices (CRSP) Market Cap Series (total return)—New York Stock Exchange companies ranked by market cap on the last trading day of each quarter.

Barclays Capital Aggregate Bond Index—An index with income reinvested, generally representative of intermediate-term government bonds, investment grade corporate debt securities, and mortgage-backed securities.

Morgan Stanley Capital International (MSCI) All Country World Free, ex-U.S. Total Return Index—An index with dividends reinvested, representative of the securities markets of 49 developed and emerging market countries.

NAREIT Equity REIT Index—An index with dividends reinvested, representative of tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System.

KEY LIMITATIONS

- In addition to the client inputs, the Analyzer uses hypothetical estimates of future market conditions based upon Russell asset class assumptions. It also uses actuarial mortality estimates. Both sets of assumptions may change over time. This analysis is not meant to serve as a direct prediction regarding the future performance of your assets, the income and capital gains that they might produce, or the ability to sustain a spending plan over the entire retirement period. Similarly, they are in no way intended to predict or guarantee future investment performance of any sort.
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- Russell's capital market forecasts are adjusted periodically, typically twice a year in January and July. Actual experience may be different.
- This analysis assumes the portfolio asset allocation is maintained for the entire length of the first stage (a "constant asset allocation strategy"), with annual rebalancing.
- The analysis does not consider the return and risk differences due to holding a highly concentrated position, nor how long a security has been held. Other asset allocation weightings may produce significantly different results, as may the use of other asset classes and investments not considered in this analysis.
- Other asset classes or investments not considered in this analysis may produce different results. There also may be other considerations pertinent to your client's situation that have not been addressed, including, but not limited to, market conditions, the tax position of their assets or cash flows, or other available assets, such as personal real estate or other investments not included in this analysis.

Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.

This hypothetical example is for illustration only and is not intended to reflect the return of any actual investment.

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Diversification and strategic asset allocation do not assure profit or protect against loss in declining markets.

No investment strategy can guarantee a profit or protect against a loss in a declining market.

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