

Near retirement

Less than three years to retirement
Very high risk

Clients in the **Red Zone** may have a large gap between their planned retirement spending and what is actually sustainable. They may face a very serious risk and must take action with regard to their stated goals. Fortunately, their current participation in the workforce may offer flexibility.



Red Zone

Situation assessment

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

Investors who are near retirement and in the Red Zone have less than a 70% probability of achieving their spending goals in retirement with a diversified portfolio.¹ They probably have a large asset deficit relative to their future expected spending needs, and they may face a **very high risk of not** achieving their expected retirement lifestyle.

Clients in the Red Zone need to clearly understand that the market impact may have resulted in a large gap between their planned retirement spending and what is actually sustainable.

These clients may face a very serious risk and **must** take action with regard to their stated goals.

Fortunately, their current participation in the workforce may offer some flexibility.

Potential actions

Income Lever (Potential Flexibility: High)

Working full time as long as possible (or until their retirement plan status improves significantly) will reduce reliance on investments for income. This may help to restore sustainable plans by postponing portfolio withdrawals for income needs.

If extending full-time work is not feasible, plan to maintain part-time work for a significant portion of the post-retirement horizon.

Spending Lever (Potential Flexibility: High)

Significantly reduce expected retirement-spending goals and, if possible, reduce current spending to increase savings if delaying retirement is not possible.

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

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.

Investment Lever (Potential Flexibility: Low)

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

For clients who cannot delay retirement, you may need to annuitize some or most of their anticipated income need. (The guarantee of this 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 take pressure off the non-annuitized portion of the portfolio. For example, if an annuity can generate cash flow 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 investors can choose to manage their retirement plan.

Discussion suggestions

Investors in the Red Zone need to understand the gap between their planned retirement and what is now possible. They may have less flexibility with their portfolio because 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.

For these clients, conversations should focus on the need to make tough decisions and the potential flexibility they have with their stated goals. The tone of these conversations should be less about what they may be considering and more about what they must do.

Discuss client priorities and available levers. Delaying retirement as long as possible, as well as increasing savings rates could help resolve their investment shortfall. If not, discuss essential retirement income needs. Again, instead of having a conversation about retirement lifestyle, talk about the clients' base needs or income floor.

Consider the order of the levers. If the Income Lever is not available or palatable, clients will need to spend less now, as well as during part or all of retirement. If it is possible to spend less now, savings will grow for the next three years. More importantly, spending less during retirement life can have a dramatic impact on potential ending wealth. The potential impact on their plan depends on how far they can pull each lever.

Future actions

Follow a detailed client engagement road map to closely monitor the impact of market changes on portfolio value, the ability to reduce or defer spending, the effect of additional income from continued work, and any other material changes to personal situations. You will also need to help manage expectations regarding a future retirement date, since it could take time to build enough wealth to make that date financially feasible.

For a deeper understanding of what it could take to salvage clients' retirement plans, it may 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. In this case, the focus will be on either a longer savings horizon due to delaying retirement, or determining the necessary income floor for the investor if a delayed retirement is not possible. 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 create an alternative 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 relative probabilities of different outcomes. 80% of the simulated

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.

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.
- Financial Professionals and investors are in the best position to determine the suitability and fitness of any investment strategies, asset allocations or securities purchases or sales decisions following the use of the Retirement Analyzer. Russell Investments does not create, endorse or provide investment advice.
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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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