## Financial Independence Planner Methodology

## Limitations of the financial independence planner

The financial independence planner ("FI Planner") is not intended to project or predict the present or future value of an actual asset allocation or actual investments. Also, the planner should not be used as the primary basis for any investment, savings, or tax-planning decisions. The planner estimates an effective tax rate based on your total income, account contributions and take-home pay. The Financial Independence Number presented in Chapter 2 is generated through Monte Carlo simulations. These simulations are based on analysis of historical market data. The analysis considers the probability of returns that certain asset mixes might experience under different market conditions. Stocks are represented by the Dow Jones Total Market Index from March 1987 to latest calendar year. From 1926 to February 1987, stocks are represented by the Standard \& Poor's $500^{\circledR}$ Index (S\&P 500® Index). The S\&P $500^{\circledR}$ Index is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance. Bonds are represented by the Barclays U.S. Aggregate Bond Index from January 1976 to the latest calendar year. The Barclays U.S. Aggregate Bond Index is a market value-weighted index of investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities, with maturities of one year or more. From 1926 to December 1975, bonds are represented by the U.S. Intermediate Government Bond Index, which is an unmanaged index that includes the reinvestment of interest income. Short-term instruments are represented by U.S. Treasury bills, which are backed by the full faith and credit of the U.S. government. Monthly returns assume the reinvestment of interest and dividends. It is not possible to invest directly in an index. All indices include reinvestment of dividends and interest income. All calculations are purely hypothetical and will not affect your actual accounts. Remember, past performance is no guarantee of future results. Performance returns for actual investments will generally be reduced by expenses, which may be different from those used in these hypothetical illustrations. Returns also will generally be reduced by taxes.

Data entered in the FI Planner will not be shared with other Fidelity tools and will not update or override any information previously provided to Fidelity. If your financial situation has changed, you should update your information accordingly.

IMPORTANT: The projections or other information generated by the FI Planner regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results may vary with each use, and over time.

## Landing Zone Quiz

The landing zone quiz asks a series of 5 questions to provide a list of priorities to consider. This list is ordered by Fidelity's proprietary hierarchy methodology, which is listed below in priority order:

- Receiving full401(k)/403(b) match from the employer, if eligible
- Saving at least 3 months of essential expenses for an emergency fund
- Paying down high interest debt with greater or equal to 6\% annual interest rate
- Maxing out contributions to the HSA, if eligible
- Maxing out contributions to the 401(k)/403(b), if eligible
- Maxing out contributions to the IRA
- Saving in other eligible accounts, such as a brokerage investment account

Based on your inputs, the quiz provides the top 5 eligible steps from the above hierarchy as a personal to- do list. The quiz is meant to provide a preliminary view of your financial priorities and could potentially differ from the full result that have additional inputs incorporated in the full FI Planner.

## Chapter 1 - Savings Rate Calculation

The savings rate calculation is intended to provide an estimated percentage of your current savings rate to your total income. The FI planner assumes all contributions customers indicate they are currently making to their accounts are for savings, and that money is not used for essential or discretionary expenses. The calculation uses inputs such as current salary, other income, account contributions, takehome pay, and pay frequency to estimate an effective tax rate. First, the calculator estimates your taxes by deducting from your take-home pay and all pre-tax deferrals you might have (traditional 401(k), traditional IRA and HSA). It then divides the remaining amount with your salary. This effective tax rate is then applied throughout the calculation to gross up any after-tax contributions and/or payments made to debt, so that the calculation can correctly factor in taxes when allocating your cash flow. The savings rate calculation then collects additional inputs to identify the current accounts you have, and to determine if you are eligible for a $401(\mathrm{k}) / 403(\mathrm{~b})$ and a Health Savings Account. The FI planner also asks you to provide your employer match information for your 401(k)/403(b) if you are eligible. A current limitation is the planner only takes a single-tiered match and does not account for multi-tiered match structure or non-elective contributions. Your employer match information will be used in a later chapter to allocate your cash flow. Based on your recurring contributions and frequency of contributions to all your accounts, the savings rate calculation estimates your total savings rate as the ratio of the total amount of savings in pre-tax terms to the total pre-tax income (salary and other income).

## Chapter 2 - Financial Independence (FI) Number

The FI number is intended to provide a projected age at which the desired level of spending may be achieved with $90 \%$ confidence throughout the retirement time horizon (age 96). The FI number calculation takes your current age, current savings and planned contributions, and your desired retirement expenses expressed in today's dollars (net of any retirement income) as inputs. Your monthly expenses are estimated as the difference between your income and your current savings indicated in

Chapter 1. Any dollars not saved are assumed to be dedicated towards essential and discretionary expenses. Fidelity estimates that the average person will spend $15 \%$ less per month in retirement. However, if you plan to move somewhere more expensive or travel a lot, you may want to estimate $15 \%$ to $30 \%$ more. For more detail, visit Fidelity's viewpoint. The future expenses indicated in the tool are used as inputs for the FI number and years to FI calculation. The calculated FI number then tests every year whether the estimated combined savings and contribution growth is sufficient to cover the desired expenses. Assets and contributions are grown using straight line growth rate calculations from a reference table derived with Monte Carlo simulations; the FI Planner itself is not running any simulations. Instead, the returns used to project any given year have been derived by determining the rate of return over the planning horizon with $90 \%$ confidence out of 250 Monte Carlo simulations. Fidelity uses the corresponding figure based on your planning horizon so as to err on the side of a more conservative estimate of future market performance. The simulations used to generate returns are based on a historical performance analysis of asset class returns, including a range of potential returns for each asset class, volatility, and correlation. Asset classes are represented by benchmark return data from Morningstar, Inc., not actual investments. ${ }^{1}$

- Stocks (Domestic and Foreign) are represented by the S\&P $500^{\circledR}$ Index from the year 1926 through 1986 and the Dow Jones U.S. Total Market IndexSM from 1987 through the last calendar year. ${ }^{2}$
- Bonds are represented by U.S. intermediate-term bonds from 1926 through 1975 and the Bloomberg Barclays U.S. Aggregate Bond Index from 1976 through the last calendar year. ${ }^{3}$
- Short-Term investments are represented by 4-week U.S. Treasury bill rates from 1926 through the last calendar year.
${ }^{1}$ Morningstar, Inc., is an independent provider of financial information. Morningstar does not endorse any broker-dealer, financial planner, insurance company, or mutual fund company.
${ }^{2}$ S\&P $500^{\circledR}$ Index is an unmanaged market capitalization-weighted index of common stocks. S\&P $500^{\circledR}$ is a registered service mark of Standard \& Poor's Financial Services LLC. Dow Jones U.S. Total Market IndexSM is an unmanaged market capitalization-weighted index of over 5,000 U.S. equity securities which contains all actively traded common stocks with readily available price data.
${ }^{3}$ Bloomberg Barclays U.S. Aggregate Bond Index is an unmanaged market capitalization-weighted index of U.S. dollar-denominated investment-grade fixed-rate debt issues, including government, corporate, asset-backed and mortgage-backed securities with maturities of at least one year.

A sustainable withdrawal rate of $3 \%$ is used to determine if the projected balance can meet your planned expenses. This rate is sustainable for withdrawal horizons up to 55 years in retirement with various investment mixes. This amount is also determined via Monte Carlo simulations to be sustainable with $90 \%$ confidence out of 250 simulations. A $90 \%$ confidence level represents underperforming market conditions, in which 9 out of 10 market scenarios the hypothetical portfolio performed at least as well as historical market averages, while 1 out of 10 times the hypothetical portfolio failed to perform as well as historical market averages. The FI number is the projected balance at $90 \%$ confidence level that is enough to cover your estimated expenses through age 96 , given the $3 \%$ sustainable withdrawal rate. Balances at that age are reported in today's dollars. The assumption of a hypothetical investment mix of $70 \%$ stocks, $25 \%$ bonds and $5 \%$ short term investments is used throughout the experience and rebalanced monthly to this stated allocation. The investment mix is for educational purpose only and
does not represent actual investment performance. If you have a different investment mix, your actual results may differ. The calculator assumes you will cover estimated expenses with your savings only. Social Security or guaranteed income sources are not included in the calculation. Non-qualified distributions may be subject to taxes and penalty.

## Chapter 3 - Debt

The Debt chapter is intended to estimate the total amount of debt you have with an annual interest rate greater than or equal to $6 \%$. The FI Planner collects balance, interest rate, minimum monthly payment, and extra monthly payments (if any) for each type of debt you indicate you have. The planner then totals debt balances that are greater or equal to $6 \%$ and categorizes that debt as high-interest. Debt lower than $6 \%$ is considered low-interest. For a detailed explanation, please refer to this Fidelity viewpoint.

## Chapter 4 - Emergency Savings

The Emergency Savings calculation is intended to estimate a monthly amount to save for an emergency fund. This amount is calculated by multiplying your estimated monthly expenses by 3 to ensure that you have at least 3 months of expenses covered for emergency purposes. After providing your personal emergency savings target and the amount saved so far, the calculation then estimates the monthly amount needed to reach your savings target in 12 months.

## Chapter 5 - Your Plan

Your plan is intended to provide a cash flow allocation based on the path of your choosing. Long- term growth is the default path, but customers can also select the option of debt paydown or flexible path. The hierarchy for each path is outlined below. The below accounts \& priorities will be excluded from a customer's plan if they are not eligible for that account type or are already contributing to the annual IRS limit.

The long-term growth path prioritizes your long-term savings, and has the following order of priorities:

- Receiving full 401(k)/403(b) match from your employer
- Saving at least 3 months of essential expenses for an emergency fund
- Paying down high interest debt with greater or equal to $6 \%$ annual interest rate
- Maxing out contributions to the HSA
- Maxing out contributions to the 401(k)/403(b)
- Maxing out contributions to the IRA
- Saving in other eligible accounts, such as a brokerage investment account

The debt paydown path prioritizes your debt paydown, and has the following order of priorities:

- Receiving full 401(k)/403(b) match from your employer
- Building an emergency savings
- Paying down high interest debt with greater or equal to $3 \%$ annual interest rate
- Maxing out contributions to the HSA
- Maxing out contributions to the 401(k)/403(b)
- Maxing out contributions to the IRA
- Saving in other eligible accounts, such as a brokerage investment account

The flexible path priorities your savings to brokerage accounts, and has the following order of priorities:

- Receiving full 401(k)/403(b) match from your employer
- Building an emergency savings
- Paying down high interest debt with greater or equal to $6 \%$ annual interest rate
- Saving in brokerage accounts (50\% of remaining cash flow)
- Maxing out contributions to the HSA
- Maxing out contributions to the 401(k)/403(b)
- Maxing out contributions to the IRA
- Continuing to save in other eligible accounts, such as a brokerage investment account

The FI Planner allocates your total available dollars in pre-tax terms (contributions made to traditional 401(k)/403(b), traditional IRA and HSA), as well as total available dollars in after-tax terms (contributions made to Roth 401(k)/403(b), Roth IRA, brokerage accounts, and any extra payments made towards debt) according to your chosen path. The suggested contributions are presented in your indicated paycheck frequency or for the whole year. The list of priorities displayed ends with allocating your last available saving dollar.

Suggested contributions to 401(k)s, HSA, and IRAs are constrained by the applicable IRS limits. You are encouraged to review information available from the Internal Revenue Service (IRS) for taxpayers, which can be found on the IRS website at IRS.gov. You can also find IRS Publication 969, Health Savings Accounts and Other Tax-Favored Health Plans, and IRS Publication 502, online, or you can call the IRS to request a copy of each at 800.829.3676.

Your stretch goals are displayed after allocating your last available dollar based on your current savings behavior and the selected path above. It is possible to see the same steps in both your plan and stretch goal section if your available saving dollar cannot meet the full suggested amount in your plan.

