

Some Caveats

It's important to note that these estimates are just that—estimates—and that it is extremely difficult to accurately forecast exact returns over the long-term. Therefore, these estimates should be viewed only as a **general guide** to assist you in your long-term, financial-planning needs.

The second thing to keep in mind is that these estimates are meant to provide a general idea of what the **average** annual return may be over the next 20 years. The actual return can and probably will be significantly different from this average in any given year. For example, our estimated return for large-cap stocks over the next 20 years is 8.6 percent annually, on average. However, in any year the actual return may be, for example, up 25 percent or down 25 percent! Also, stocks come with more risk to principal invested than other asset classes. And certain stock types, such as small cap and international, carry additional risks. As an investor, you need to be aware of this uncertainty when developing your financial plans, especially for shorter-term goals.

What Should You Do?

Thanks to the power of compound returns, what you do or don't do today can have big implications on your ability to meet your long-term goals. Therefore, one of the most important things you can do is to resist the temptation to do nothing in hopes that market returns will be higher than anticipated. If they are, that's a great bonus. But it's better to plan for a more realistic scenario.

Here are a couple of things you can do. First, while it's always wise to focus on avoiding unnecessary fees and taxes, it's even more important to do so in a lower-return environment. Second, if you don't have a long-term financial plan, it's a good time to put one together. If you already have one, you should consider revising it based on the market estimates provided in this study. By incorporating reasonable return assumptions into the financial-planning process, you are better able to more effectively plan for reaching your long-term financial goals – the main reason you developed a financial plan in the first place.

The Schwab Center for Investment Research is a division of Charles Schwab & Co., Inc. The Center produces the Schwab Mutual Fund Select List[®] and Schwab Equity Ratings[™] and publishes research on a wide variety of topics. This research can be found online at www.schwab.com/scir.

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International investing may involve greater risk than U.S. investments due to currency fluctuations, unforeseen political and economic events, and legal and regulatory structure in foreign countries. Such circumstances can potentially result in a loss of principal. Small-cap funds also are subject to greater volatility than other asset categories.

Always obtain a prospectus for any fund you are interested in by calling Schwab at 1-800-435-4000. Read the prospectus carefully before investing or sending money. It contains more complete information about charges and expenses.

Schwab Center for Investment Research

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Appendix

The table lists the benchmarks assigned to each asset class. In cases where the benchmark has a short history, it's extended by using a statistically similar longer-lived proxy.

Asset-Class Benchmarks ^a				
Asset Class	Benchmark	Inception Date	Benchmark Extension	Period Used
Large Stocks	S&P 500 Index	1957	Wilson and Jones ^b	1926 – 1956
Mid/Small Stocks	Russell 2000 Index	1979	CRSP 6-8 Deciles	1926 – 1978
International Stocks	MSCI EAFE	1970	n.a. ^c	n.a.
Bonds	Lehman Aggregate Bond Index	1976	Portfolio of Ibbotson Government Bond Indexes with similar current maturity as the Lehman Aggregate ^e	1970 – 1975 ^d
Cash Equivalents	Citigroup U.S. Domestic 3 Month T-Bill Index	1978	Returns from 30 Day T-Bill Index adjusted to exhibit characteristics of Citigroup Domestic 3 Month T-Bill Index ^f	1970 – 1977 ^d
Overall (Domestic) Stocks	Russell 3000 Index	1979	Portfolio of stock indexes with similar market capitalization as the Russell 3000 Index ^g	1926 – 1978
World Stocks	MSCI World	1970	n.a. ^c	n.a.

a. All benchmark returns are from Ibbotson Associates, except for the returns prior to 1957 for large-cap stocks, which are obtained from Wilson and Jones, 2002, "An Analysis of the S&P 500 Index and Cowles's Extensions: Price Indexes and Stock Returns, 1870-1999," *Journal of Business* 75, 505-533. Fundamental data for large-cap stocks (P/E ratio, dividend yield, etc.) from 1925 through 1999 are obtained from Wilson and Jones, and directly from Standard & Poor's website for the years after 1999.

b. Although S&P 500 return data are available, we use returns from Wilson and Jones for the 1926-1956 time period because they provide a return series that represents a more diversified portfolio of large-cap stocks over this time period. This results in a compound annual return over the 1926-2005 time period that's about 1/3 percentage point lower than the average return on the S&P 500.

c. No international benchmark series were available for years prior to 1970.

d. For bonds and cash equivalents, we use returns that begin in 1970, even if we have access to a longer return history. This is because

changes in the market structure and bond pricing in the fixed income markets make data prior to the 1970s not relevant when developing future prospects. These changes include the Federal Reserve changing its operating procedures from targeting interest rates to managing money-supply growth, the change from fixed—to floating—rate regimes, and the abolishment of the gold standard.

e. The composition for the bonds' benchmark extension is 18% Ibbotson 1 Yr Govt Bond Index, 56% Ibbotson IT Govt Bond Index, and 26% Ibbotson LT Govt Bond Index.

f. The returns are adjusted by multiplying the return on the 30 Day T-Bill Index for each month in the 1970-1978 time period by the historical sensitivity, or beta, between the 3 Month T-bill index and the U.S. 30 Day T-Bill Index, estimated over the 1978 to 2004 period.

g. The portfolio consists of 70% CRSP 1 Decile, 12% CRSP 2 Decile, 12% CRSP 3-5 Deciles, and 6% CRSP 6-8 Deciles.

Asset-Class Benchmark Definitions

The S&P 500® Index is a market-capitalization weighted index that consists of 500 widely traded stocks chosen for market size, liquidity and industry group representation.

Russell Indexes are subsets of the Russell 3000® Index, which contains the largest 3,000 companies incorporated in the United States and represents approximately 98% of the investable U.S. equity markets.

Russell 2000® Index is a market-capitalization weighted index composed of the 2,000 smallest companies in the Russell 3000.

CRSP Cap-Based Portfolios data tracks micro, small, mid and large-cap stocks on monthly and quarterly frequencies. CRSP ranks all NYSE companies by market capitalization and divides them into 10 equally populated portfolios. AMEX and NASDAQ stocks are then placed into the deciles determined by the NYSE breakpoints, based on their market capitalization. CRSP portfolios 1-2 represent large-cap stocks, portfolios 3-5 are mid caps, and portfolios 6-8 represent small caps. Portfolio Assignments are available as a CRSPAccess stock module. The stock and indices types must match (monthly).

MSCI® EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the U.S. and Canada. As of April 2002, the MSCI EAFE Index consisted of the following 21 country indices: Australia, Austria, Belgium, Denmark, France, Finland, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

The MSCI World IndexSM is a free float-adjusted market capitalization index that is designed to measure global developed-market equity performance. As of April 2002 the MSCI World Index consisted of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States.

Lehman Brothers Aggregate Bond Index includes fixed-rate debt issues rated investment grade or higher by Moody's Investors Service, Standard & Poor's,® or Fitch Investor's Service, in that order. (It also includes commercial mortgage-backed securities.) Bonds or securities included must be fixed rate, must be dollar denominated and non-convertible, and must be publicly issued. Bonds included span the maturity horizon, although all issues must have at least one year to maturity. All returns are market-value weighted inclusive of accrued interest.

The following is a partial list of the Schwab Center for Investment Research reports. All of the complete reports are accessible at schwab.com/SCIR or order them by calling Schwab at 1-800-435-4000.

Retirement Spending: With Confidence

If the market has you second-guessing your retirement plans, it might be time for a reality check. "Retirement Spending: With Confidence" is that check. Designed to help you establish and achieve your own retirement spending goals, this research should help you set realistic portfolio withdrawal rates that match your time horizon and risk tolerance.

Location, location, location... Tax-efficient portfolio implementation

Did you know that more than two percentage points of your return can be lost to taxes each year, potentially making tax-inefficiency the biggest drag on investment performance? If you have financial assets in both taxable and tax-advantaged accounts, deciding on which account type is best for which assets is an important decision. Our research looks at the main factors influencing tax-efficient asset placement and offers practical steps investors can take to maximize their potential for after-tax wealth.

Harvesting Losses: Making lemonade out of lemons

Paying taxes is hard enough, but you want to make sure that you're not paying more than you have to. By combining tax-loss harvesting with portfolio rebalancing, you may be able to develop a more tax-efficient strategy going forward.

Buying New-Issue Bonds

What are the advantages to buying newly issued bonds? Learn more about this and a recent new issue—California Power Bonds—that may be attractive for some of your clients.

How do you spell relief: T-E-N T-H-I-R-T-Y F-I-V-E—Transferring to a lower-cost variable annuity via a section 1035 tax-free exchange

If you're holding a high-cost variable annuity, it might be time to take advantage of an IRS law that allows you to exchange it tax free for a lower-cost one. Before you do, though, there are important things to consider and you should read the small print in your contract to make sure that the timing is appropriate.

Variable Annuities—Are they right for you?

Variable Annuities aren't the right investment vehicle for everyone. However, if you're in a high tax bracket and have reached your contribution limits in qualified retirement plans, or are interested in some of their other features, they might just be right for you.

Doughnuts to Dollars—Give up and gain

The heavy message in this light-hearted approach to savings is that a little bit of cutting back can go a long way, especially when invested regularly for the long term. The second lesson is that the road to improved wealth might also result in improved health.

Index or actively managed equity funds: Which way to go in a down market?

If you're buying actively managed funds because you think these types of funds will give greater protection in bear markets, you may be wrong. Contrary to public opinion, this research found that actively managed funds didn't always perform better than index funds did in poor markets.

Explaining the after-tax performance of equity mutual funds

There are many benefits to being a tax-aware investor. And while you shouldn't let the tax tail wag the investment dog, you need to know what factors are important to look at when selecting a mutual fund for a taxable account.

Bond mutual funds—what matters when selecting a fund?

Toss out your crystal ball and make more educated decisions about which bond fund might be best for you. Try to diversify across funds with different target maturities and credit quality and look for funds with good past risk-adjusted performance and low expenses.

The costs and benefits of waiting to invest

The Schwab Center for Investment Research found that it's not about timing the market, but time in the market. It may seem tempting to wait for the perfect moment, but the cost of waiting has been shown to be much greater than the potential benefit of being in the market. In other words, the best course generally has been to invest immediately.

Fixed income investing—should you own individual bonds or bond mutual funds?

If you have \$50,000 or more to invest in highly liquid and highly rated bonds, individual bonds generally have been the way to go. If the amount to be invested is less than \$50,000 and you can tolerate the volatility, bond mutual funds might be a better route to take.

How many funds should you own?

There are no absolutes, but after running computer simulations on thousands of portfolios of diversified equity and bond funds, SCIR believes that holding three funds per equity class and one diversified bond fund may eliminate some amount of risk, while retaining the probability of outperforming the market. Index investors would do well by selecting just one broad-based diversified index fund per asset class.

Should you consider risk-adjusted returns?

This research shows you shouldn't rely only on returns to select a fund unless you're ready for the volatility that may lie ahead. By using risk-adjusted return measures, you should get a more complete picture of a fund's overall behavior. This measure evaluates performance relative to the amount of risk—both upside and downside swings—that may accompany a fund's returns.

Fund selection is a matter of style

Investors hear a lot about style, but because both growth and value have led the markets at different times and style has been difficult, at best, to forecast, you might not know which style of funds to purchase. Since one of Schwab's fundamental investment principals is to diversify (across and) within asset classes, SCIR suggests that you mix it up a little to help prevent being blindsided when one or the other emerges as the more popular style.

Do new funds offer better performance?

Only new small-cap growth funds have tended to have higher risk-adjusted returns than older ones. But, because most of the exceptional returns enjoyed by new small growth funds occurred in the first several months of the fund's existence, it's probably wiser to pick funds that fit into your risk profile and total investment strategy. You should ask yourself the same kinds of questions about a new fund that you might ask about any fund.

A prudent approach for when to sell a mutual fund

A 'buy and hold' strategy doesn't mean you should never sell your funds. In fact, when individual funds fail to measure up to market or peer performance, it might be the time to consider getting rid of them. After comparing different funds' performance from 1987-1996, SCIR found that returns improved when a strategy was used that involved selling funds that fell into the bottom quartile's performance in their respective categories.