
Historically Low Interest Rates, Public Private partnerships for Real Estate & Investing In a New Environment

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George Mason University Foundation, Inc.

Foundation Real Estate Holdings 2015

NAME	Assessed Value	Debt O/S
Potomac Heights - Housing VI	38,500,000	18,925,000
Commerce Buildings	7,322,400	5,624,836
University Park Residential Townhouses	8,172,100	1,378,750
University Park Commercial Townhouses	2,195,900	
Mathy House (President's Residence)	1,202,620	
Mathy Lodge	1,163,370	
Kelly House #1	479,890	
Kelly House #2	477,490	
Shirley Gate Park (11333 Crescent Drive in Shirley Gate Park)	17,000	
Allman Land (in Alexandria between railroad tracks and I-95)	24,400	
Broadlands Land (Loudoun County)	14,380,000	
3434 Washington Blvd, Arlington - Metropolitan Bldg.	101,629,500	62,752,712
Mason Administrative Building – Merten Hall	38,000,000	30,788,403
Prince William Housing LLC	19,500,000	15,605,000
Prince William Life Sciences Lab LLC	39,300,000	32,135,000
Total	272,364,670	167,209,701





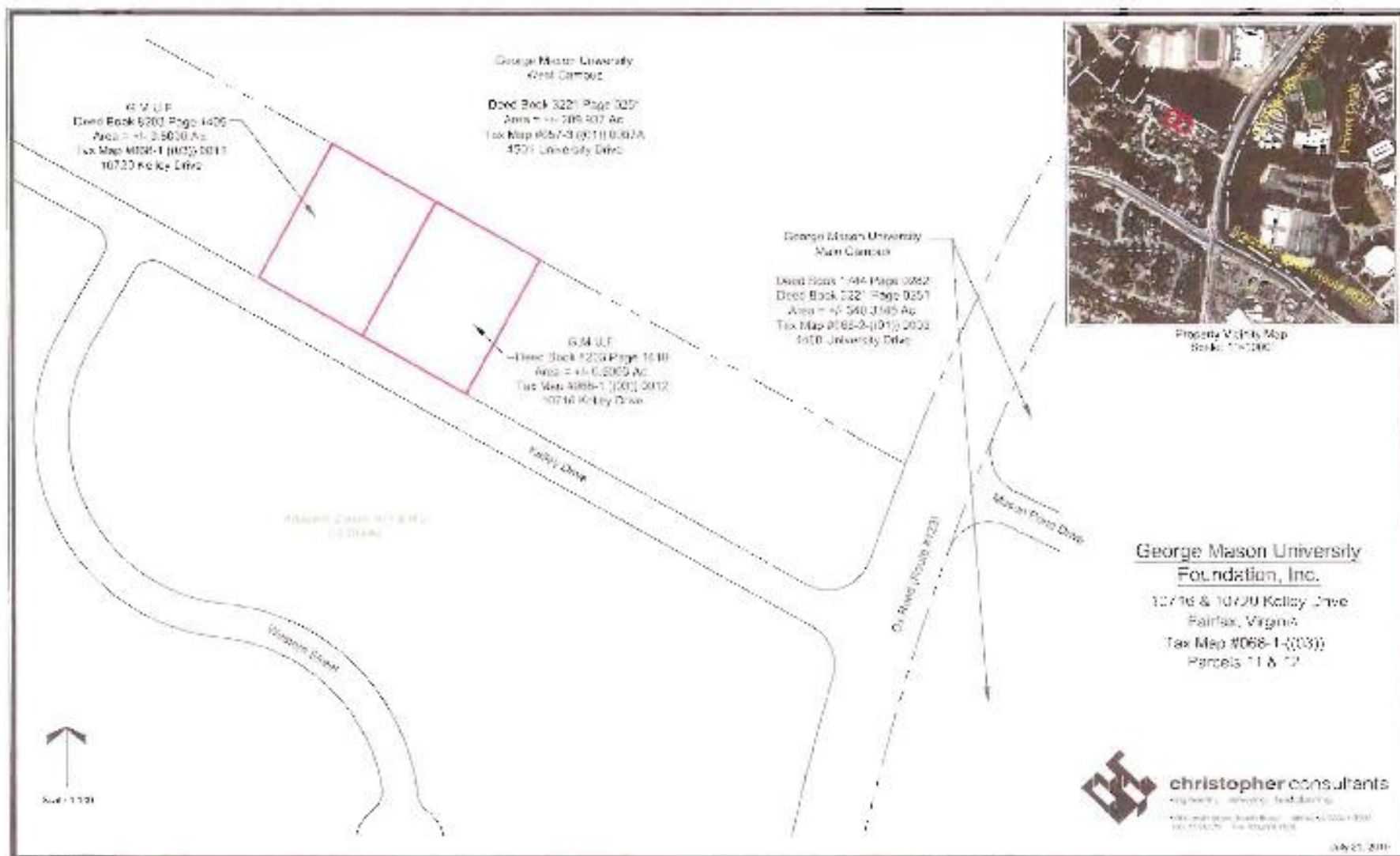














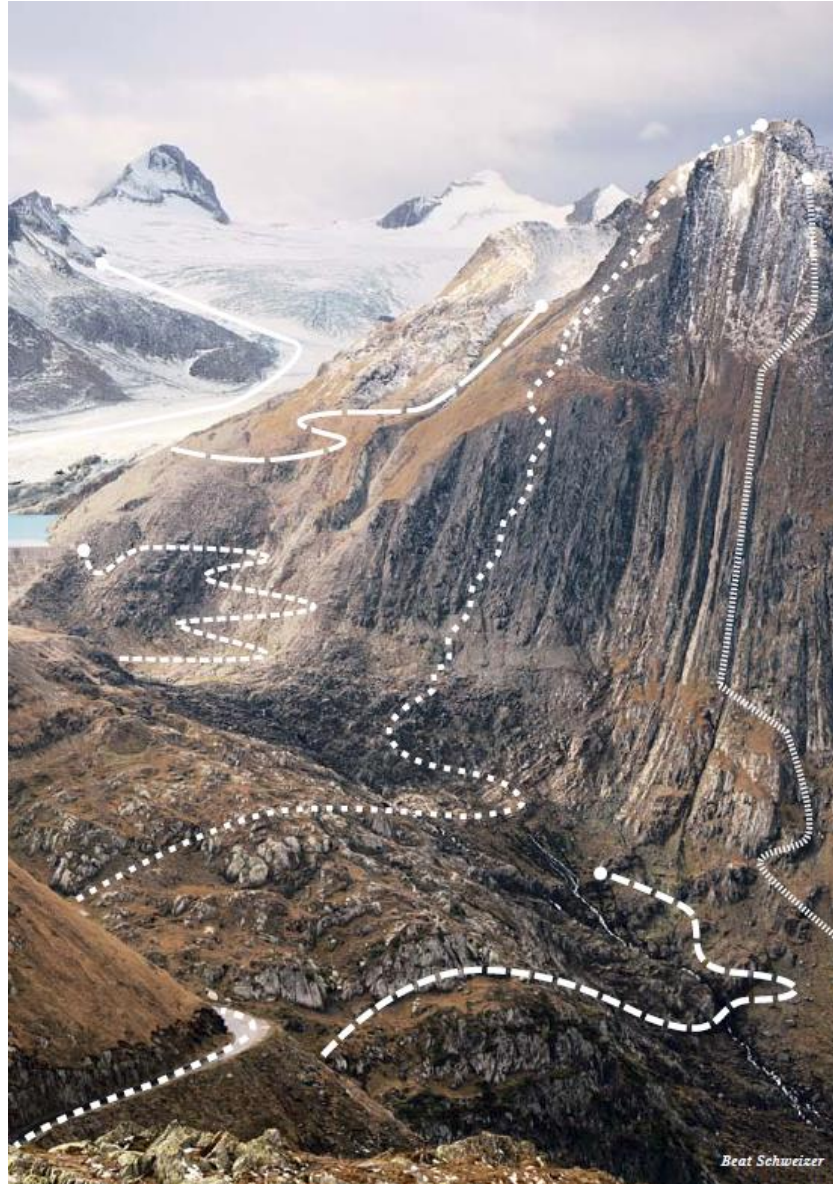






Look before you *leap*

Whether embarking on a journey or investing, preparation is vital; *there are many ways to get to the same place*



Rethinking the Spending Rate

In a Low Return Environment

The risk-free rate is the foundation of any portfolio's return. With the 10-year treasury yield at less than half of where it was in 2005, the ability to generate high single-digit returns may be more uncertain.

2005

Total Return = 8.8%

Equity Risk
Premium
4.5%

Risk Free Return
(10-Year Treasury)
4.3%

2015

Total Return = 6.6%

Equity Risk
Premium
4.5%

Risk Free Return
(10-Year Treasury)
2.1%

Risk Free Return

10-year Treasury
Yields

09/25/2000: 5.83%

09/23/2005: 4.25%

09/24/2010: 2.61%

09/24/2015: 2.10%

A World of Low Returns?

UBS Financial Services – Projected Future Risk and Returns

	Current CMAs		Previous CMAs		Comparison - Current vs. Previous	
	Ann. total return	Ann. risk	Ann. total return	Ann. risk	Change in return estimate	Change in risk estimate
U.S. cash	2.5%	0.5%	4.0%	0.5%	-1.5%	0.0%
U.S. government fixed income	2.2%	4.3%	4.6%	4.8%	-2.4%	-0.5%
U.S. municipal fixed income	2.9%	4.7%	3.9%	5.4%	-1.0%	-0.7%
U.S. corporate investment grade fixed income	3.5%	5.9%	4.6%	4.8%	-1.1%	1.1%
U.S. corporate high yield fixed income	5.6%	11.7%	6.6%	10.0%	-1.0%	1.7%
International developed markets fixed income	4.0%	9.0%	6.1%	8.8%	-2.1%	0.2%
Emerging markets fixed income	4.9%	9.1%	8.0%	14.5%	-3.1%	-5.4%
U.S. large-cap equity	7.5%	16.8%	9.0%	16.7%	-1.5%	0.1%
U.S. mid-cap equity	8.4%	19.6%	10.4%	18.4%	-2.0%	1.2%
U.S. small-cap equity	8.6%	21.8%	10.6%	21.4%	-2.0%	0.4%
International developed markets equity	8.5%	19.7%	10.4%	17.7%	-1.9%	2.0%
Emerging markets equity	10.0%	25.5%	12.6%	26.6%	-2.6%	-1.1%
Commodities	6.4%	18.9%	7.6%	17.1%	-1.2%	1.8%
Hedge funds	6.2%	6.7%	8.7%	8.5%	-2.5%	-1.8%
Private equity	11.8%	24.4%	11.4%	17.7%	0.4%	6.7%
Private real estate	8.5%	11.8%	8.7%	11.4%	-0.2%	0.4%

Source: UBS Wealth Management Americas, current as of 13 October 2014. See disclosure UBS Capital Market Assumptions and Strategic Asset Allocation Models for information regarding how the models are developed. CMAs were updated in January 2013.

Market downturns and recoveries

1926 – 2014

Downturn	% Loss		Recovery
34 months	-83.4%	Sep 1929 – Jun 1932	Jul 1932 – Jan 1945 151 months
6 months	-21.8%	Jun 1946 – Nov 1946	Dec 1946 – Oct 1949 35 months
7 months	-10.2%	Aug 1956 – Feb 1957	Mar 1957 – Jul 1957 5 months
5 months	-15.0%	Aug 1957 – Dec 1957	Jan 1958 – Jul 1958 7 months
6 months	-22.3%	Jan 1962 – Jun 1962	Jul 1962 – Apr 1963 10 months
8 months	-15.6%	Feb 1966 – Sep 1966	Oct 1966 – Mar 1967 6 months
19 months	-29.3%	Dec 1968 – Jun 1970	Jul 1970 – Mar 1971 9 months
21 months	-42.6%	Jan 1973 – Sep 1974	Oct 1974 – Jun 1976 21 months
14 months	-14.3%	Jan 1977 – Feb 1978	Mar 1978 – Jul 1978 5 months
20 months	-16.5%	Dec 1980 – Jul 1982	Aug 1982 – Oct 1982 3 months
3 months	-29.6%	Sep 1987 – Nov 1987	Dec 1987 – May 1989 18 months
5 months	-14.7%	Jun 1990 – Oct 1990	Nov 1990 – Feb 1991 4 months
2 months	-15.4%	Jul 1998 – Aug 1998	Sep 1998 – Nov 1998 3 months
25 months	-44.7%	Sep 2000 – Sep 2002	Oct 2002 – Oct 2006 49 months
16 months	-50.9%	Nov 2007 – Feb 2009	Mar 2009 – Mar 2012 37 months

It is evident that stocks are prone to sudden declines in value. These declines seem to happen at random, and there are many different reasons offered for stock market crashes and bear markets. Sometimes stocks recover their value quickly, while other times the decline lasts for a while.

The most severe downturn marked the start of the Great Depression, where stocks lost over 80% of their value. In this case, the recovery period was over 12 years. More recently, stocks lost 44.7% of their value during the early 2000 bear market. This recovery period, lasting four years, was the second longest in history. Stocks lost 50.9% during the 2007 – 2009 bear market; this downturn lasted for 16 months, and the stock market recovered after 37 months, in March 2012.

The recovery period may be painfully long. Often, the decline is preceded by a period of high returns, which lulls investors into a false sense of security. Because no one can predict market declines with certainty, a diversified portfolio may be the best solution for a long-term investor who is concerned about both return and risk.

Large stocks are represented by the Ibbotson® Large Company Stock Index. Downturns in this example are defined by a time period when the stock market value declined by 10% or more from its peak, while the recovery period indicates the number of months from the trough of the downturn to the market's previous peak. An investment cannot be made directly in an index. The data assumes reinvestment of all income and does not account for taxes or transaction costs.

Past performance is no guarantee of future results. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. Downturns are defined by a time period when the stock market value declined by 10% or more from its peak. ©2015 Morningstar. All Rights Reserved.



5 Year history of the 10-Year Treasury Note



10 Year History of the 10 Year Treasury



10 Year History of the 30 year Treasury



10 Year History of the DOW Jones Industrial Average



10 Year history of Gold Prices

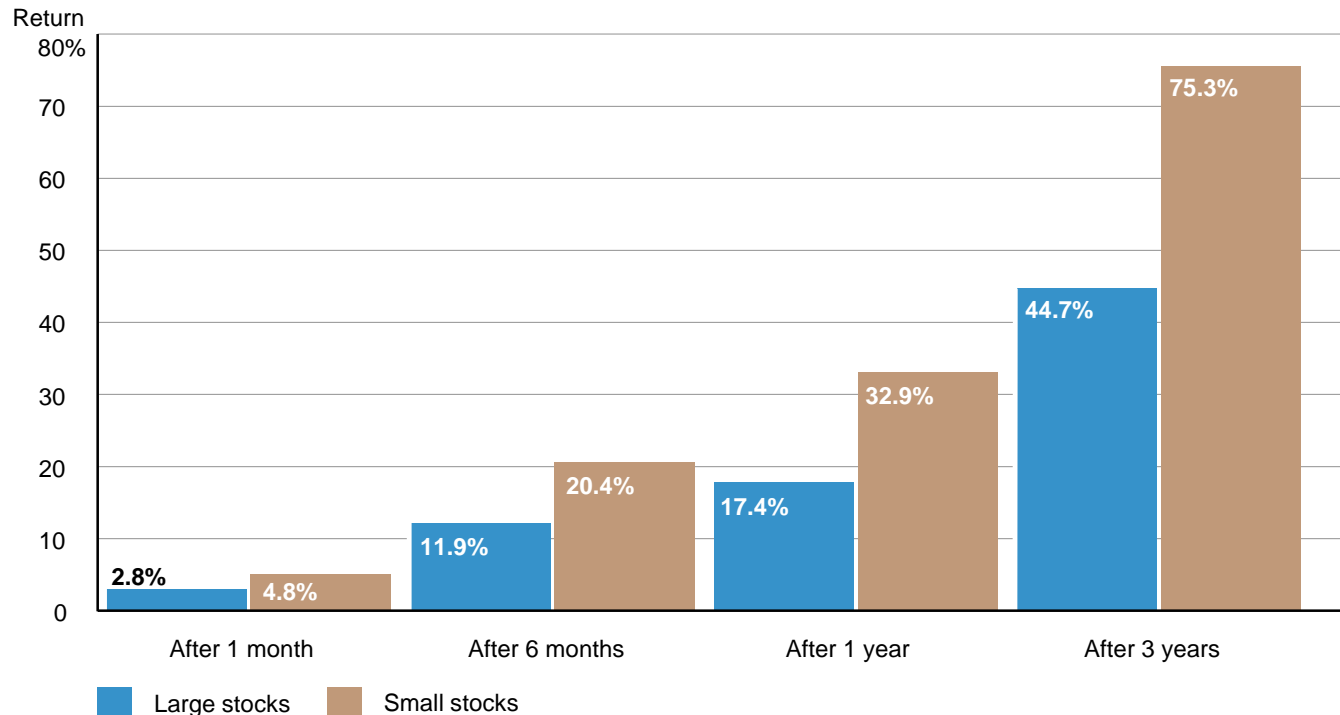


10 Year History of Crude Oil Prices per Barrel



Stock performance after recessions

1953 – 2014



Recession data is from the National Bureau of Economic Research (NBER). The average cumulative returns are calculated from the end of each of the 10 recessions in U.S. history since 1953. The National Bureau of Economic Research (NBER) does not define a recession in terms of two consecutive quarters of decline in real GDP. Rather, a recession is a recurring period of decline in total output, income, employment, and trade usually lasting from six months to a year and marked by widespread contractions in many sectors of the economy. The data assumes reinvestment of income, and does not account for taxes or transaction costs.

Small stocks haven't outperformed large stocks after every recession, yet, on average their potential to lead the way out of recessions is significant. Diversifying into small stocks may benefit investor portfolios, especially when the market is coming out of a recession.

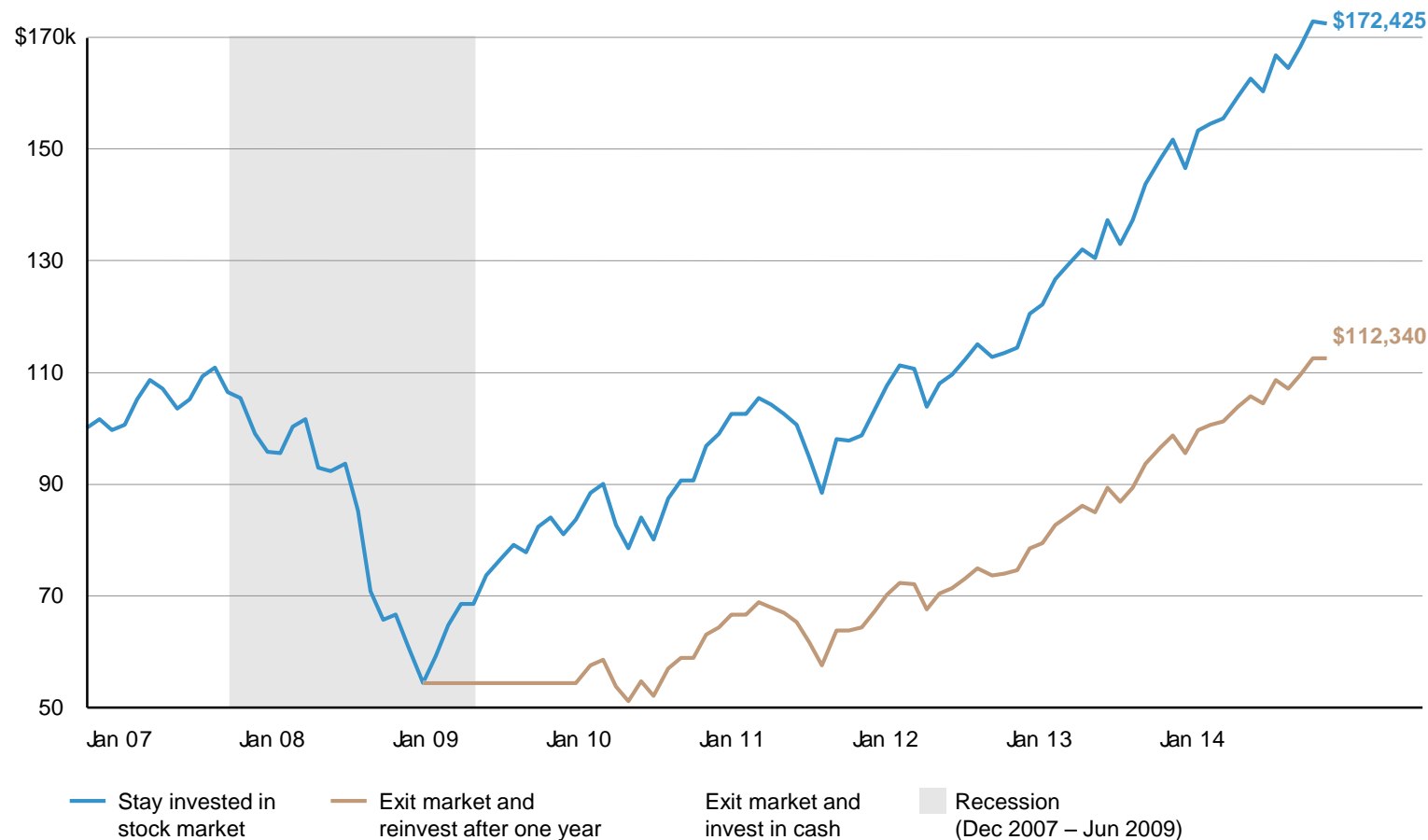
Stocks are not guaranteed and have been more volatile than the other asset classes. Furthermore, small stocks are more volatile than large stocks and are subject to significant price fluctuations and business risks, and are thinly traded.

Large stocks are represented by the Ibbotson® Large Company Stock Index. Small stocks are represented by the Ibbotson® Small Company Stock Index. An investment cannot be made directly in an index.

Past performance is no guarantee of future results. Cumulative returns of large and small stocks after recessions 1953 – 2014. This is for illustrative purposes only and not indicative of any investment. ©2015 Morningstar. All Rights Reserved.

The importance of staying invested

Ending wealth values after a market decline



The image illustrates the value of a \$100,000 investment in the stock market during the period 2007 – 2014, which included the global financial crisis and the recovery that followed.

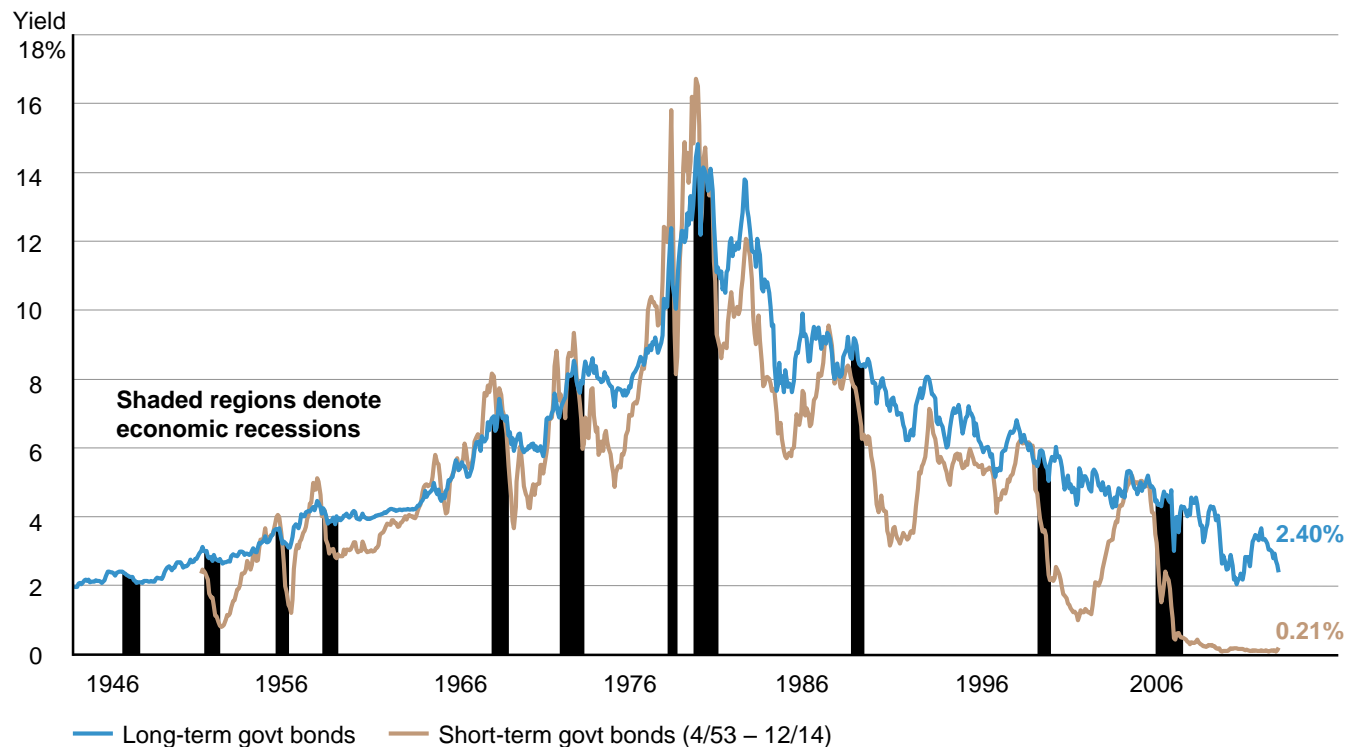
Returns and principal invested in stocks are not guaranteed. Stocks have been more volatile than bonds or cash. Holding a portfolio of securities for the long term does not ensure a profitable outcome and investing in securities always involves risk of loss.

Recession data is from the National Bureau of Economic Research (NBER). The market is represented by the Ibbotson® Large Company Stock Index. Cash is represented by the 30-day U.S. Treasury bill. An investment cannot be made directly in an index. The data assumes reinvestment of income and does not account for taxes or transaction costs.

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Bond yields during recessions

1946 – 2014



Bond yields are driven by factors such as the supply and demand for loans, monetary policy, and inflation expectations.

Bond yields, especially long-term bond yields, are sensitive to inflation expectations because inflation can erode the value of a bond over time. If inflation expectations are high, lenders require a higher interest rate to lend funds for more than the short term. Therefore, if inflation expectations remain high, long-term interest rates may take longer to drop, even during periods when the Fed is cutting rates. In the long run, interest rates could even rise instead of fall.

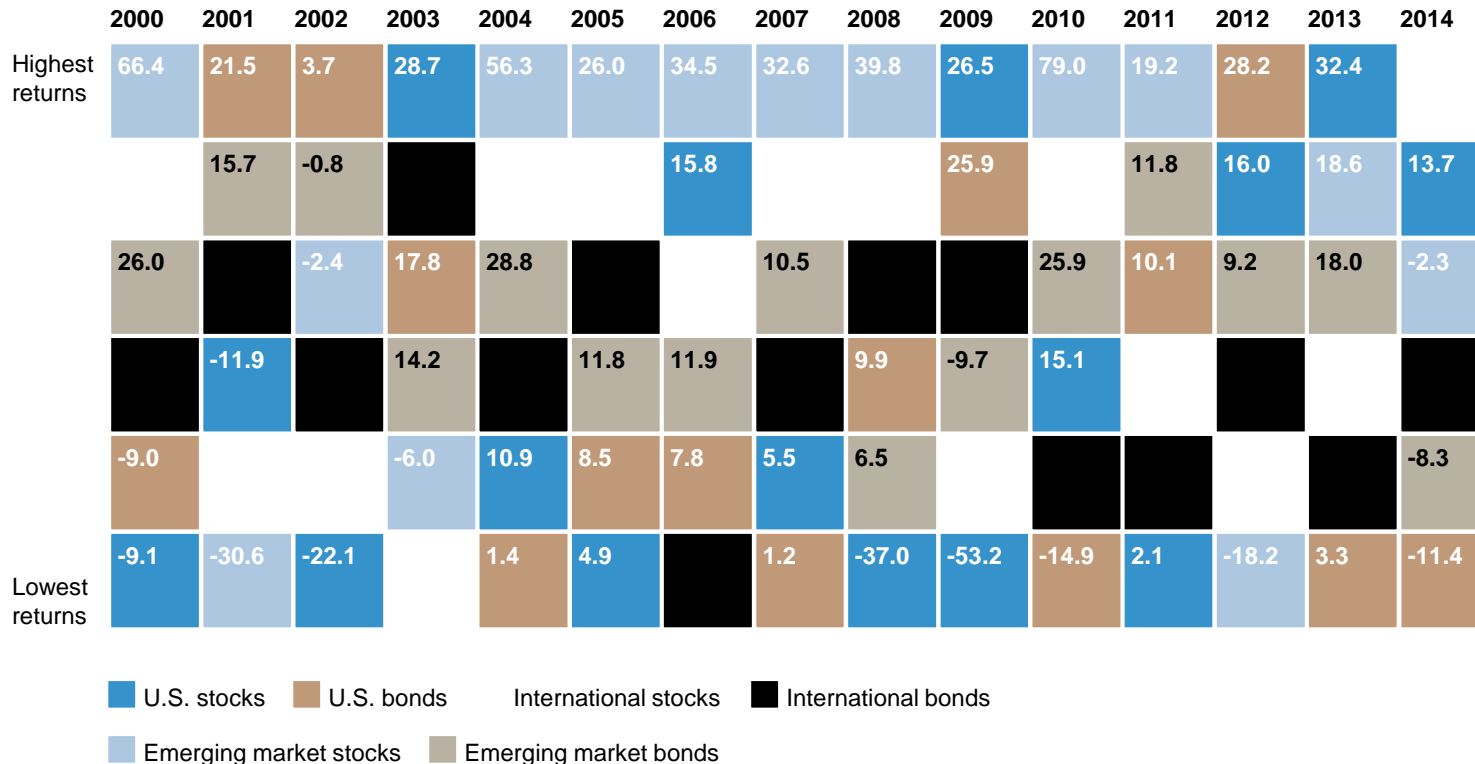
Bond yields and prices move in opposite directions. When yields for new bonds fall, existing bonds with higher yields become more valuable and can demand a higher price. Conversely, when yields for new bonds rise, the prices of existing bonds fall in order to compete with the increased demand for new bonds.

Long-term bond yields are represented by the 20-year U.S. government bond yield and short-term bond yields by the one-year U.S. government bond yield. An investment cannot be made directly in an index. Recession data is from the National Bureau of Economic Research (NBER). The National Bureau of Economic Research (NBER) does not define a recession in terms of two consecutive quarters of decline in real GDP. Rather, a recession is a recurring period of decline in total output, income, employment, and trade usually lasting from six months to a year and marked by widespread contractions in many sectors of the economy.

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Global winners and losers

2000 – 2014



This image represents the past 15 years of performance for these six asset classes.

U.S. stocks are represented by the Ibbotson® Large Company Stock Index. U.S. bonds are represented by the 20-year U.S. government bond. International stocks are represented by the Morgan Stanley Capital International Europe, Australasia, and Far East (EAFE®) Index, and international bonds by the Citigroup Non-U.S. 5+ Year World Government Bond Index. Emerging-market stocks are represented by the Morgan Stanley Capital International Emerging Markets Index, and emerging-market bonds by the J.P. Morgan Emerging Markets Bond Index Plus. All values expressed in U.S. dollars. The countries/regions illustrated do not represent investment advice. An investment cannot be made directly in an index.

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Style winners and losers

2005 – 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Highest returns		25.8 LV		-31.7 SV	44.4 LG	31.3 SG	2.2 LV	18.3 SV		14.4 LG
		20.0 SV	12.3 LG				1.6 LG	18.0 LG	41.9 SG	
	8.2 DP		11.1 SG	-36.1 LV	40.3 SV	26.0 SV	-0.7 DP		35.9 DP	10.0 SV
	7.0 LV	15.0 DP	4.8 DP	-38.6 DP		22.2 DP	-1.0 SG	16.2 DP	35.7 SV	
	5.8 SG	10.0 SG	-0.4 LV	-39.9 SG	34.5 DP		-1.8 SV			9.6 DP
	5.1 SV			-41.9 LG	33.0 SG	14.7 LV		14.5 SG	32.5 LG	9.2 LV
Lowest returns	3.4 LG	5.7 LG	-8.1 SV		11.4 LV	12.9 LG		12.9 LV	28.9 LV	2.5 SG

■ Large growth (LG)
 ■ Large value (LV)
 ■ Mid growth (MG)
 ■ Mid value (MV)

■ Small growth (SG)
 ■ Small value (SV)
 ■ Diversified portfolio (DP)

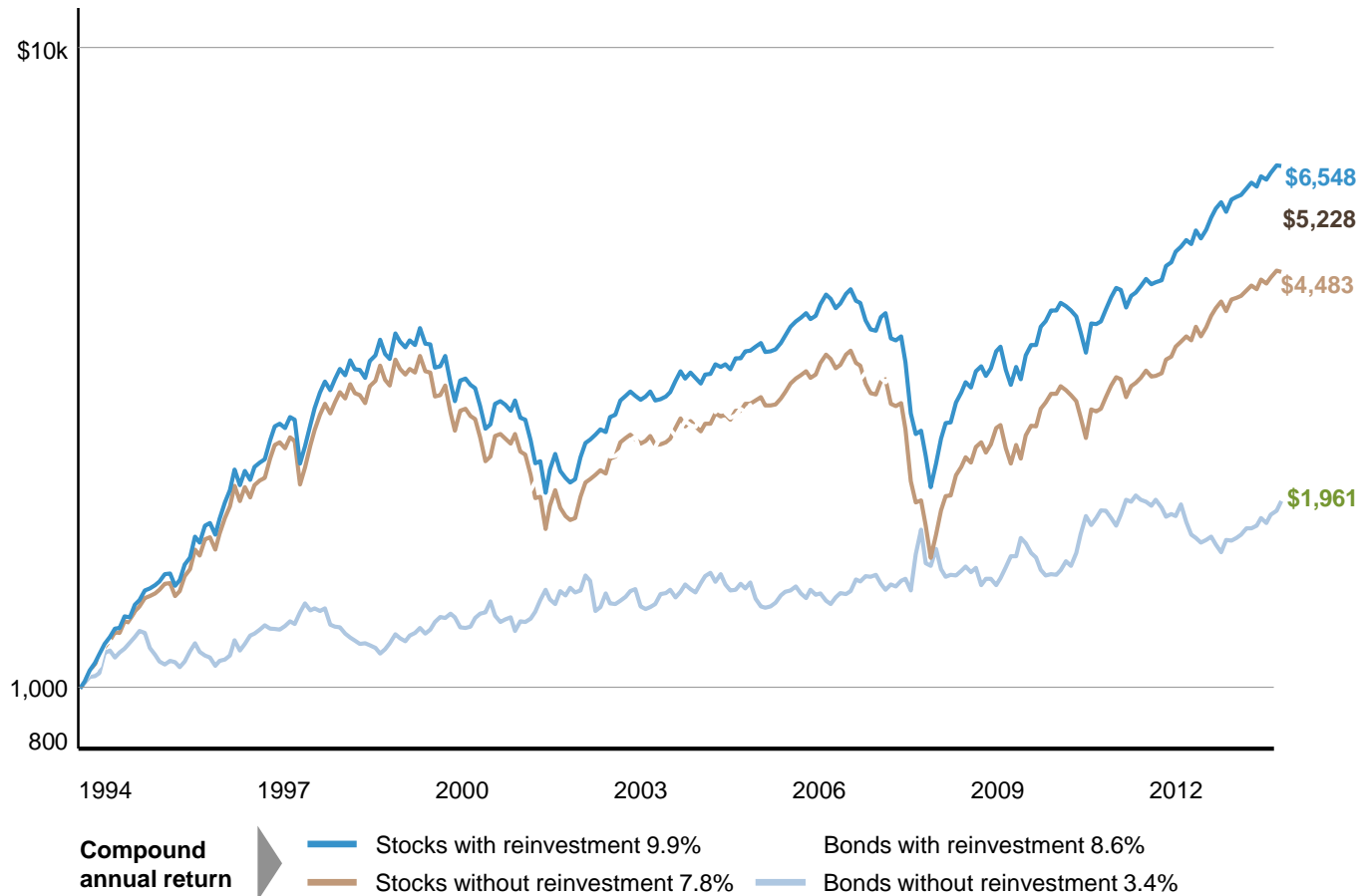
This image illustrates the annual performance of large growth and value, mid growth and value, and small growth and value in relation to one another, as well as an equally weighted diversified portfolio. Over the last 10 years, nearly every style spent at least one year as the best-performing asset class.

Growth and value stocks in this example are represented by the Ibbotson Associates Growth and Value Indexes for 1970 – 1997 and the Morningstar Style Indexes thereafter. Ibbotson Associates Growth and Value Indexes are calculated based on data from CRSP U.S. Stock Database and CRSP U.S. Indices Database, Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission. An investment cannot be made directly in an index. The data assumes reinvestment of income and does not account for transaction costs or taxes.

Past performance is no guarantee of future results. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. The diversified portfolio is equally weighted between the six styles. ©2015 Morningstar. All Rights Reserved.

Power of reinvesting

1995 – 2014



The image compares the difference in hypothetical growth of \$1,000 invested in stocks and bonds with and without reinvestment of dividends or coupon payments.

Reinvesting your income enables you to take advantage of compounding. With compounding, you earn income on the principal in addition to the reinvested dividends and coupon payments.

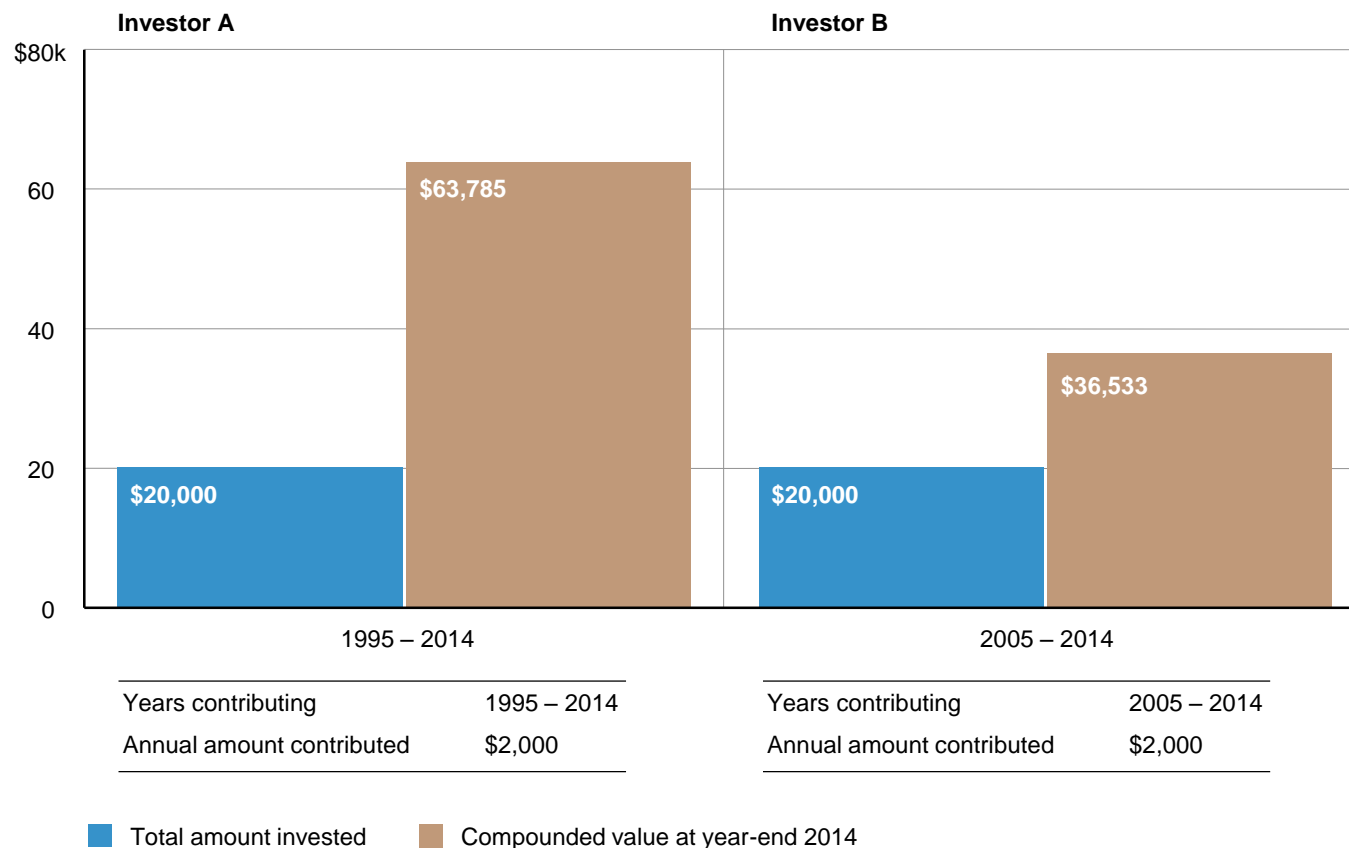
Total return represents capital appreciation, income, and reinvestment of income, and that capital appreciation is the return due only to changes in price. Government bonds are guaranteed by the full faith and credit of the U.S. government as to the timely payment of principal and interest, while stocks are not guaranteed and have been more volatile than bonds.

About the data: Stocks are represented by the Ibbotson® Large Company Stock Index. Bonds are represented by the 20-year U.S. government bond. An investment cannot be made directly in an index.

Past performance is no guarantee of future results. Hypothetical value of \$1,000 invested at the beginning of 1995. Data does not account for taxes or transaction costs. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. ©2015 Morningstar. All Rights Reserved.

Power of compounding

Hypothetical investment in stocks



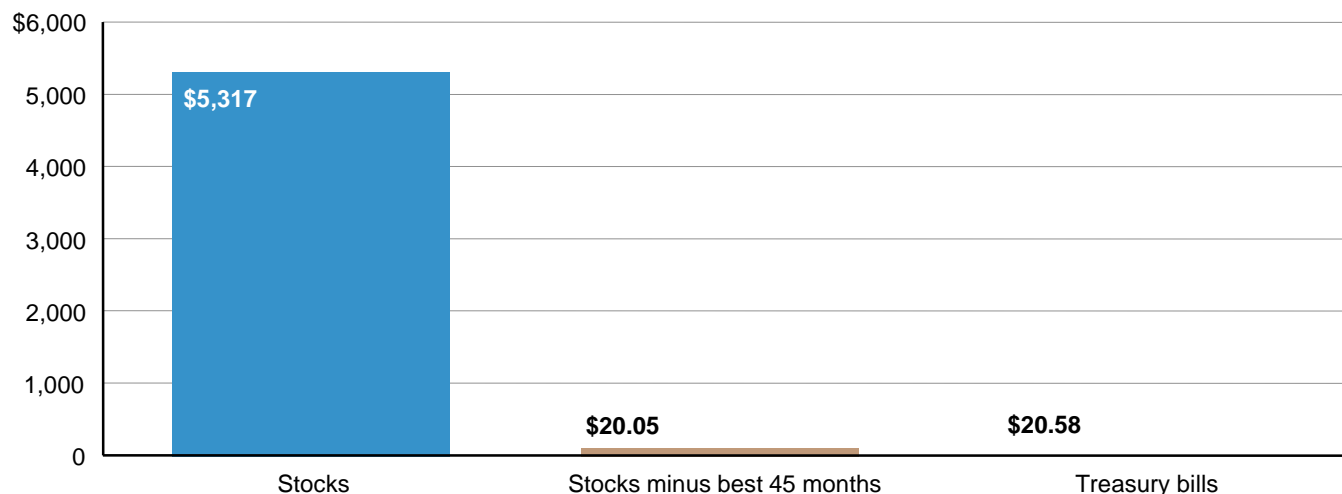
By starting early, and thereby taking advantage of compounding, Investor A accumulated \$27,252 more than Investor B, while investing exactly the same amount.

Returns and principal invested in stocks are not guaranteed, and stocks have been more volatile than other asset classes. The data assumes reinvestment of income and does not account for taxes or transaction costs.

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Dangers of market timing

Hypothetical value of \$1 invested from 1926 – 2014



Investors who attempt to time the market run the risk of missing periods of exceptional returns. This practice may have a negative effect on a sound investment strategy.

This image illustrates the risk of attempting to time the stock market over the past 89 years. A hypothetical \$1 investment in stocks invested at the beginning of 1926 grew to \$5,317 by year-end 2014. However, that same \$1 investment would have only grown to \$20.05 had it missed the best 45 months of stock returns. One dollar invested in Treasury bills over the 89-year period resulted in an ending wealth value of \$20.58. An unsuccessful market timer, missing the 45 best months of stock returns, would have received a return lower than that of Treasury bills.

Stocks are represented by the Ibbotson® Large Company Stock Index. Treasury bills are represented by the 30-day U.S. Treasury bill. The data assumes reinvestment of income and does not account for taxes or transaction costs.

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Dangers of market timing

Hypothetical value of \$1 invested from 1995 – 2014



This image illustrates the risk of attempting to time the stock market over the past 20 years.

A hypothetical \$1 investment in stocks invested at the beginning of 1995 grew to \$6.55 by year-end 2014. However, that same \$1 investment would have only grown to \$1.62 had it missed the 18 best months of stock returns. One dollar invested in Treasury bills over the 20-year period resulted in an ending wealth value of \$1.69. An unsuccessful market timer, missing the 18 best months of stock returns, would have received a return lower than that of Treasury bills.

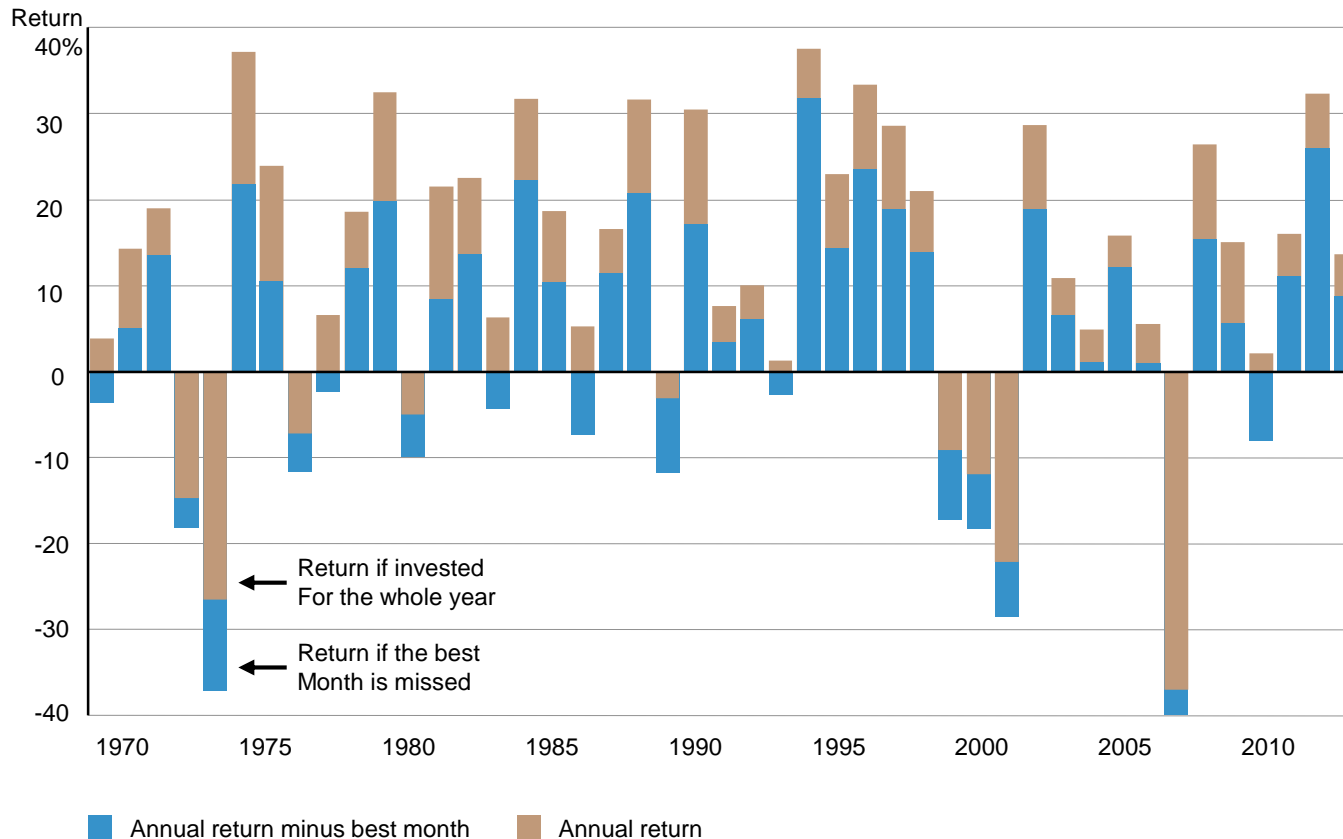
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Market-timing risk

The effects of missing the best month of annual returns 1970 – 2014



Missing the one best month during a year drastically reduced returns. During years when returns were already negative, the effect of missing the best month only exaggerated the loss for the year. In six of the 45 years shown, 1970, 1978, 1984, 1987, 1994, and 2011, otherwise positive returns would have been dragged into negative territory by missing the best month.

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