Markets recover from crises

A major crisis that causes the stock market to drop in value can be unsettling, but does not spell the end for markets or investment strategies. History has shown that markets bounce back, and that staying invested through volatile episodes lets you benefit from a rebound.

Crisis and recovery: How the S&P 500 Index performed during and after historic events

Event	Event reaction dates	Percent of gain/ loss during event	S&P 500 percentage of gain/loss after last reaction date			
			1 month later	1 year later	5 years later	10 years later
Fall of France	5/9/40–6/22/40	-18.2	3.1	5.2	15.9	13.2
Attack on Pearl Harbor	12/6/41–12/10/41	-6.9	4.5	16.0	18.1	17.1
Outbreak of Korean War	6/23/50–7/13/50	-11.1	9.5	42.0	27.6	18.4
Eisenhower heart attack	9/23/55–9/26/55	-6.6	0.1	11.8	8.5	11.6
Cuban Missile Crisis	8/23/62–10/23/62	-9.9	15.5	41.1	15.8	11.0
Kennedy assassination	11/21/63–11/22/63	-2.8	7.0	27.8	12.4	7.0
U.S. attacks Cambodia	4/29/70–5/26/70	-15.0	6.4	49.0	9.3	9.3
Nixon resigns	8/9/74–8/29/74	-13.4	-6.8	30.6	14.6	14.6
1987 stock market crash	10/2/87–10/19/87	-31.5	7.1	27.9	17.0	18.9
Gulf War ultimatum	12/17/90–1/16/91	-2.8	17.2	36.6	17.3	18.0
Gorbachev coup	8/16/91–8/19/91	-2.3	3.2	14.5	15.2	14.3
Collapse of Long-Term Capital Management	8/28/98–9/9/98	-2.0	-2.0	35.8	1.8	3.7
September 11 terrorist attacks	9/10/01–9/21/01	-11.6	11.3	-11.1	8.3	3.9
U.S. invades Iraq	3/18/03–3/31/03	-2.1	8.2	35.1	11.3	8.5
Collapse of Lehman Brothers	9/5/08–11/20/08	-39.1	18.3	48.8	21.5	15.8
U.S. debt downgrade by S&P	8/5/11–10/3/11	-8.0	14.9	35.0	17.0	—
2016 Brexit	6/23/16–6/27/16	-5.3	8.5	23.5	—	—

Historical references do not assume that any prior market behavior will be duplicated. Past performance does not indicate future results.

There are risks associated with mutual fund investing including the possibility that share prices will decline. Since investment return and principal value will fluctuate, shares when redeemed may be worth more or less than their original cost. Performance of Putnam funds will differ.

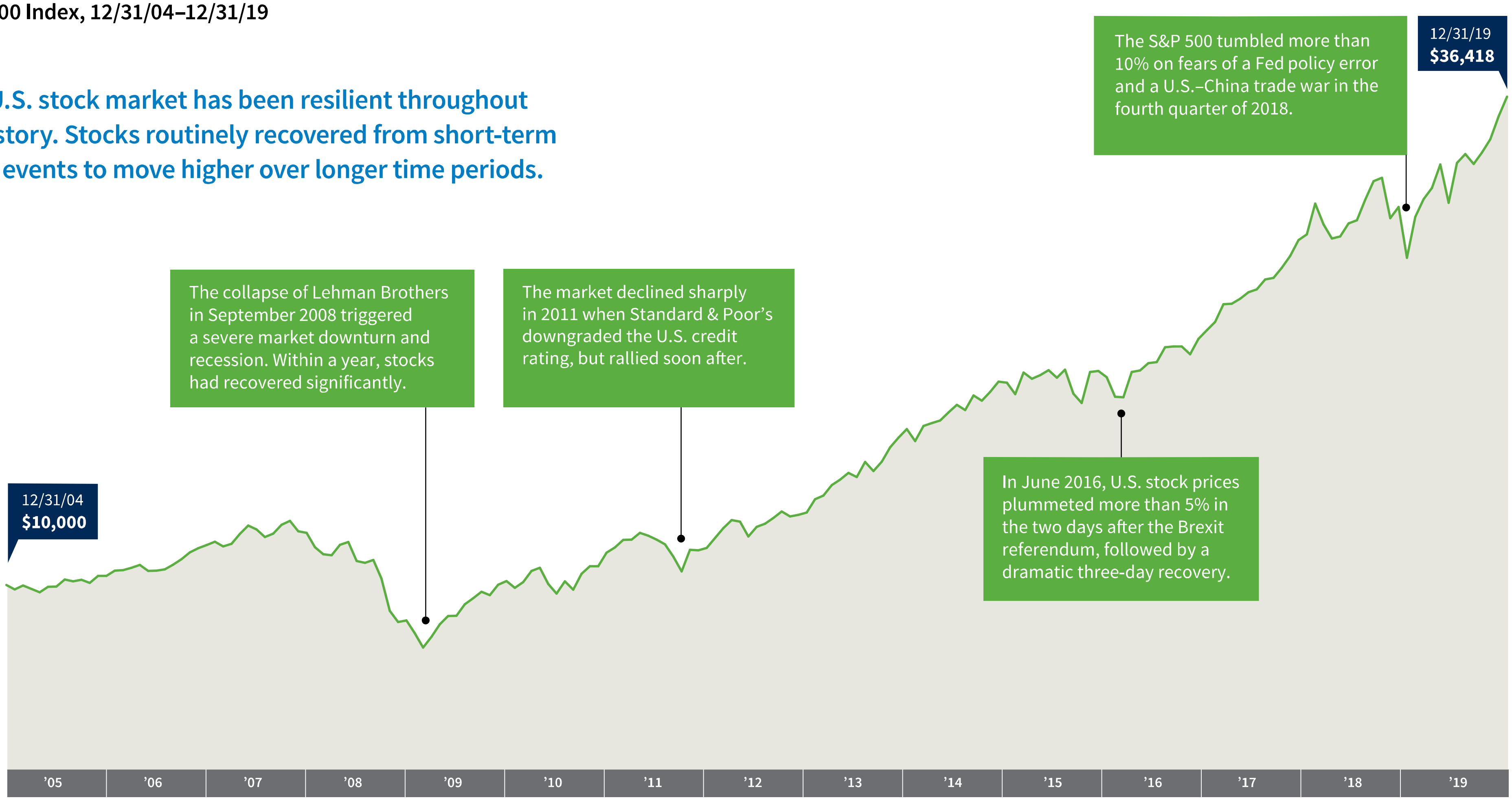
The S&P 500 Index is an unmanaged index of common stock performance. You cannot invest directly in an index. Indexes are unmanaged and used as a broad measure of market performance.

Time, not timing, is the best way to capitalize on stock market gains

By trying to predict the best time to buy and sell, you may miss the market's biggest gains.

S&P 500 Index, 12/31/04–12/31/19

The U.S. stock market has been resilient throughout its history. Stocks routinely recovered from short-term crisis events to move higher over longer time periods.



Data is historical. Past performance is not a guarantee of future results. The S&P 500 Index is an unmanaged index of common stock performance.

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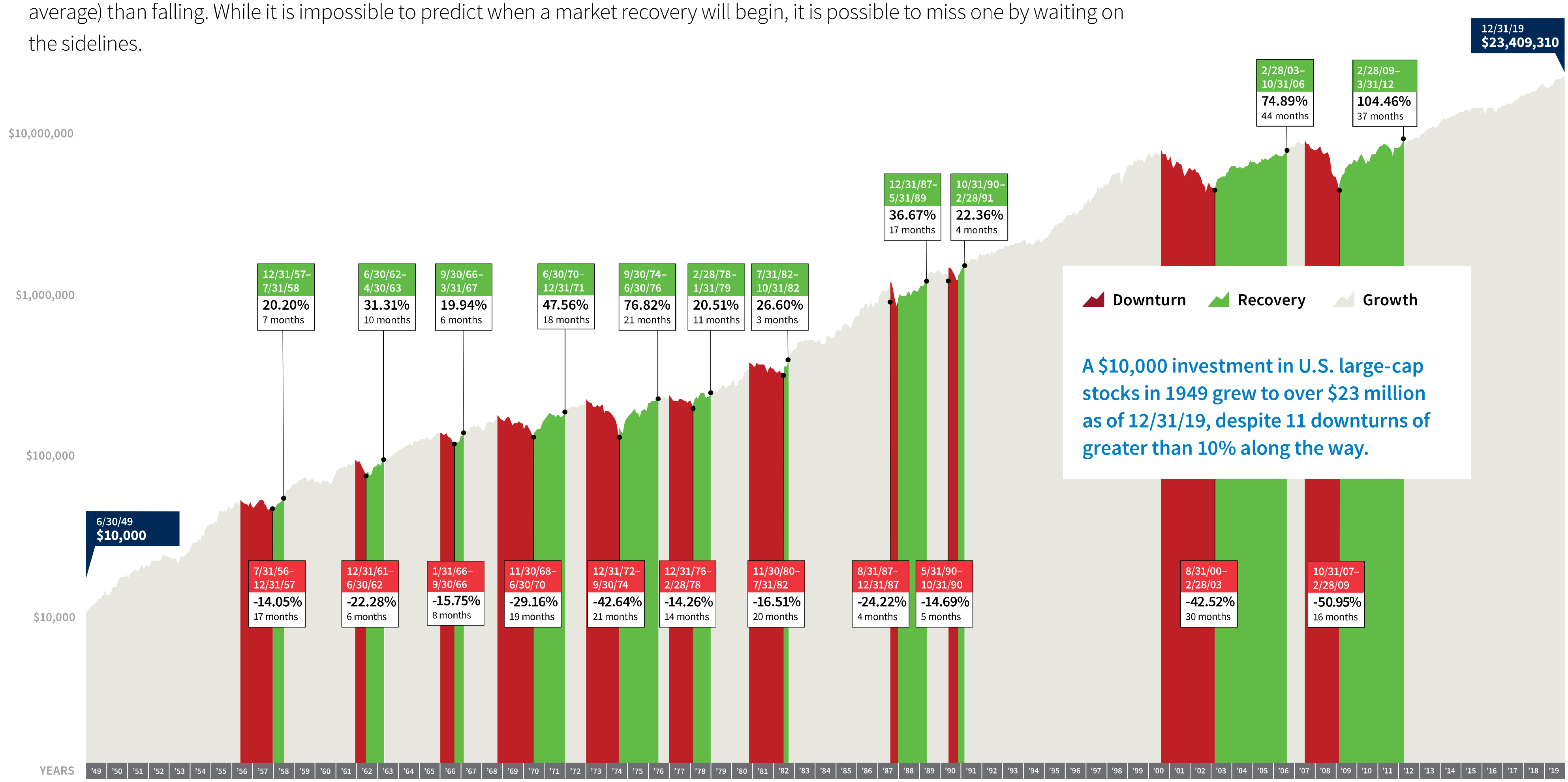
Market rebounds outlasted declines

The stock market has experienced many downturns over the past 60+ years, but in each case there was a period of recovery followed by growth that more than made up for the losses. Since 1949, the market has spent longer periods rising (48 months on average) than falling. While it is impossible to predict when a market recovery will begin, it is possible to miss one by waiting on the sidelines.



Data is as of 12/31/19, is historical, and reflects reinvestment of dividends. Data is plotted on a logarithmic scale so that comparable percentage changes appear similar. Past performance does not guarantee future results. The stock market is represented by the S&P 500 Index, which is an unmanaged index of common stock performance. You cannot invest directly in an index. A bull market is here defined as a period when the stock market rises for at least four straight months. A bear market is defined as a market decline of at least four months.

What matters most is how you respond

Imagine you had $100,000 invested in the stock market just before the 1973–1974 bear market, and you had been contributing $10,000 per year ($833 per month). Which action would have produced the best result?

INVESTOR A
Stayed invested, but stopped contributing
3.5 years until account returned to $100,000

Value of account in 20 years **$858,194**

INVESTOR B
Moved into cash and kept contributing
Never lost money

Value of account in 20 years **$896,826**

INVESTOR C
Stayed invested and kept contributing
2.34 years until account returned to $100,000

Value of account in 20 years **$1,892,293**

If you chose to stay the course through the 1970s bear market rather than halting your investment program or moving to cash, you would have ended up with twice as much money.

Moving assets into conservative investments with low rates of return, such as Treasury bills, may prolong the time it takes for your account to recover from a downturn. Remember, the greater the bear market decline, the longer the recovery time.

RATE OF RETURN	SIZE OF DOWNTURN				
	-10%	-20%	-30%	-40%	-50%
0.5%	21.00 yrs	44.75 yrs	71.25 yrs	102.25 yrs	138.75 yrs
2.0%	5.25 yrs	11.25 yrs	17.75 yrs	25.50 yrs	34.75 yrs
4.0%	2.75 yrs	5.50 yrs	9.00 yrs	12.75 yrs	17.25 yrs
6.0%	1.75 yrs	3.75 yrs	6.00 yrs	8.50 yrs	11.50 yrs
8.0%	1.25 yrs	2.75 yrs	4.50 yrs	6.50 yrs	8.75 yrs
10.0%	1.00 yr	2.25 yrs	3.50 yrs	5.25 yrs	7.00 yrs

This hypothetical illustration is based on mathematical principles and assumes monthly compounding. It is not meant as a forecast of future events or as a statement that prior markets may be duplicated. Recovery periods are rounded to the nearest quarter of a year.

For informational purposes only. Not an investment recommendation.

All funds involve risk, including the loss of principal.

Past performance is not indicative of future results. Regular investing does not assure a profit or protect against loss in a declining market. You should consider your ability to continue investing during periods of low prices. The stock market is represented by the S&P 500 Index, which is an unmanaged index of common stock performance. Cash is represented by the Ibbotson U.S. 30-day T-Bill Total Return Index, an unmanaged index that seeks to measure the performance of U.S. Treasury bills available in the marketplace. You cannot invest directly in an index.

Request a prospectus, or a summary prospectus if available, from your financial representative or by calling Putnam at 1-800-225-1581. The prospectus includes investment objectives, risks, fees, expenses, and other information that you should read and consider carefully before investing.

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Putnam Retail Management
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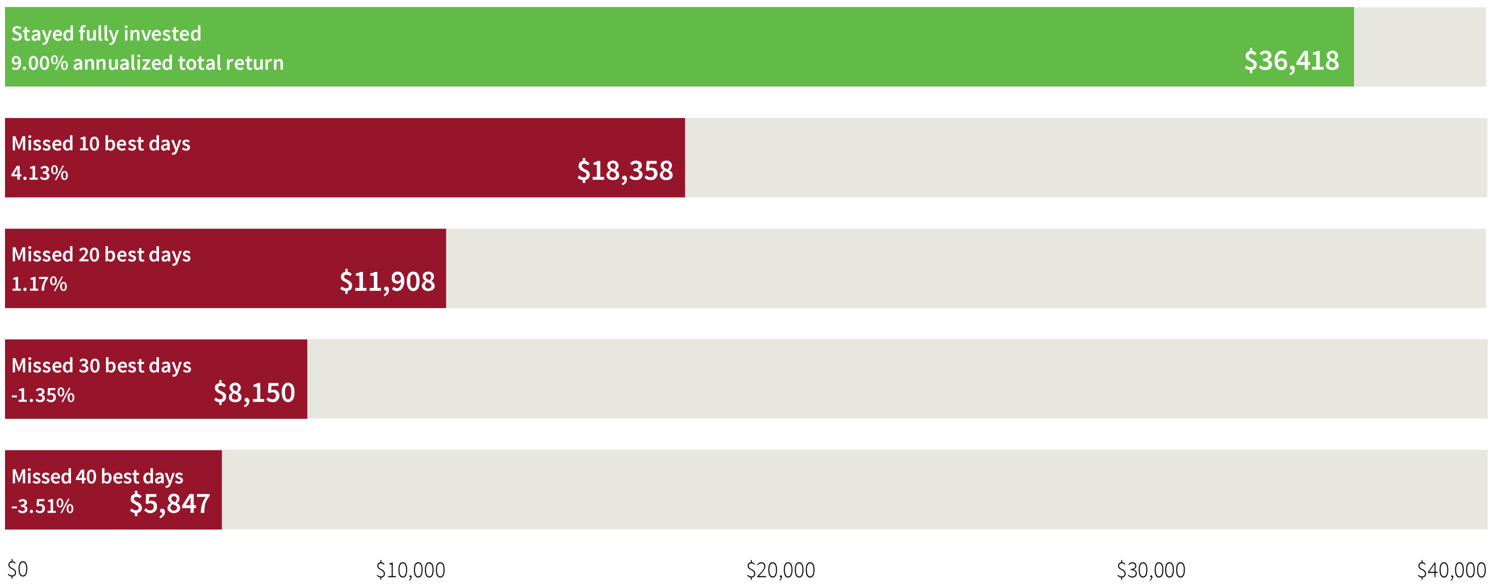
Stay invested so you don't miss the market's best days

$10,000 invested in the S&P 500 (12/31/04–12/31/19)



By staying fully invested over the past 15 years, you would have earned $18,060 more than someone who missed the market's 10 best days.

Data is historical. Past performance is not a guarantee of future results. The best time to invest assumes shares are bought when market prices are low.

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Investors should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. For a prospectus, or a summary prospectus if available, containing this and other information for any Putnam fund or product, call your financial representative or call Putnam at 1-800-225-1581. Please read the prospectus carefully before investing.

The pattern of crisis and recovery

All too often, a crisis can lead to fear as public perceptions become overly pessimistic. Financial markets that are usually rational can behave irrationally. But the U.S. stock market has proven remarkably resilient; it routinely has recovered from short-term crisis events to move higher over longer time periods.

The graph below shows a hypothetical investment in the S&P 500 Index, which represents some of the largest companies in the U.S. stock market from across all sectors of the economy. In spite of recessions, wars, and other crises, the annualized return over the past 79 years was 11.39%.

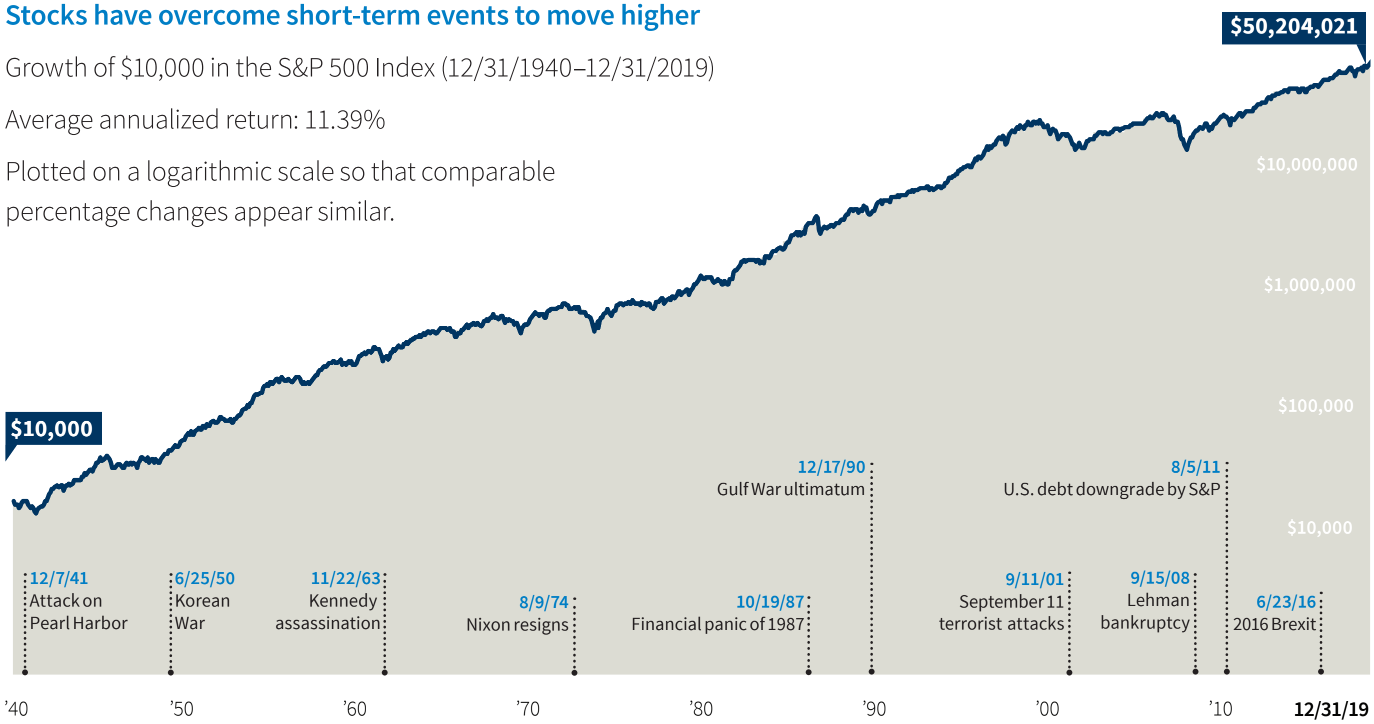
By staying invested during crises — or by investing during a crisis to take advantage of stock market valuations — investors can keep their portfolios on track in pursuit of their long-term goals.

Stocks have overcome short-term events to move higher

Growth of $10,000 in the S&P 500 Index (12/31/1940–12/31/2019)

Average annualized return: 11.39%

Plotted on a logarithmic scale so that comparable percentage changes appear similar.



This graph represents a hypothetical $10,000 investment in the S&P 500 Index, an unmanaged index of common stock performance. You cannot invest directly in an index. Indexes do not have sales charges and do not represent the performance of any Putnam fund or product. Past performance does not indicate future results, and prior markets may not be duplicated. Systematic or continued investing does not assure a profit or protect against loss. You should consider your ability to continue investing during periods of low price levels. The time horizon shown here is longer than that of most investors.

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All funds involve risk, including the loss of principal.

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