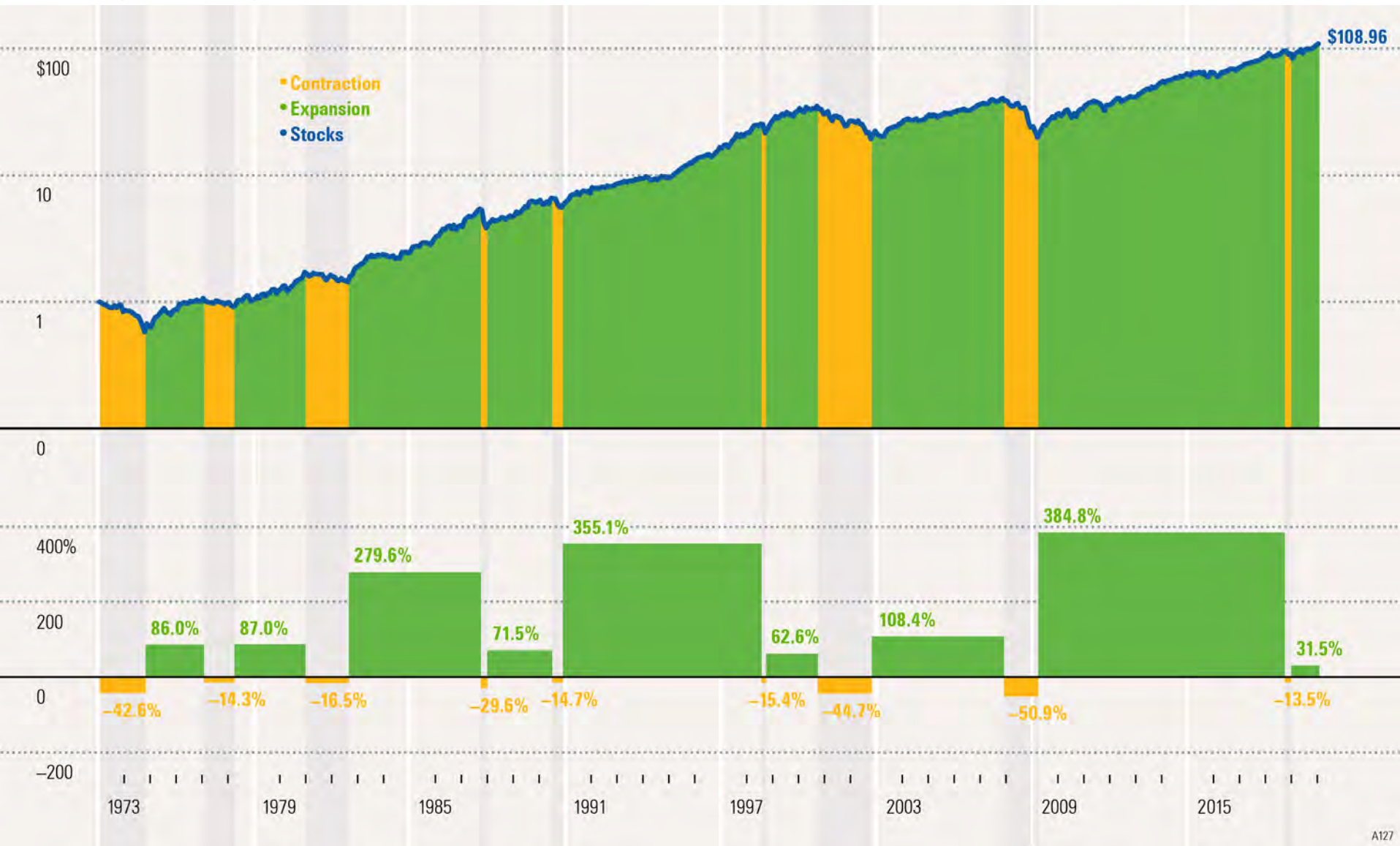


---

# Downturns and Recoveries

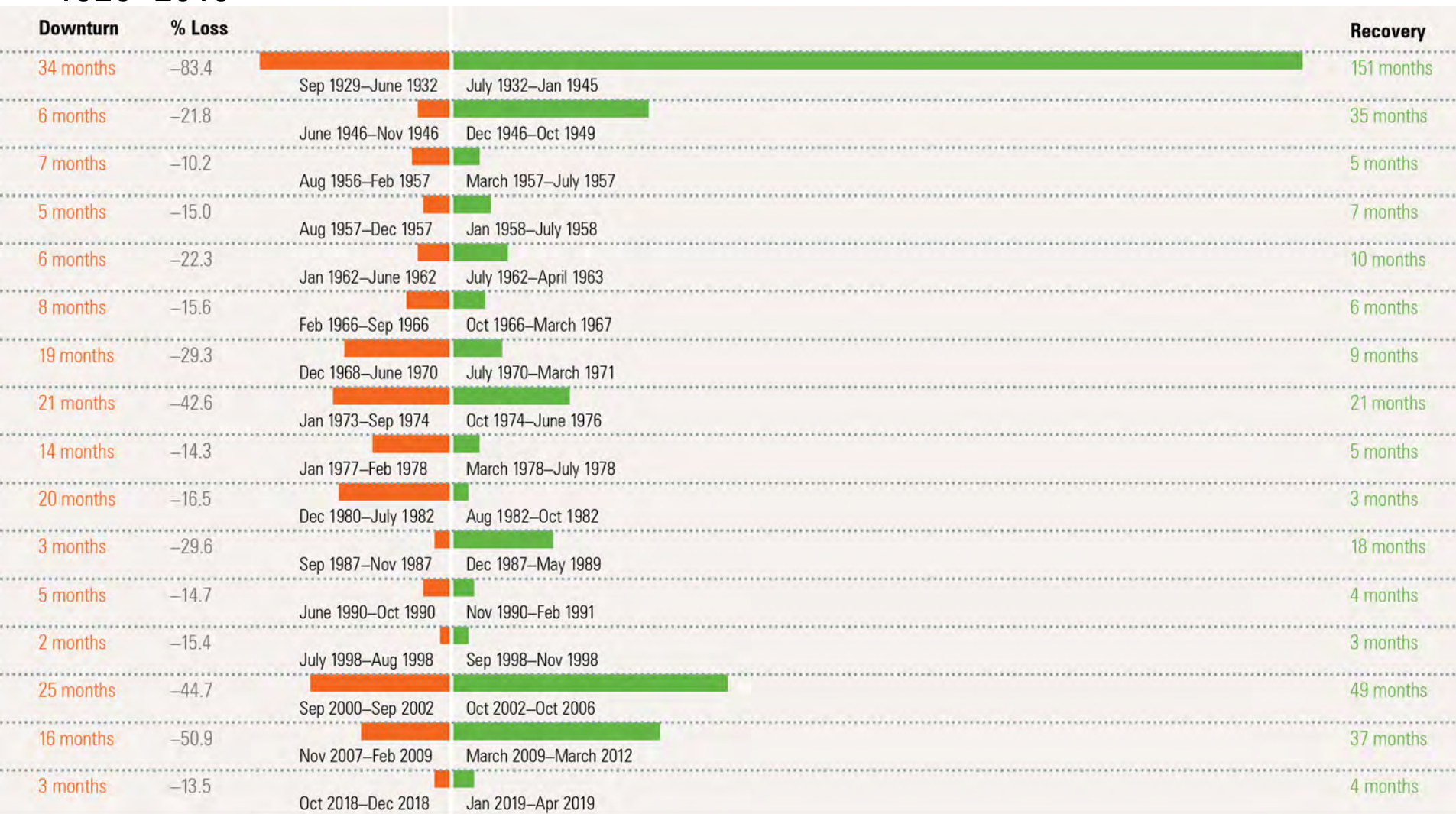
# Stock Market Contractions and Expansions 1973–2019



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.  
© Morningstar 2020. All Rights Reserved.

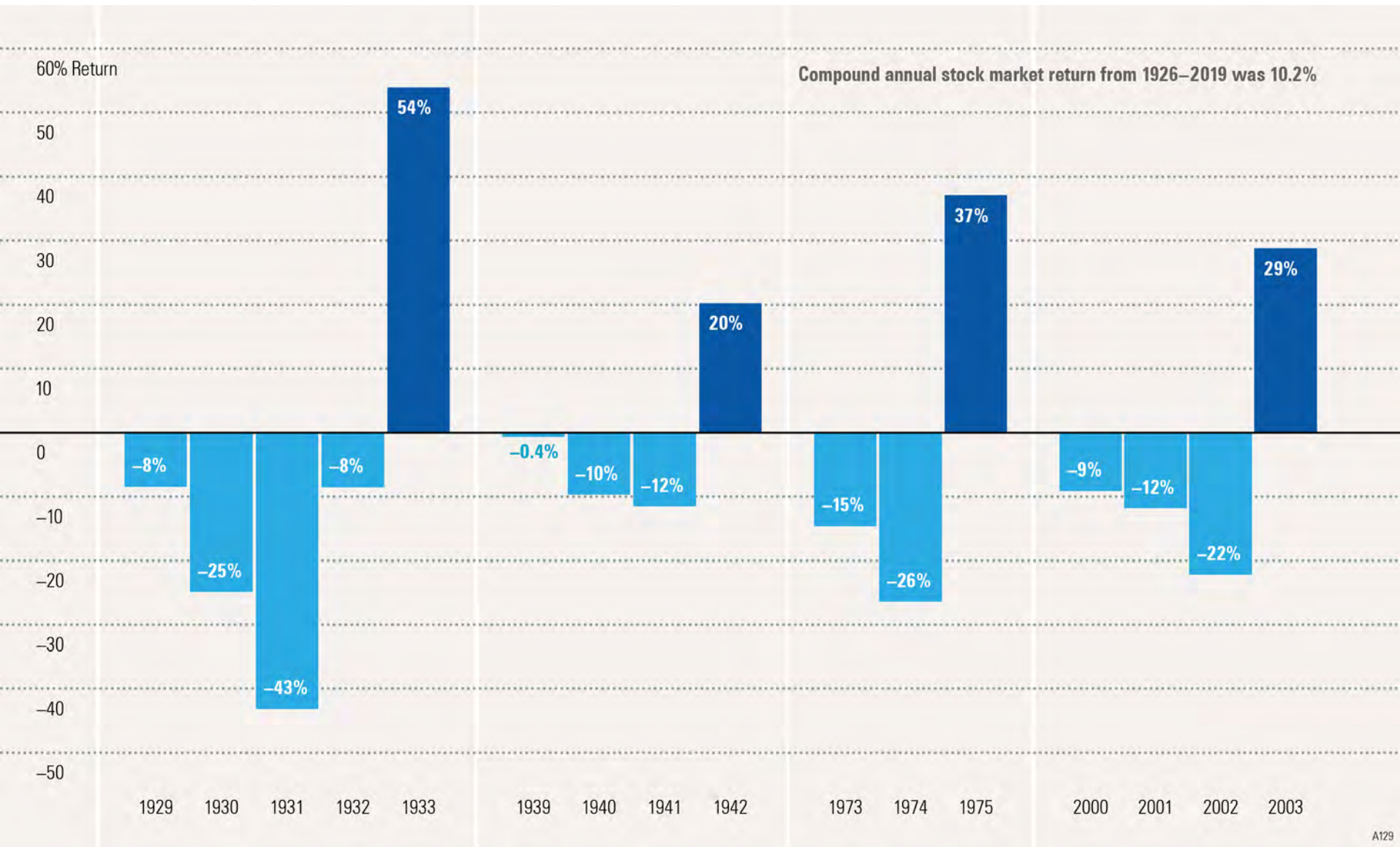
# Market Downturns and Recoveries

## 1926–2019



**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. © Morningstar 2020. All Rights Reserved.

# Periods of Consecutive Negative Stock Returns 1926–2019



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.  
© Morningstar 2020. All Rights Reserved.

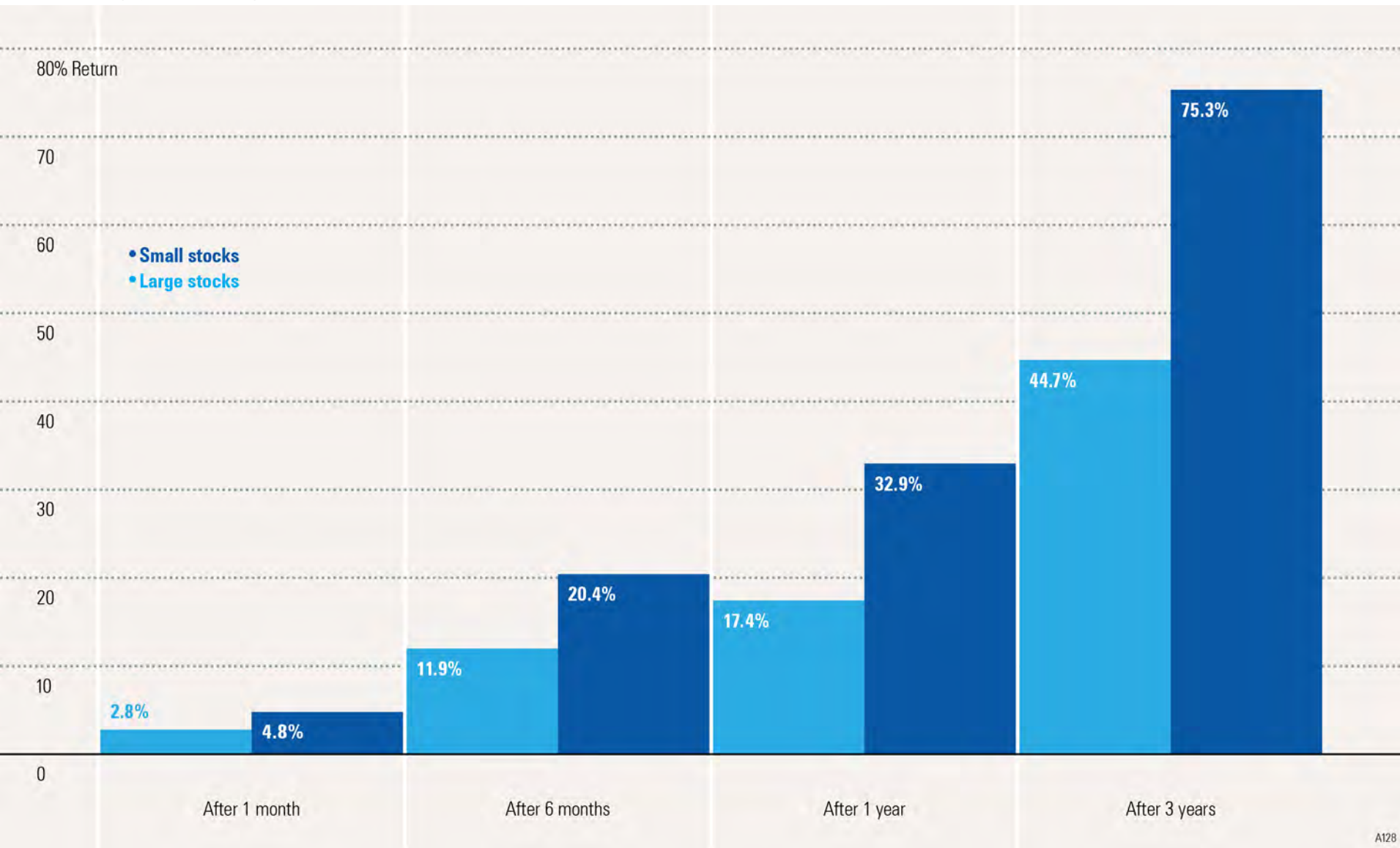
# Crises and Long-Term Performance

## Market Declines in Historical Context, January 1970 – December 2019



**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. Four market crises defined as a drop of 25% or more in the Ibbotson® Large Company Stock Index. © Morningstar 2020. All Rights Reserved.

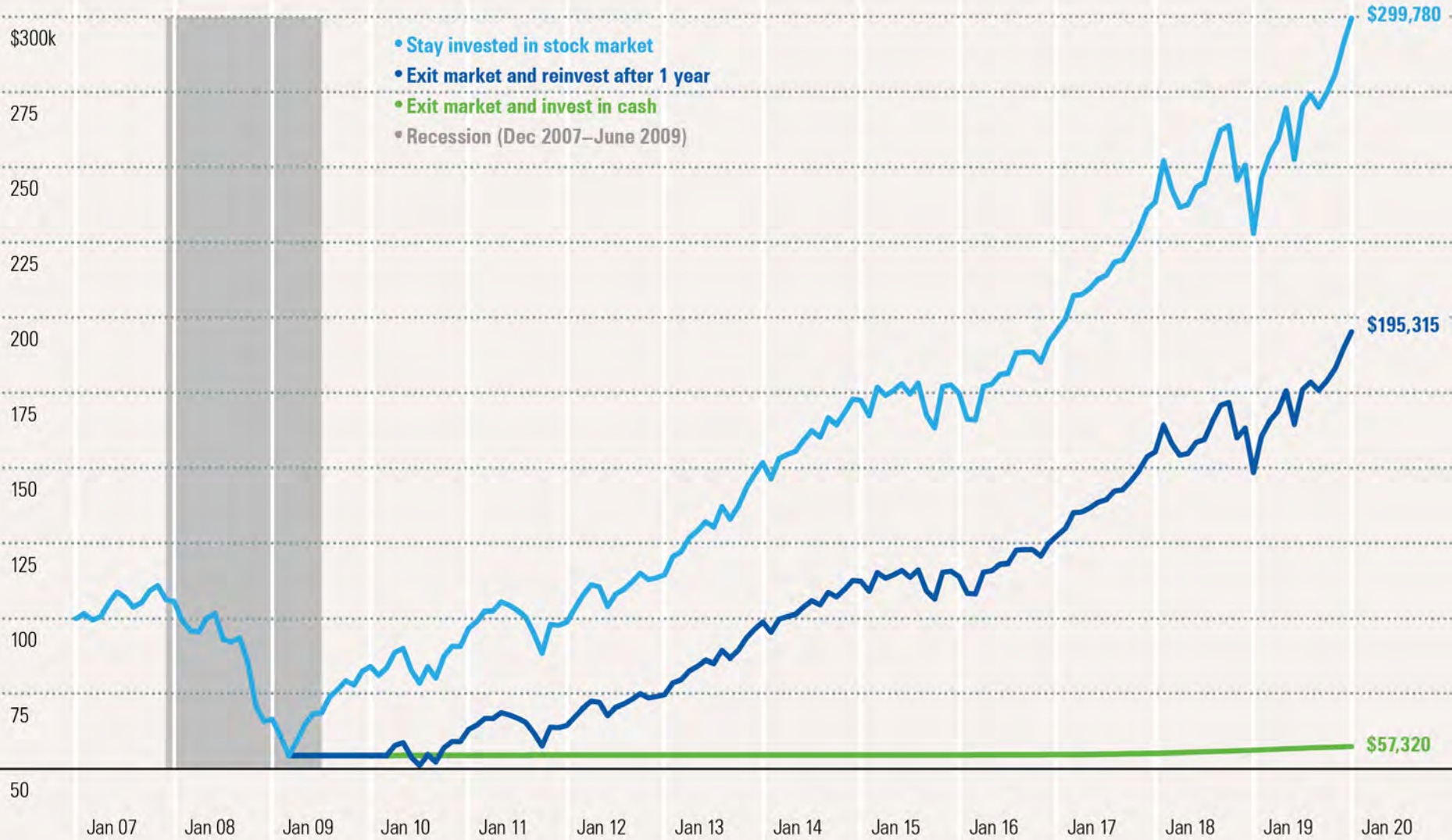
# Stock Performance After Recessions 1953–2019



**Past performance is no guarantee of future results.** Cumulative returns of large and small stocks after recessions 1953–2019. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar 2020. All Rights Reserved.

# The Importance of Staying Invested

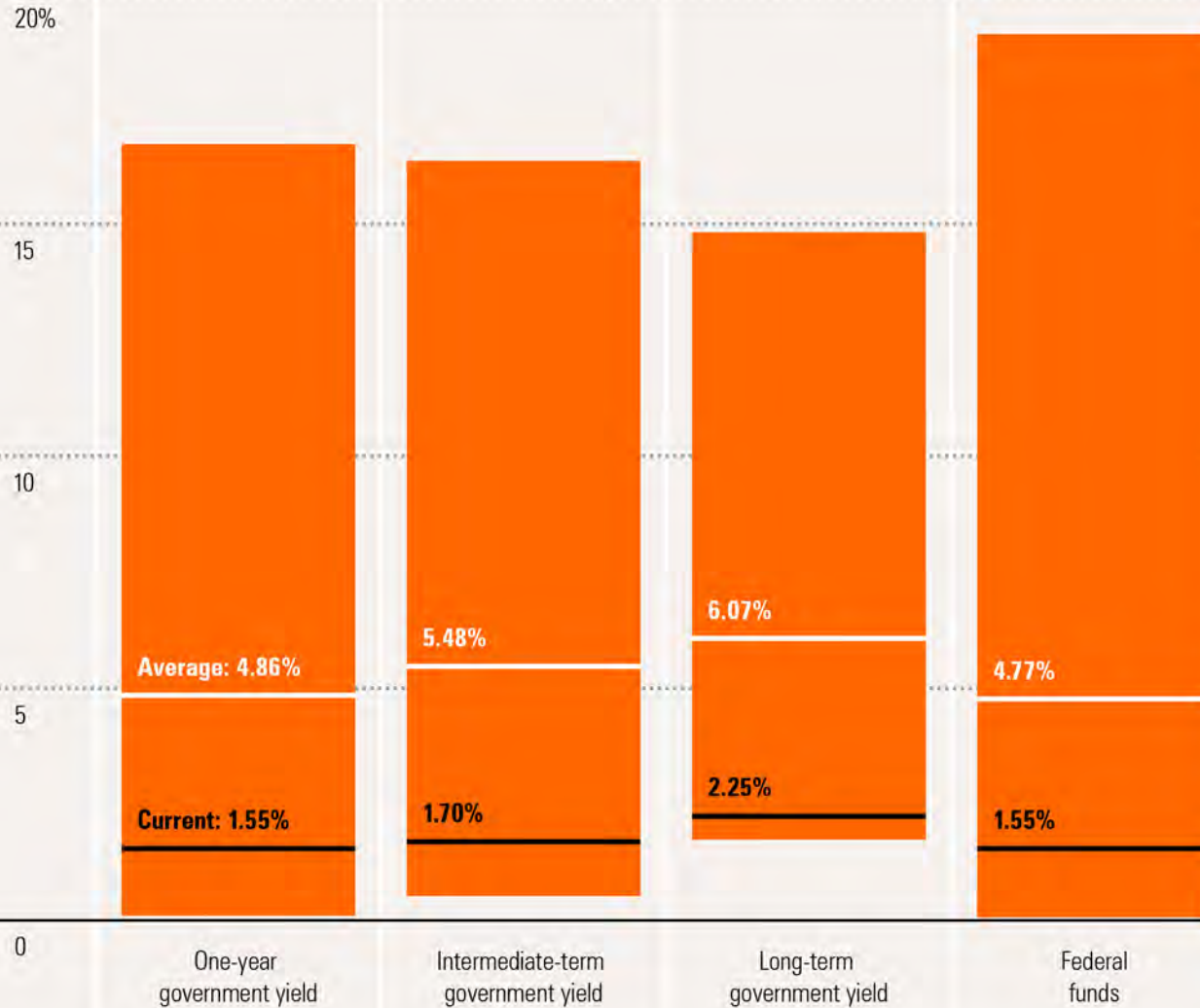
## Ending Wealth Values After a Market Decline



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.  
© Morningstar 2020. All Rights Reserved.

# History of Interest Rates

## July 1954–December 2019





# Bond Yields During Recessions

## 1946–2019

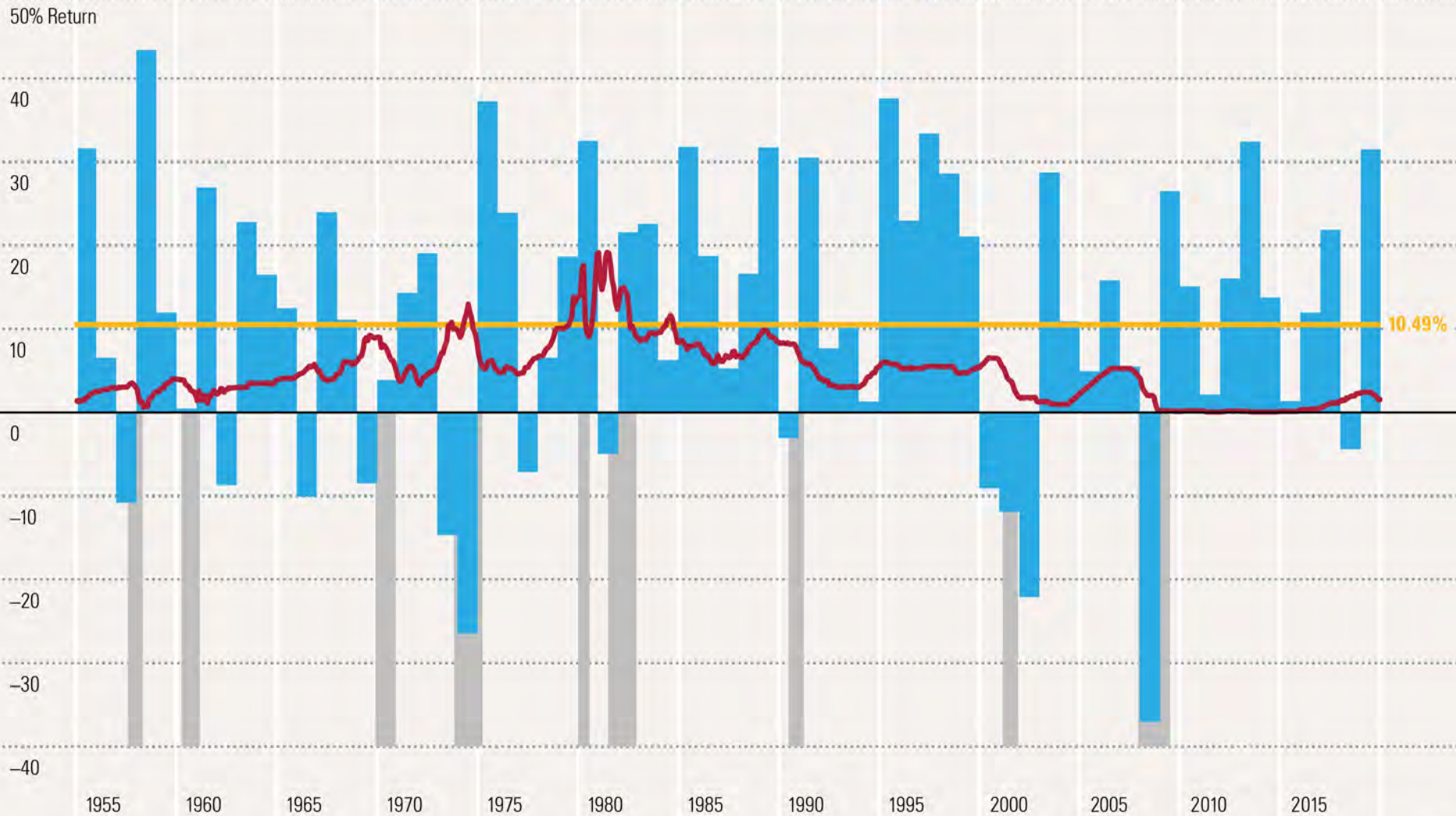


Past performance is no guarantee of future results. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index.  
© Morningstar 2020. All Rights Reserved.

# Stock Returns and Monetary Policy

## Annual Returns, 1955–2019

• Annual stock returns • Effective fed-funds rate • Average return Gray-shaded regions denote economic recessions



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.  
© Morningstar 2020. All Rights Reserved.



# Correlations of Various Asset Classes with the Market

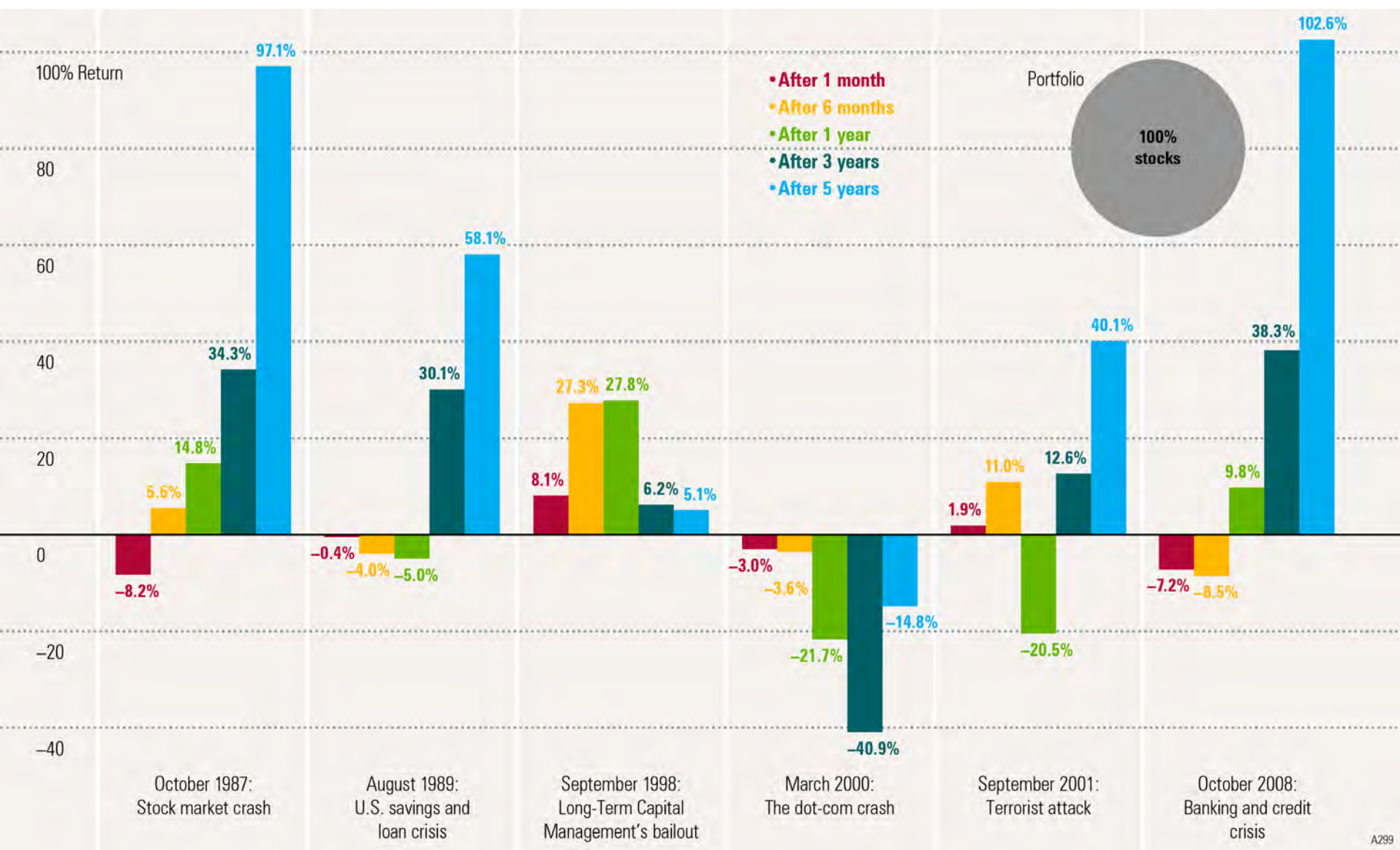
## January 1980–December 2019

	Before recession Jan 1980–Nov 2007	During recession Dec 2007–Jun 2009	Entire period Jan 1980–Dec 2019
<b>Small stocks</b>	0.72	0.95	0.77
<b>International stocks</b>	0.57	0.93	0.67
<b>Commodities</b>	0.08	0.51	0.24
<b>REITs</b>	0.47	0.83	0.56
<b>Gold</b>	0.05	-0.06	0.04
<b>Long-term corp bonds</b>	0.23	0.34	0.18
<b>Long-term govt bonds</b>	0.18	0.03	0.03
<b>Intermediate-term govt bonds</b>	0.12	-0.32	0.03
<b>Treasury bills</b>	0.00	-0.11	0.01

• Low • Medium • High

# U.S. Market Recovery After Financial Crises

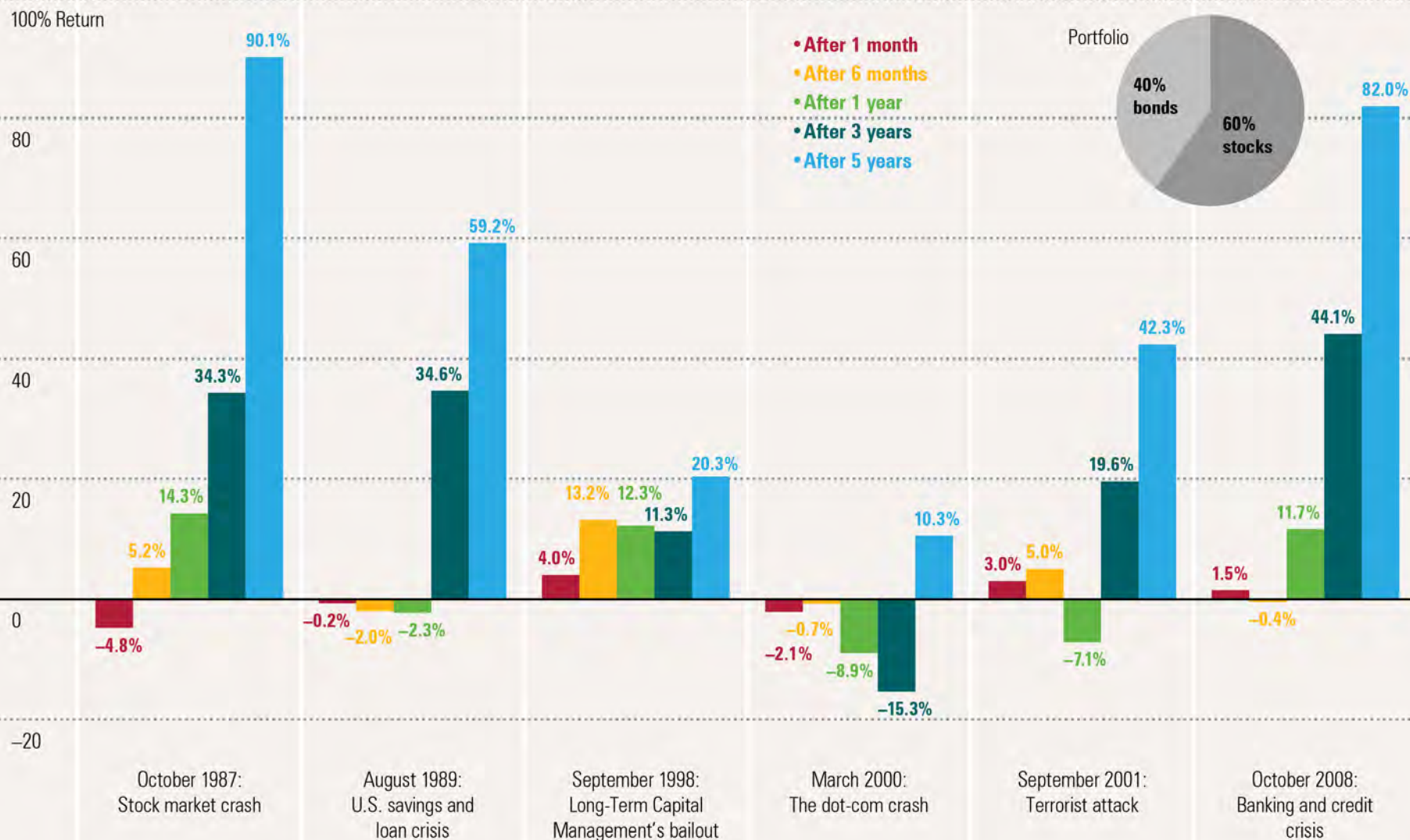
## Cumulative Return of All-Stock Portfolio After Various Events



**Past performance is no guarantee of future results.** Returns reflect the percentage change in the index level from the end of the month in which the event occurred to one month, six months, one year, three years and five years after. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar 2020. All Rights Reserved.

# U.S. Market Recovery After Financial Crises

## Cumulative Return of Balanced Portfolio After Various Events



Past performance is no guarantee of future results. Returns reflect the percentage change in the index level from the end of the month in which the event occurred to one month, six months, one year, three years and five years after. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar 2020. All Rights Reserved.