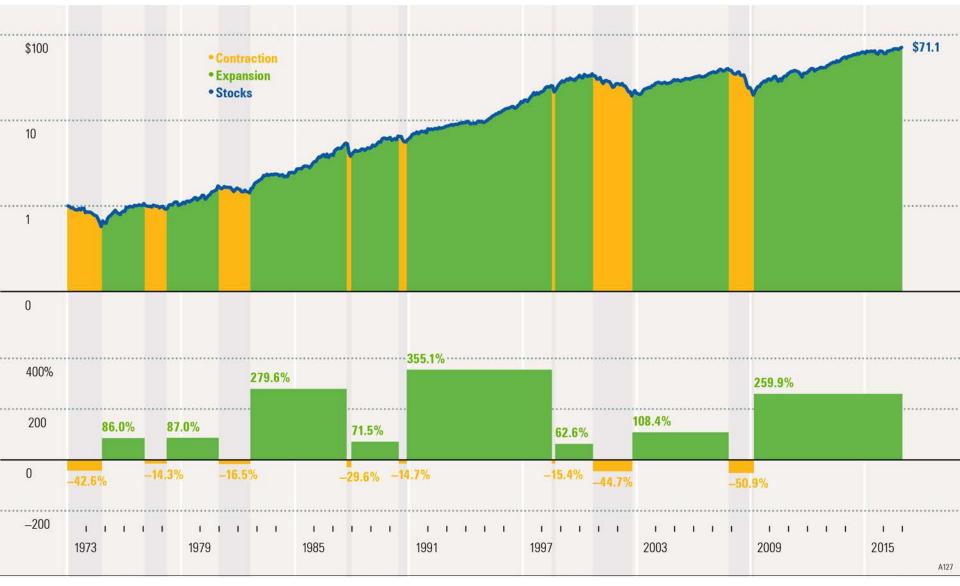
### **Downturns and Recoveries**



## **Stock Market Contractions and Expansions** 1973–2016



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# Market Downturns and Recoveries 1926–2016

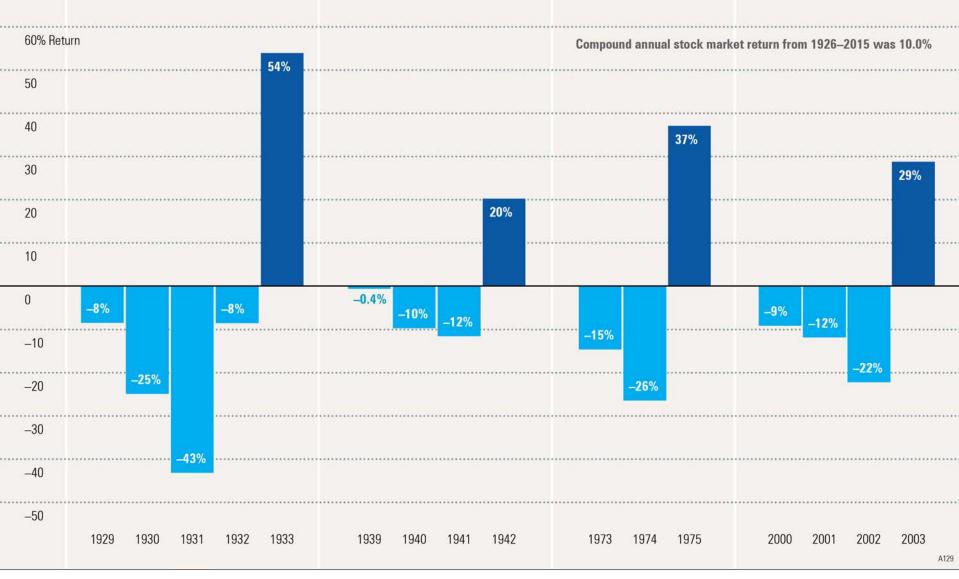
Downturn	% Loss			Recovery
34 months	-83.4%	Sep 1929–Jun 1932	Jul 1932–Jan 1945	151 months
6 months	-21.8%	Jun 1946–Nov 1946	Dec 1946-Oct 1949	35 months
7 months	-10.2%	Aug 1956–Feb 1957	Mar 1957–Jul 1957	5 months
5 months	-15.0%	Aug 1957–Dec 1957	Jan 1958–Jul 1958	7 months
6 months	-22.3%	Jan 1962–Jun 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

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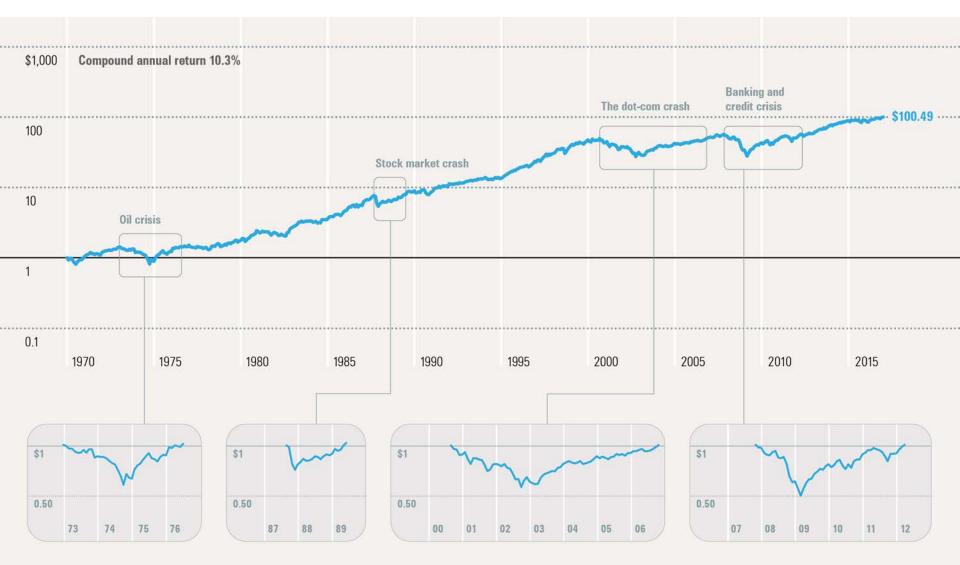
### **Periods of Consecutive Negative Stock Returns** 1926–2016



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#### **Crises and Long-Term Performance**

Market declines in historical context, Jan. 1970–Dec. 2016



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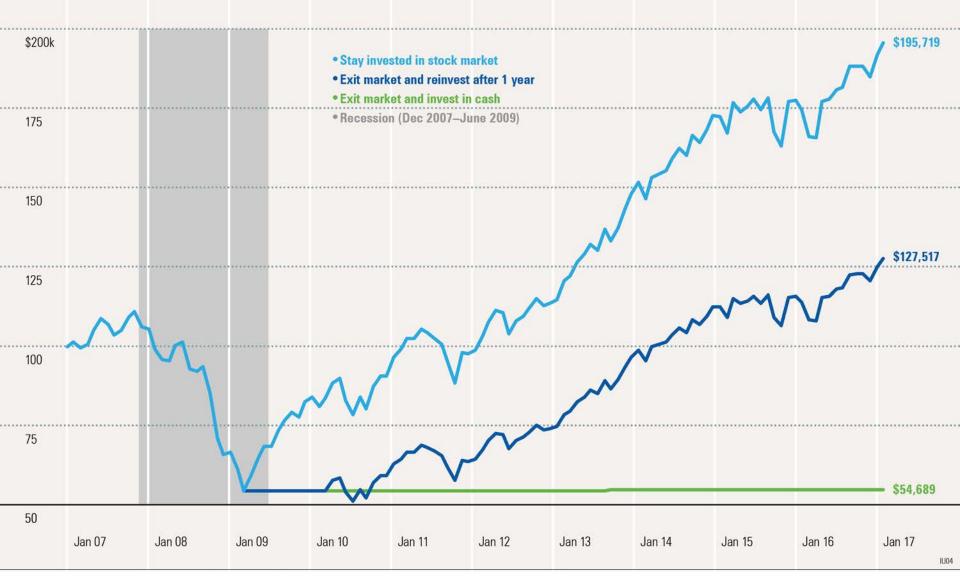
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## Stock Performance After Recessions 1953–2016

80% Retu	ım			75.3%	
70					
60	• Small stocks • Large stocks				
50				44.7%	
40					
30			02.070		
20		20.4%	17.4%		
10	2.8%	11.9%			
0	After 1 month	After 6 months	After 1 year	After 3 years	
					A128

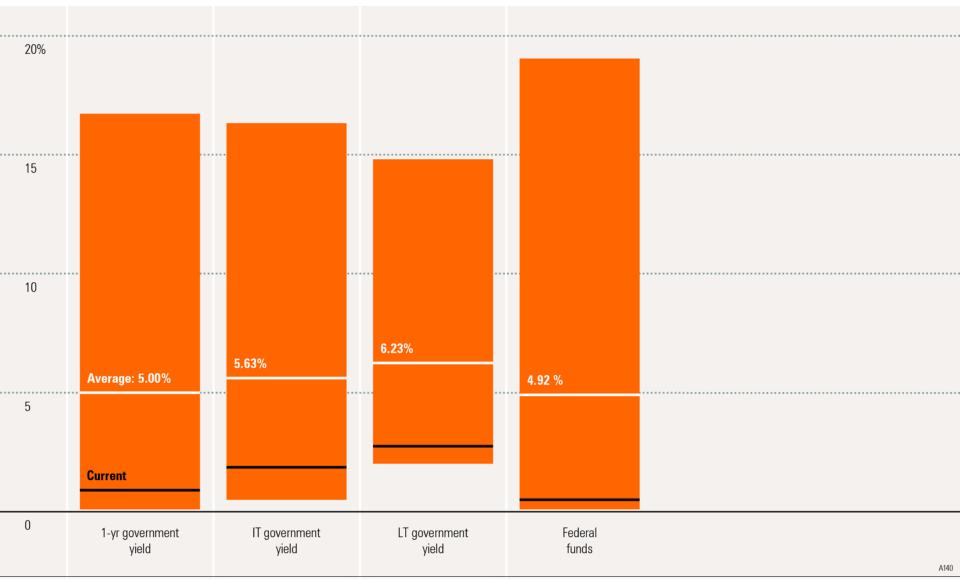
Past performance is no guarantee of future results. Cumulative returns of large and small stocks after recessions 1953–2016. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar. All Rights Reserved.

### The Importance of Staying Invested Ending wealth values after a market decline



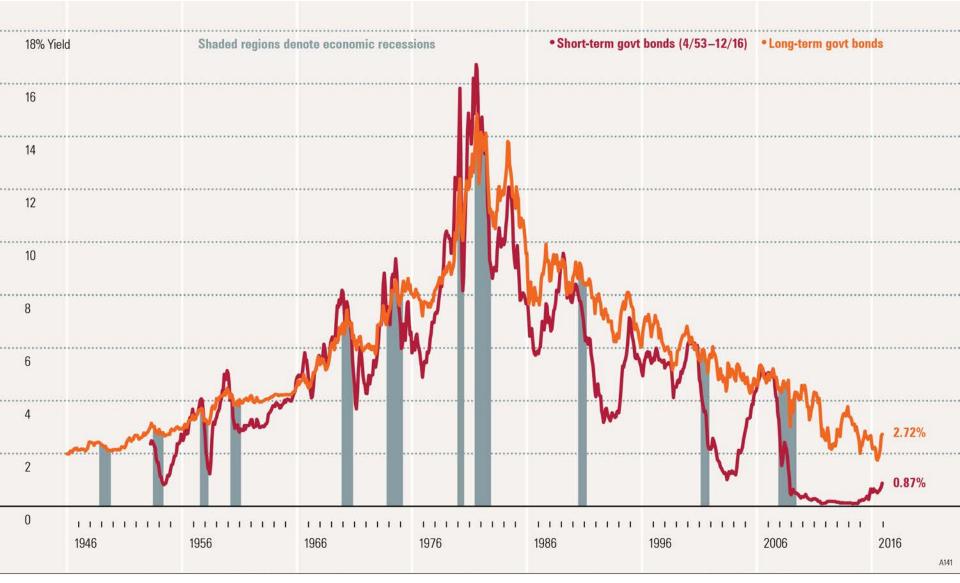
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#### History of Interest Rates July 1954–December 2016



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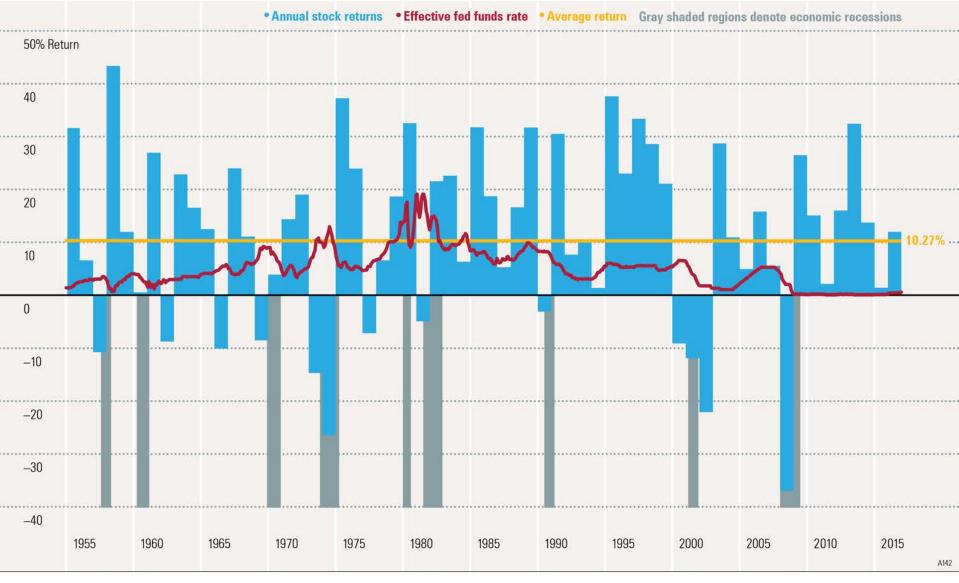
# Bond Yields During Recessions 1946–2016



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### Stock Returns and Monetary Policy Annual returns, 1955–2016



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#### **Correlations of Various Asset Classes with the Market**

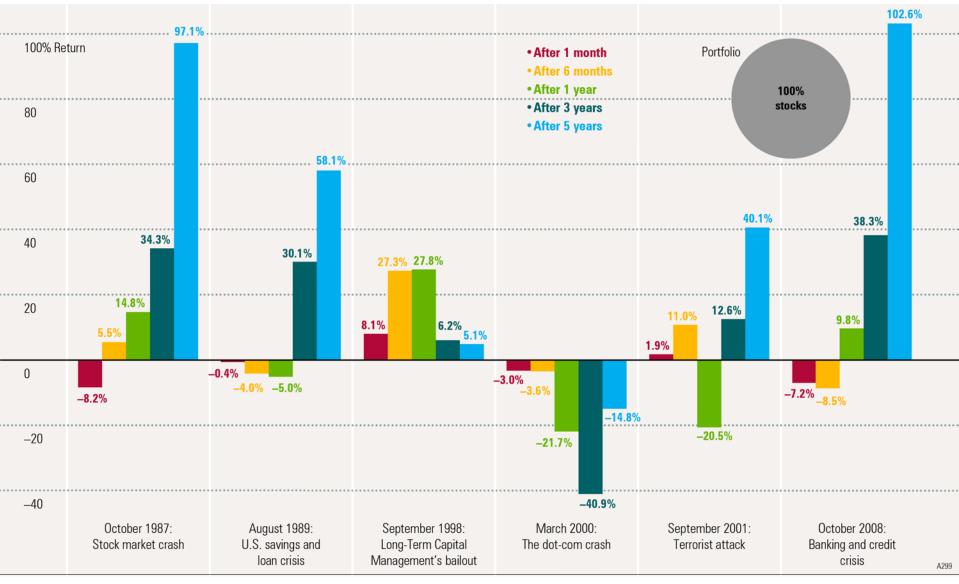
January 1980–December 2016

	Before recession Jan 1980–Nov 2007	During recession <b>Dec 2007–Jun 2009</b>	Entire period Jan 1980–Dec 2016
Small stocks	0.72	0.95	0.77
International stocks	0.57	0.93	0.67
Commodities	0.08	0.51	0.21
REITs	0.47	0.83	0.56
Gold	0.05	-0.06	0.04
Long-term corp bonds	0.23	0.34	0.19
Long-term govt bonds	0.18	0.03	0.05
Intermediate-term govt bonds	0.12	-0.32	0.04
Treasury bills	0.00	-0.11	0.02

• Low • Medium • High

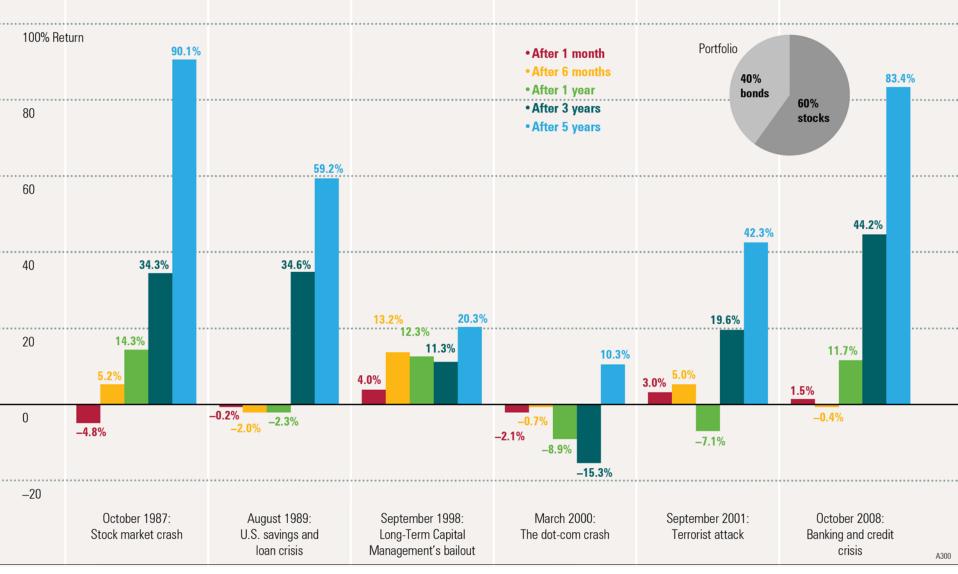


### **U.S. Market Recovery After Financial Crises** Cumulative return of all-stock portfolio after various events



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. All Rights Reserved.

#### U.S. Market Recovery After Financial Crises Cumulative return of balanced portfolio after various events



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