

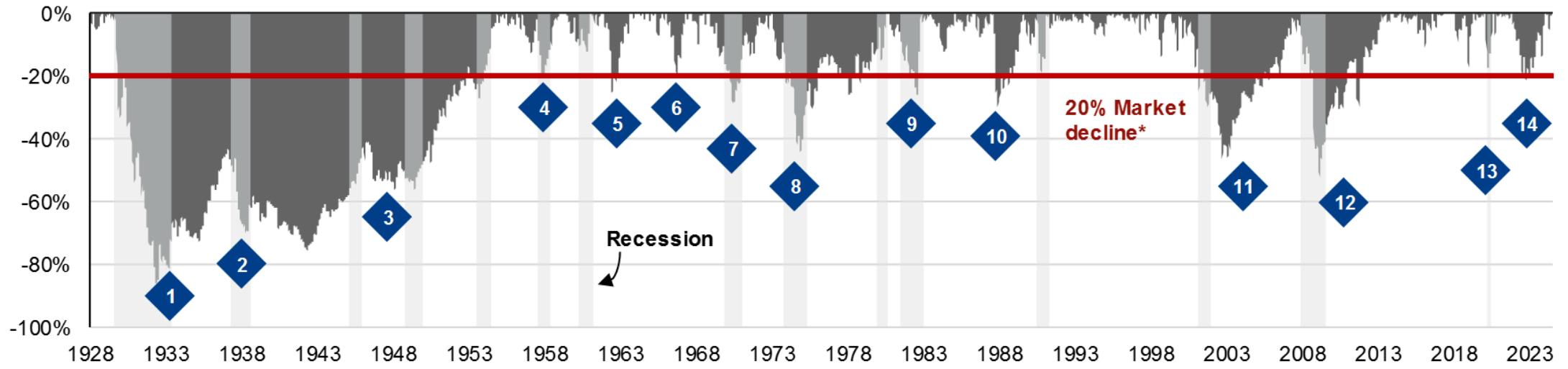


Bull and bear markets

GTM U.S. OTB

Equities

U.S. recessions and S&P 500 composite declines from all-time highs



Characteristics of bull and bear markets

Market correction	Bull Market			Macro Environment				Bear Market		
	Bull begin	Bull return	Duration (months)	Recession	Commodity Spike	Aggressive Fed	Extreme Valuation	Market peak	Bear return*	Duration (months)*
1 Crash of 1929 - Excessive leverage, irrational exuberance	Jul 1926	152%	37	◆			◆	Sep 1929	-86%	32
2 1937 Fed Tightening - Premature policy tightening	Mar 1935	129%	23	◆		◆		Mar 1937	-60%	61
3 Post WWII Crash - Post-war demobilization, recession fears	Apr 1942	158%	49	◆			◆	May 1946	-30%	36
4 Eisenhower Recession - Worldwide recession	Jun 1949	267%	85	◆		◆	◆	Aug 1956	-22%	14
5 Flash Crash of 1962 - Flash crash, Cuban Missile Crisis	Oct 1960	39%	13				◆	Dec 1961	-28%	6
6 1966 Financial Crisis - Credit crunch	Oct 1962	76%	39			◆	◆	Feb 1966	-22%	7
7 Tech Crash of 1970 - Economic overheating, civil unrest	Oct 1966	48%	25	◆	◆	◆		Nov 1968	-36%	17
8 Stagflation - OPEC oil embargo	May 1970	74%	31	◆	◆			Jan 1973	-48%	20
9 Volcker Tightening - Whip Inflation Now	Mar 1978	62%	32	◆	◆	◆		Nov 1980	-27%	20
10 1987 Crash - Program trading, overheating markets	Aug 1982	229%	60				◆	Aug 1987	-34%	3
11 Tech Bubble - Extreme valuations, .com boom/bust	Oct 1990	417%	113	◆			◆	Mar 2000	-49%	30
12 Global Financial Crisis - Leverage/housing, Lehman collapse	Oct 2002	101%	60	◆	◆	◆		Oct 2007	-57%	17
13 Global Pandemic Recession	Mar 2009	401%	131	◆				Feb 2020	-34%	1
14 Inflation spike - Fed tightening	Mar 2020	114%	21		◆	◆	◆	Jan 2022	-25%	9
Averages	-	162%	51					-	-40%	20

Source: FactSet, NBER, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management.

*A bear market is defined as a 20% or more decline from the previous market high. The related market return is the peak to trough return over the cycle. Periods of "Recession" are defined using NBER business cycle dates. "Commodity spikes" are defined as movement in oil prices of over 100% over an 18-month period. Periods of "Extreme Valuations" are those where S&P 500 last 12-months P/E levels were approximately two standard deviations above long-run averages, or time periods where equity market valuations appeared expensive given the broader macroeconomic environment. "Aggressive Fed Tightening" is defined as Federal Reserve monetary tightening that was unexpected and/or significant in magnitude. Bear and bull returns are price returns.

Guide to the Markets - U.S. Data are as of December 31, 2024.

J.P.Morgan
ASSET MANAGEMENT