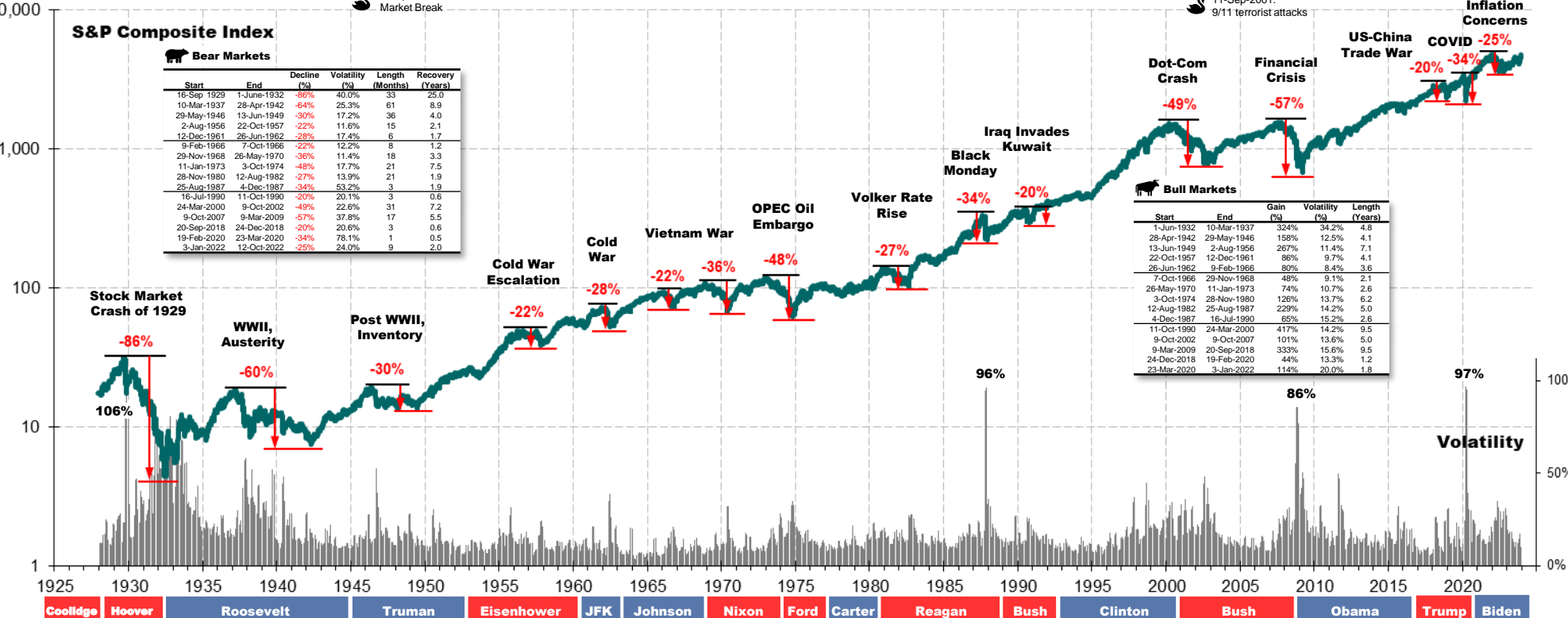


# A BRIEF HISTORY OF THE U.S. STOCK MARKET & THE ECONOMY

<b>Bull Markets</b>	Avg. Length: 4.6 years Avg. Gain: 164% Avg. Volatility: 14%	<b>GDP (avg.)</b> 3.3%
<b>Bear Markets</b>	Avg. Length: 18 months Avg. Decline: -37% Avg. Volatility: 26%	<b>Inflation (avg.)</b> 3.0%
		<b>Unemployment (avg.)</b> 6.4%

**Black Swan Events**

- 28-Oct-1929: Black Tuesday
- 10-May-1940: Germany Invades France
- 8-Dec-1941: Attack on Pearl Harbor
- 3-Sep-1946: Market Break
- 26-Jun-1950: Outbreak of Korean War
- 26-Sep-1955: Eisenhower heart attack
- 28-May-1962: Flash (specialist) crash
- 22-Nov-1963: JFK assassination
- 19-Oct-1987: Black Monday
- 27-Oct-1997: Asian financial crisis
- 31-Aug-1998: Russian debt default
- 11-Sep-2001: 9/11 terrorist attacks
- 15-Sep-2008: Lehman collapse
- 6-May-2010: Flash crash
- 5-Feb-2018: Volmageddon
- 16-Mar-2020: COVID-19 pandemic

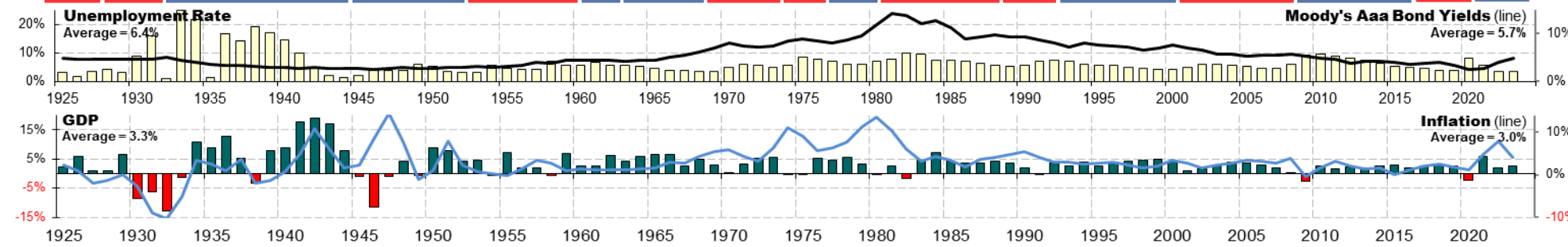


**Bear Markets**

Start	End	Decline (%)	Volatility (%)	Length (Months)	Recovery (Years)
16-Sep-1929	1-Jun-1932	-86%	40.0%	33	25.0
10-Mar-1937	29-Apr-1942	-64%	25.3%	61	8.9
29-May-1946	13-Jun-1949	-30%	17.2%	36	4.0
2-Aug-1956	22-Oct-1957	-22%	11.6%	15	2.1
12-Dec-1961	26-Jun-1962	-28%	17.4%	6	1.7
9-Feb-1966	7-Oct-1966	-22%	12.2%	8	1.2
29-Nov-1968	26-May-1970	-36%	11.4%	18	3.3
11-Jan-1973	3-Oct-1974	-48%	17.7%	21	7.5
28-Nov-1980	12-Aug-1982	-27%	13.9%	21	1.9
25-Aug-1987	4-Dec-1987	-34%	53.2%	3	1.9
16-Jul-1990	11-Oct-1990	-20%	20.1%	3	0.6
24-Mar-2000	9-Oct-2002	-49%	22.6%	31	7.2
9-Oct-2007	9-Mar-2009	-57%	37.9%	17	5.5
20-Sep-2018	24-Dec-2018	-20%	20.6%	3	0.6
19-Feb-2020	23-Mar-2020	-34%	78.1%	1	0.5
3-Jan-2022	12-Oct-2022	-25%	24.0%	9	2.0

**Bull Markets**

Start	End	Gain (%)	Volatility (%)	Length (Years)
1-Jun-1932	10-Mar-1937	324%	34.2%	4.8
28-Apr-1942	29-May-1946	158%	12.5%	4.1
13-Jun-1949	2-Aug-1956	267%	11.4%	7.1
22-Oct-1957	12-Dec-1961	86%	9.7%	4.1
26-Jun-1962	9-Feb-1966	80%	8.4%	3.6
7-Oct-1966	29-Nov-1968	48%	9.1%	2.1
26-May-1970	11-Jan-1973	74%	10.7%	2.6
3-Oct-1974	28-Nov-1980	126%	13.7%	6.2
12-Aug-1982	25-Aug-1987	229%	14.2%	5.0
4-Dec-1987	16-Jul-1990	65%	15.2%	2.6
11-Oct-1990	24-Mar-2000	417%	14.2%	9.5
9-Oct-2002	9-Oct-2007	101%	13.6%	5.0
9-Mar-2009	20-Sep-2018	333%	15.6%	9.5
24-Dec-2018	19-Feb-2020	44%	13.3%	1.2
23-Mar-2020	3-Jan-2022	114%	20.0%	1.8



Sources: S&P 500 Composite Index: Bloomberg, LP. The S&P 90 Index was replaced by the S&P 500 Index on March 4, 1957. Volatility: Bear and bull market tables based on annualized standard deviation for the period. Chart based on 20-day moving average annualized standard deviation. Unemployment Rate: Bureau of Labor Statistics. Moody's Corporate Aaa Bond Yield: The Federal Reserve Bank of St. Louis (FRED). GDP: Bureau of Economic Analysis. Inflation: Bureau of Labor Statistics. Bear Markets: Decline and length based on market peak to trough. Recovery based on time to reach pre-bear market level. Bull Markets: Gain and length based on market trough to peak. © 2024 Bates Group LLC. All rights reserved. No part of this graphic may be reproduced in any manner without written permission. Prepared by Greg Kyle

