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TACTICAL INSIGHTS

THREE WORST BEAR MARKETS STARTED WITH HIGH PE

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As the stock markets continue setting records day after day, many investors are becoming more and more concerned about the potential over-valuation and a possible market correction. The widely-followed cyclically-adjusted price-earnings ratio (Shiller PE) reached 31.2, almost twice as much as the historical average of 16.8. While market valuation may not be a good timing indicator (see If Jeremy Grantham Has a Changing Heart on Value Investing, Should You?), does it have any impact on the severity of a bear market when it happens?

Table 1: Historical Bear Markets

Time	Duration	Trigger events	Recession Period	Loss	Starting Shiller PE
Sept. 1929 – Jun. 1932	34 months	Great Depression	43 months	86.10%	31.48
May 1946 – Jun 1949	37 months	Recession after WWII	11 months	29.60%	16.01
Dec. 1961 – Jun 1962	6 months	Bay of Pigs Attack and Cuban Missile Crisis	No recession	28.00%	22.04
Nov. 1968 – May 1970	18 months	Recession, high inflation, assassination and riots	11 months	36.10%	22.20
Jan. 1973 – Oct. 1974	21 months	Arab oil embargo, lengthy recession and high inflation	16 months	48.00%	18.71
Nov. 1980 – Aug. 1982	21 months	Fed's rate hikes and stagflation	16 months	27.80%	9.65
Aug. 1987 – Dec. 1987	3 months	Black Monday crash after a lengthy bull run	No recession	33.50%	18.33
Mar. 2000 – Oct. 2002	30 months	Dot-com bubble burst	8 months	49.10%	43.22
Oct. 2007 – Mar. 2009	17 months	Subprime crisis after housing bubble burst	18 months	56.40%	27.32

Data Source: CNBC, NBER and Shiller

To answer the question, I collected some historical data on the nine bear markets since 1928 and summarized them in Table 1. There are three interesting observations:

- **Three of the four worst bear markets were preceded by high valuation.** Among the four worst bear markets with over 40% losses, three of them including the Great Depression in 1929, dot-com bubble in 2000 and subprime crisis in 2007 started with somewhat extreme market valuation. The only exception is the 1973 bear market caused by Arab oil embargo and subsequent recession, but it had an above-average PE to start with as well.
- **Three of the four worst bear markets coincided with lengthy recessions.** The bear markets of 1929, 1973 and 2007 were accompanied by long recession periods. The perfect example is 1929 bear market, when the three-year-long depression drove the market down by 86%. The exception is 2000 bear market, which was mainly caused by the dot-com bubble burst despite a mild recession in 2001.
- **The two bear markets without economic recessions were short-lived.** The two shortest bear markets were caused by geopolitical events like Bay of Pigs Invasion in 1961 or market disfunction like Black Monday crash in 1987. Both occurred during the periods of economic expansion.

Historically, the worst bear markets happened amid extreme market valuation or lengthy economic recession, or both. After eight years of economic expansion, the US economy is close to the late stage of the current boom cycle. The current high valuation is certainly a cause for concern. While it is hard to predict exactly when the bear market will happen, high valuation, together with a possible economic recession will likely make the bear market more severe when it finally materializes.

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