



Market Predictors – an Evaluation (Report by Y-Charts)

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AAII RETIREMENT SIG

Market Predictors - Conclusions

- ▶ No single predictor has a perfect track record
- ▶ None appear reliable enough for decision making
 - ▶ Perhaps a combination?
- ▶ “Upper Tier”
 - ▶ The Buffett Indicator
 - ▶ Inverted Yield Curves
 - ▶ S&P500 Cyclically Adjusted 10-yr Ratios
- ▶ “Lower Tier”
 - ▶ Tobin’s Q Ratio
 - ▶ Negative S&P 500 Earnings Growth
 - ▶ S&P500 P/E Ratio Direction

Market Predictors - Definitions

- ▶ Buffet Ratio Ratio of S&P500 value compared to annual GDP
- ▶ Inverted Yield Curves When 10-yr/3-mth yields or 10-yr/2-yr yields invert
- ▶ S&P500 CAPE Ratio Ratio of S&P500 to 10-yr cyclically adjusted PEs
- ▶ Tobins Q Ratio Ratio of S&P500 value to replacement cost
- ▶ Neg S&P500 Earnings growth Absolute or per share earnings decline
- ▶ S&P500 P/E Ratios Ratio of current P/E ratios vs historical average

Market Predictors – Y Charts Analysis

- ▶ Look at 3 discrete periods of market declines
 - ▶ Really old (1950-70)
 - ▶ Mid years (1971-99)
 - ▶ Recent (2000-date)
- ▶ Segment into categories to determine accuracy of prediction
 - ▶ Non-Applicable (N/A)
 - ▶ No signal given
 - ▶ Signal provided before market decline
 - ▶ Signal provided after market decline (too late)
- ▶ Most of the oldest period are N/A
- ▶ Most emphasis is put on the most recent years post 2000

Market Predictions - Discussion

- ▶ Y-Charts have published an 81-page White Paper that goes in great depth on each of these ratios & measures
- ▶ Most importantly, it analyzes which predict well & which not
- ▶ Tried to distill the message as best we could but had to cut out a huge amount of detail
- ▶ For those who wish to download the White paper simply go to www.ycharts.com website with your email address, look for Resources & you will find the White papers
- ▶ They allow free downloads

Market Predictors – The Buffet Rule

Accuracy For Predicting Major Market Declines: The “Buffett Indicator”, 2000-to-Date

Major Decline	% Off ATH	Major Decline	% Off ATH	Major Decline	% Off ATH
1950	-14.02%	1973-74	-48.20%	2000-02	-49.50%
1953	-14.82%	1980-82	-27.11%	2007-09	-56.78%
1956-57	-21.48%	1983-84	-14.38%	2015-16	-14.16%
1959-60	-13.85%	1987	-33.51%	Early 2018	-10.16%
1961-62	-27.97%	1990	-19.92%	Late 2018	-19.78%
1966	-22.18%	1998	-19.34%	2020	-33.93%
1968-70	-36.06%	1999	-12.08%	2022	-21.08%

N/A

No Signal Given

Signal Given Before Decline

Recent period: 4 early signals & 3 no signals

Market Predictors – Inverted Yields

Accuracy For Predicting Major Market Declines: 10-2 Year Yield Spread, 1976-to-Date

Major Decline	% Off ATH	Major Decline	% Off ATH	Major Decline	% Off ATH
1950	-14.02%	1973-74	-48.20%	2000-02	-49.50%
1953	-14.82%	1980-82	-27.11%	2007-09	-56.78%
1956-57	-21.48%	1983-84	-14.38%	2015-16	-14.16%
1959-60	-13.85%	1987	-33.51%	Early 2018	-10.16%
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1966	-22.18%	1998	-19.34%	2020	-33.93%
1968-70	-36.06%	1999	-12.08%	2022	-21.08%

N/A

No Signal Given

Signal Given
Before Decline

Late Signal
Given

Recent period: 3 early
signals, 3 no & 1 late signal

Market Predictors – S&P500 CAPE Ratio

Accuracy For Predicting Major Market Declines: S&P 500 CAPE Ratio, 2000-to-Date

Major Decline	% Off ATH	Major Decline	% Off ATH	Major Decline	% Off ATH
1950	-14.02%	1973-74	-48.20%	2000-02	-49.50%
1953	-14.82%	1980-82	-27.11%	2007-09	-56.78%
1956-57	-21.48%	1983-84	-14.38%	2015-16	-14.16%
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1966	-22.18%	1998	-19.34%	2020	-33.93%
1968-70	-36.06%	1999	-12.08%	2022	-21.08%

N/A

No Signal Given

Signal Given Before Decline

Recent period: 4 no
signals & 3 early signals

Market Predictors – Tobin's Q Ratio

Accuracy For Predicting Major Market Declines: Tobin's Q, 2000-to-Date

Major Decline	% Off ATH	Major Decline	% Off ATH	Major Decline	% Off ATH
1950	-14.02%	1973-74	-48.20%	2000-02	-49.50%
1953	-14.82%	1980-82	-27.11%	2007-09	-56.78%
1956-57	-21.48%	1983-84	-14.38%	2015-16	-14.16%
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1966	-22.18%	1998	-19.34%	2020	-33.93%
1968-70	-36.06%	1999	-12.08%	2022	-21.08%

N/A

No Signal Given

Signal Given Before Decline

Recent period: 4 no
signals & 3 early signals

Market Predictors – S&P500 Earnings

Accuracy For Predicting Major Market Declines:
S&P 500 P/E Ratio, 2000-to-Date

Major Decline	% Off ATH	Major Decline	% Off ATH	Major Decline	% Off ATH
1950	-14.02%	1973-74	-48.20%	2000-02	-49.50%
1953	-14.82%	1980-82	-27.11%	2007-09	-56.78%
1956-57	-21.48%	1983-84	-14.38%	2015-16	-14.16%
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1968-70	-36.06%	1999	-12.08%	2022	-21.08%

N/A	No Signal Given	Signal Given Before Decline	Late Signal Given
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Recent period: 4 no signals, 2 early signals & 1 late

Market Predictors - S&P500 P/E Ratios

Accuracy For Predicting Major Market Declines: S&P 500 P/E Ratio, 2000-to-Date

Major Decline	% Off ATH	Major Decline	% Off ATH	Major Decline	% Off ATH
1950	-14.02%	1973-74	-48.20%	2000-02	-49.50%
1953	-14.82%	1980-82	-27.11%	2007-09	-56.78%
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Recent period: 4 no signals, 2 early & 1 late

Market Predictors - Conclusions

- ▶ No single predictor has a perfect track record
- ▶ None appear reliable enough for decision making
 - ▶ Perhaps a combination may be indicative?
- ▶ “Upper Tier”
 - ▶ The Buffett Indicator vs GDP 4 out of 7
 - ▶ Inverted Yield Curves (short/long) 3 out of 7
 - ▶ S&P500 Cyclically Adjusted 10-yr P/Es 3 out of 7
- ▶ “Lower Tier”
 - ▶ Tobin’s Q Ratio vs Replacement Cost 3 out of 7
 - ▶ Negative S&P500 Earnings Growth 2 out of 7
 - ▶ S&P500 P/E Ratio vs 10 yr history 2 out of 7