

Value Trap Indicator v7.0 – Backtesting Results –

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Executive Summary

Ever since the first version of the Value Trap Indicator was released in April 2015, the tool has consistently proved its ability to identify companies likely to go bankrupt, through simple inputs from financial statements.

After 6 iterative versions of the Value Trap Indicator, mostly to improve user experience and interface, the formula has finally evolved to a v7.0. This latest update maintains the same bankruptcy predictive power of previous versions, but makes fundamental changes to the underlying formula—with the help of powerful computing and broad swathes of data sets.

VTI v7.0 Backtest: 2003-2018

Expanding the scope past previous bankruptcies and into a large dataset of stocks and their key financials, the new formula (v7.0) shows a **predicative** power in avoiding the Value Trap type stocks that are more likely, on average, to underperform a universe of stocks (4,000+) both in frequency and by average total return.

- The 1y, 2y, 3y, and 5y CAGR is calculated after each VTI signal.
- An average of total median performance per year compared to the universe returns a difference of -0.7% CAGR over this examined time period.

The Evolution from v6.0 to v7.0

Not only have the formulas to calculate the VTI score changed, but the application of the score has transformed from a strictly **static** Strong Buy / Strong Sell signal, to an indicator **monitoring adverse developments** in the business (as a “No Buy” / Strong Sell).

- A lack of a dividend payment no longer disqualifies a company automatically.
- More of an emphasis on changes in financials rather than absolute values.
- An average of 18%-25% of companies as a Strong Sell vs 43%-57% in v6.0.
- Much improved signaling of low return stocks with the VTI v7.0 Strong Sell vs v6.0.

The 30 Biggest Bankruptcies – VTI v7.0

Company Name	Date Failed	VTI Signals
THQ	2012	2011
Borders Group	2011	2007
AMR Corp	2011	2008
MF Global	2011	2010
Hollywood Video (Movie Gallery)	2010	2005
Blockbuster	2010	2009, 2008
Spanion	2009	2008
Spectrum Brands	2009	2006
Silicon Graphics	2009	2008
Nortel	2009	2007, 2005
Monaco Coach Corp	2009	2005
Hartmarx Corp	2009	2007
Gottschalks	2009	2008
CIT Group Inc	2009	none
Resolute Forest	2009	n/a
Washington Mutual	2008	2007
Tribune Company	2008	2006
Pilgrim's Corp	2009	2007, 2006
Lehman Brothers	2008	2007
Countrywide Financial	2008	2007
Circuit City	2008	2004
Acclaim Entertainment	2004	2003, 1999
Loral Space & Comm.	2003	2002, 2000
The 3DO Company	2003	2002, 2001
Worldcom	2002	none
WCOM Tracking Stock	2002	2001
Global Crossing	2002	2000
Adelphia Comm.	2002	2000
HomeBase	2001	2001
Enron	2001	2000

Summary: Biggest Bankruptcies

For Value Trap Indicator v1.0 – v6.0, the formula was successful in avoiding 29 out of 30 (97%) of the biggest bankruptcies of the 21st century. In other words, in only 1 stock out of 30 would the investor have been guided to a Strong Buy in a stock that quickly went bankrupt.

With the latest conversion to v7.0, the Value Trap Indicator would've maintained a similar track record. Of the 30 stocks, 27 of 29 (93%) would've flashed a VTI Strong Sell within one of the previous 5 years prior to bankruptcy.

One of the stocks, Resolute Forest, would not qualify in this test due to only 1 year of publicly available stock price data in the company's 10-k. With the new VTI v7.0, at least 2 years of financials are required to be inputted, since the new indicator now looks at the change in VTI values rather than an absolute value independent of context.

Backtest Results – VTI v7.0 vs All Stocks

This first table shows the **median** in 1y and 2y CAGR return on a stock with a VTI v7.0 Strong Sell vs all of the stocks in the universe (4,000+) over the same time period. The final row in the 1y and 2y NET column shows the average of this set of **median** values per year.

The -0.6% average for 1y_NET medians and -0.8% average for 2y_NET medians shows that a VTI v7.0 Strong Sell was most likely to underperform all stocks over the selected time period. Good signal.

MEDIAN	1y_ALL	1y_VTI	1y_NET	2y_ALL	2y_VTI	2y_NET
2003	22.8%	23.9%	1.1%	16.4%	19.0%	2.6%
2004	9.3%	9.4%	0.1%	12.4%	12.9%	0.5%
2005	14.6%	14.8%	0.2%	8.5%	8.3%	-0.2%
2006	2.6%	-5.9%	-8.5%	-15.2%	-25.0%	-9.8%
2007	-32.8%	-44.8%	-12.0%	-12.2%	-11.7%	0.5%
2008	16.6%	35.4%	18.8%	19.0%	27.0%	8.0%
2009	22.7%	18.9%	-3.8%	12.2%	6.9%	-5.3%
2010	0.3%	0.2%	-0.1%	4.9%	5.2%	0.3%
2011	9.9%	9.0%	-0.9%	19.8%	20.5%	0.7%
2012	30.9%	33.3%	2.4%	19.7%	18.9%	-0.8%
2013	7.3%	4.7%	-2.6%	3.0%	-0.8%	-3.8%
2014	-2.4%	-2.7%	-0.3%	3.7%	2.8%	-0.9%
2015	11.3%	10.5%	-0.8%	14.0%	13.8%	-0.2%
2016	15.5%	15.6%	0.1%	3.7%	2.8%	-0.9%
2017	15.4%	11.4%	-4.0%	3.7%	1.6%	-2.1%
2018	15.4%	16.5%	1.1%			
AVG	10.0%	9.4%	-0.6%	7.6%	6.8%	-0.8%