



Trend Capture Driven Risk Control - An Analysis on US Stocks from 2008-10

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Summary

Trend Capture is a powerful tool for risk control as it facilitates significant drawdown reduction during bear market phases that limits losses so that investment portfolios begin their ascent from a higher point when uptrends resume. We present an analysis for the period **January 01, 2008** through **December 31, 2010** on a universe of large capitalisation US stocks to demonstrate the significant performance uplift that investors would have gained from using Trendrating in their investment process. Limiting participation during drawdowns and resuming participation only during the recovery phase is the effective **Risk Control** that investors can bring to their investment process using trend capture. Trendrating offers a robust trend capture model and flexible technology to incorporate trend capture into the investment process.

- *Analysis spans January 01, 2008 to December 31, 2010*
- *Analysis covers 476 stocks*
- *Average percentage drawdown reduction of 67%*
- *Average drawdown using Trendrating was -16.16% versus -58.57% for buy & hold, an average gain of 42.41% due to loss minimisation*

Trend capture offers significant upside potential through loss minimisation, and this is evident from the mean return of **11.07%** from employing the Trendrating investment strategy versus a mean return of **-13.54%** from a buy & hold strategy on the **476** stocks analysed in this study. This return difference of **24.61%** is largely facilitated by the drawdown reduction of **42%**.

1 Framework

Trendrating's **Trend Capture** Analytic captures price trends early, in a robust and highly accurate manner, to offer investors the opportunity to maximise their participation in uptrends and limit drawdowns through minimal participation in downtrends. The Trendrating rating scale ranges from A through D, where ratings of **A** & **B** signal an uptrend whilst ratings of **C** & **D** signal a downtrend. A rating of **B** signals the start of an uptrend while a rating of **A** confirms the uptrend; Trendrating's recommendation is to establish a long position in a security only when its rating changes to an **A**. Downtrends tend to be sharper and thus a rating of **C** is sufficient to exit a position as a high proportion of **C**'s turn into **D**'s that signal strong downtrends. Trendrating's Momentum Analytic carries a high accuracy rate and thus offers investors a robust mechanism for profiting from security price trends.

A robust signal that indicates that the prevailing price trend for a security is one that is negative, is of immense value in terms of damage control. Investors display asymmetric behavioural responses to losses than to gains, and limiting losses on portfolio positions is of paramount importance to them. An early exit from a security whose price is likely to deteriorate places the portfolio in a strong position as it starts the recovery phase from a higher point than the market of peer portfolios whose drawdown is steeper. Market recovery phases can have a steep upward trajectory, so an early indication that an uptrend has begun is key to ensuring maximum participation in the recovery phase.

2 Risk Control Visual

The following set of charts demonstrate the effective **Risk Control** that Trendrating can facilitate to investment portfolios by providing a robust signal of downtrends to limit drawdowns, and an early signal of uptrends to participate in the ensuing recovery. The two signals in tandem help insulate the portfolio from steep drawdowns and provide return uplift through gains achieved in the recovery phase. In each chart, the numeric value adjacent to each character rating on the price series is the percentage performance following the rating until the next rating.

Figure 1 plots the price path of **Apple** during the analysis period along with the **ratings** issued during this period. In **2008**, the stock price experienced a steep fall followed by a period of sideways movement, with the recovery phase starting in the second half of **2009**.

Trendrating provided an early exit signal around the middle of **2008** that limited the drawdown followed by an entry signal shortly after the recovery phase began. The timely exit and entry signals combined to generate a return of **14.1%** versus the buy & hold performance of **6.45%**.

The price evolution of **Unitedhealth** plotted in **Figure 2** is an example where drawdown limitation was of greater importance as the stock had a very steep fall during the analysis period. This is a very good example of stock that should not have been held during this period though the Trendrating model once again provided a timely entry signal to facilitate significant participation in the recovery phase.

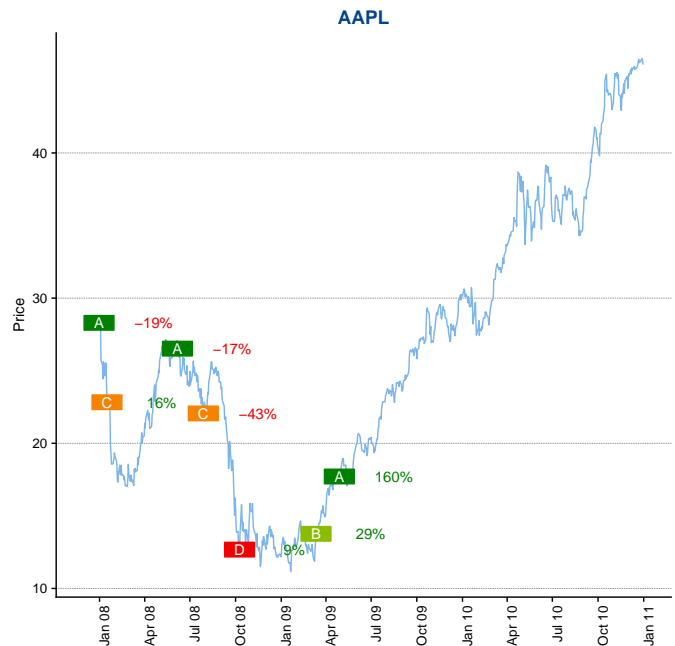


Figure 1: Apple

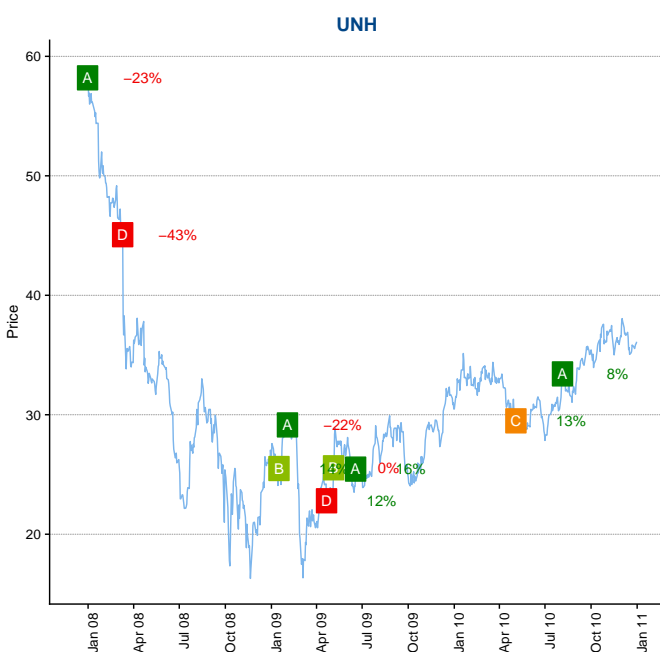


Figure 2: Unitedhealth

The rest of the charts in this section repeat the story of **Figure 1** and **Figure 2**. The charts illustrate the strong **risk control** that Trendrating can bring to investment portfolios and help insulate them from drawdowns and at the same time provide significant uplift from participation in the recovery phase.

An important characteristic of an analytic is its statistical robustness as it must have a high accuracy rate. In addition, the magnitude of the return uplift it provides when correct should be vastly higher than the damage it can cause when it is incorrect.

The **Trendrating** model scores strongly on both counts as the accuracy of its ratings measured by the price evolution following a rating is high and the magnitude of the positive return achieved

when the rating is correct is vastly superior to the magnitude of the negative return experienced when the price evolution following a rating is contrary to expectation.

Figure 3:

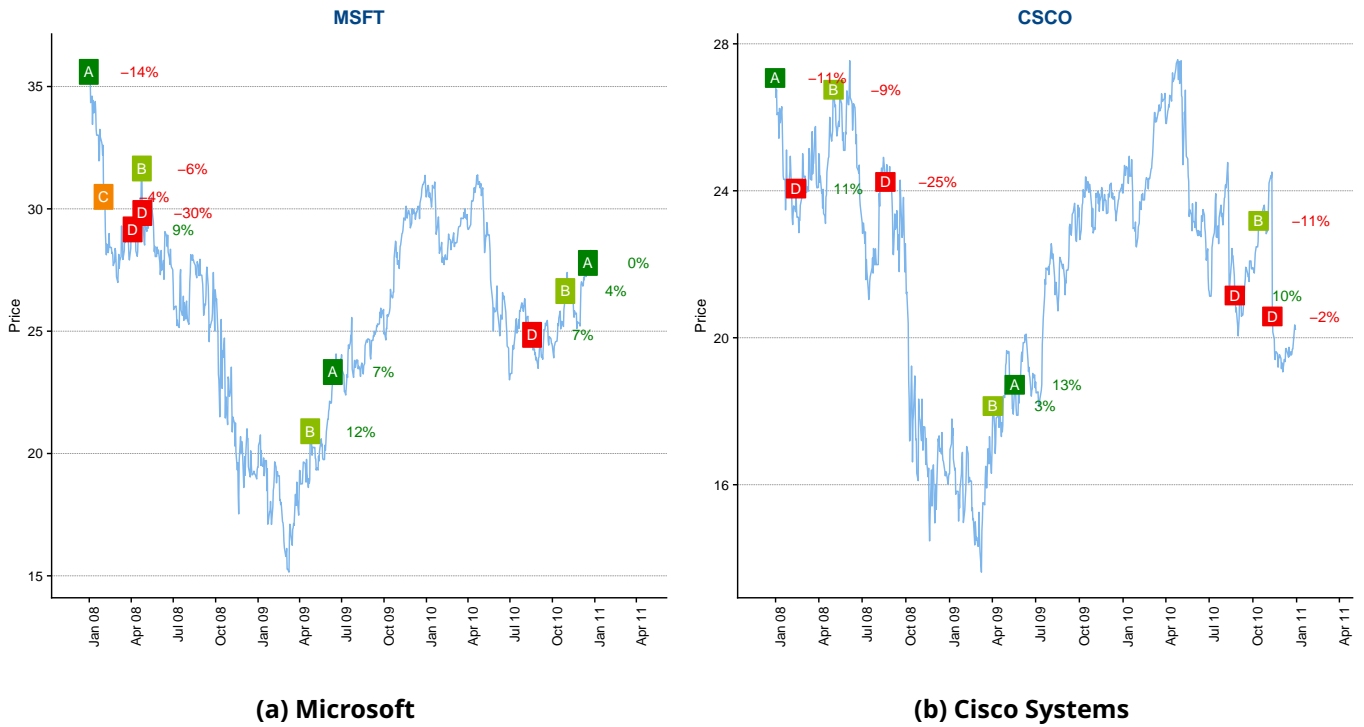


Figure 4:

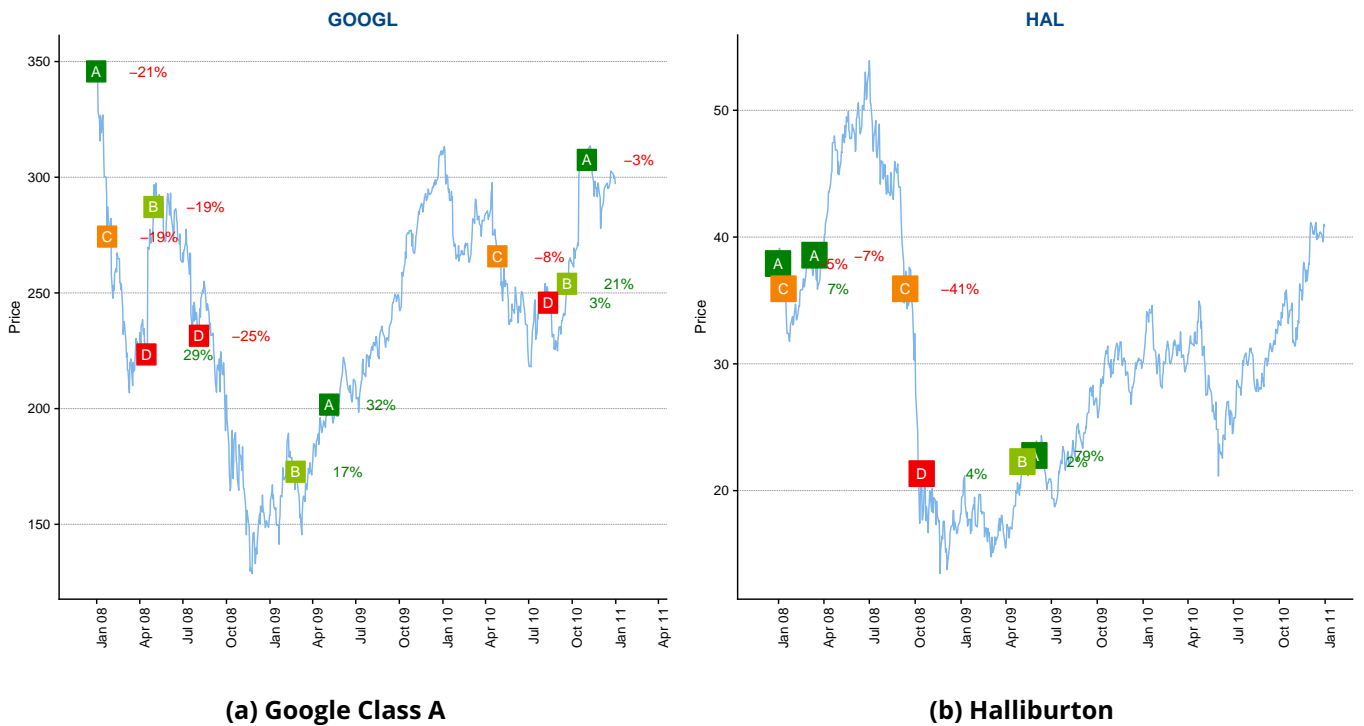
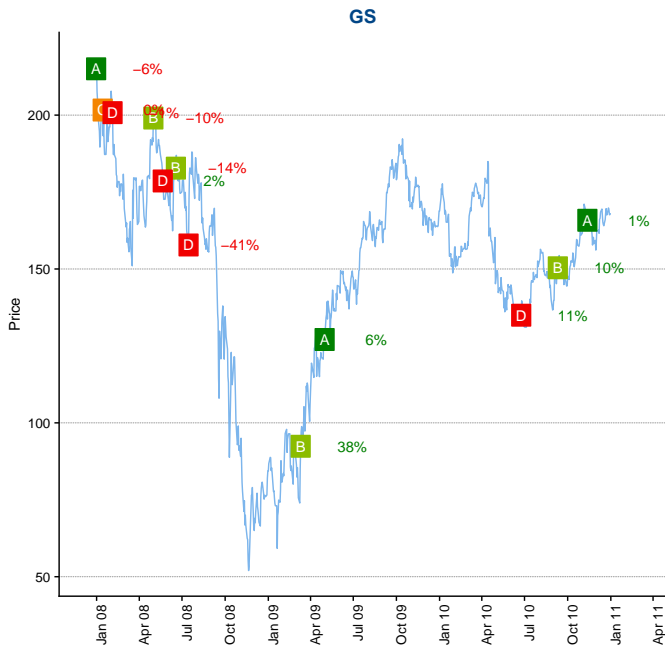
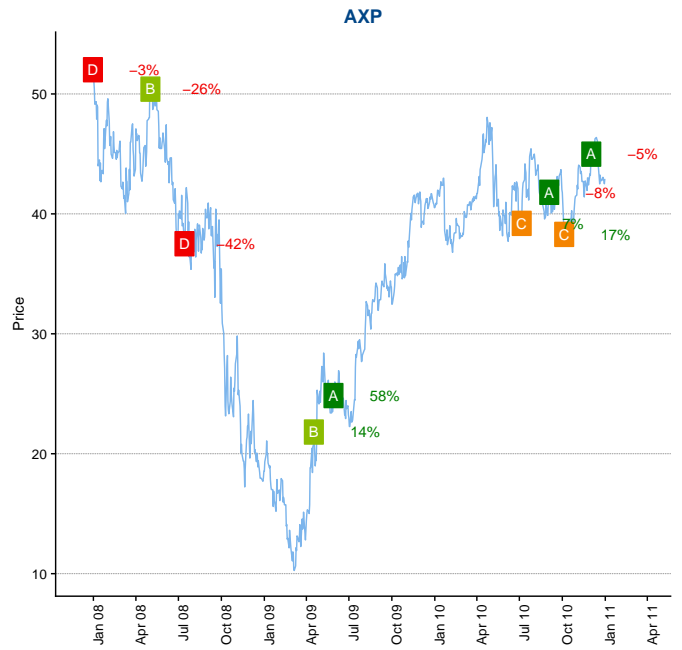


Figure 5:

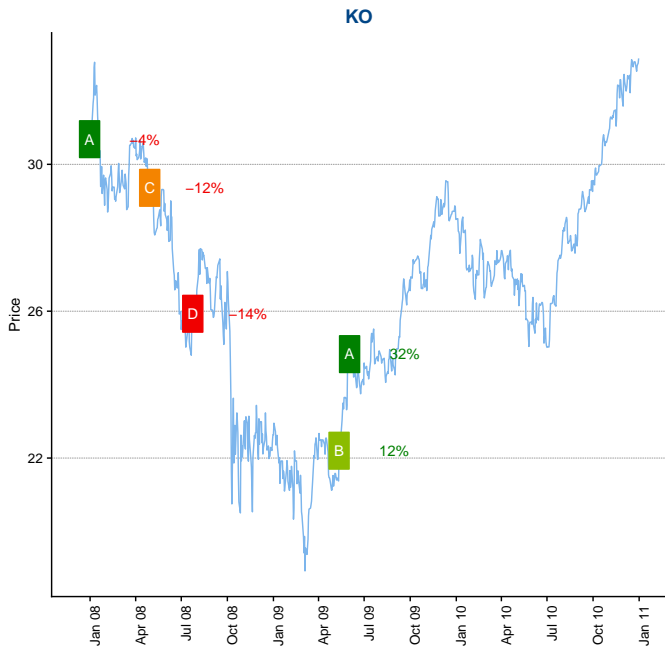


(a) Goldman Sachs

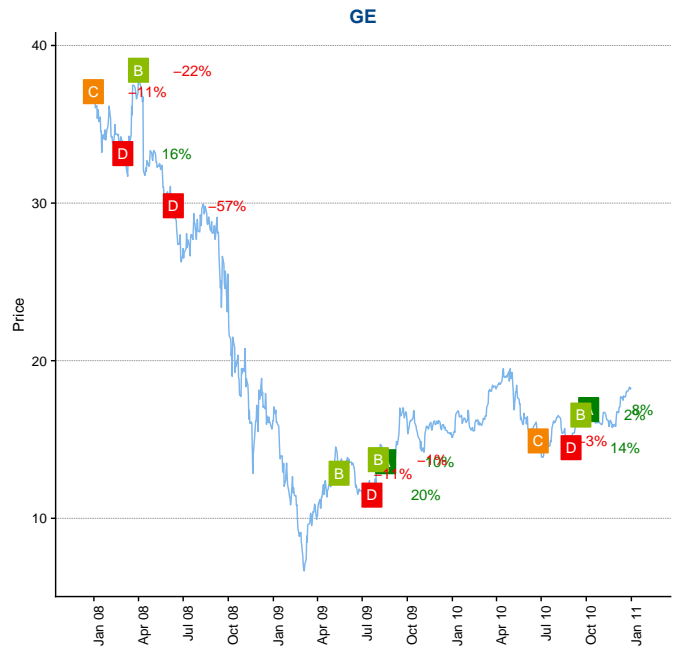


(b) American Express

Figure 6:



(a) Coca-cola



(b) General Electric

3 Portfolio Return Impact

In this section we present two sets of tabular results for drawdown comparison and return uplift respectively. In **Table 1**, we delineate the universe of stocks into five groups based on the level of drawdown experienced between **January 01, 2008** and **December 31, 2010** and present the drawdown analytics for each group.

In each drawdown group, the drawdown experienced for the same set of securities using the Trendrating model is substantially lower than that for the buy & hold strategy, demonstrating the strong drawdown reduction that Trendrating can facilitate. The percentage of drawdown reduction at the group level is at least **39.84%** and as high as **87.11%**.

In **Table 2**, we demonstrate the potential upside that investors can derive by employing Trendrating in their decision making process. The ability to avoid the drawdown losses enables one to begin participation in the recovery period from a higher level as illustrated by the strong return upside over the analysis period.

Drawdown Group (%)	Mean Draw-down (%)	Trendrating Mean Draw-down (%)	Drawdown Reduction (%)	Percentage Draw-down Reduction (%)	Number of Stocks
-20 to 0	-11.90	-7.16	4.74	39.84	15
-40 to -20	-32.34	-18.29	14.05	43.44	82
-60 to -40	-50.66	-16.72	33.94	66.99	155
-80 to -60	-69.28	-18.62	50.66	73.13	132
-100 to -80	-87.52	-11.28	76.24	87.11	92

Table 1: Drawdown Reduction

Trend capture facilitated very strong performance in each return group. Employing the Trendrating model in the decision making process would have generated outperformance in 4 out of the 5 return groups.

The return group **20 to 60** in which Trendrating's performance lagged that of the mean return is due to a few outliers that had extremely sharp recoveries due to exogenous factors.

However, even for this group, Trendrating delivered a very strong performance by delivering a return over

Return Group (%)	Mean Return (%)	Trendrating Mean Re-turn (%)	Return Up-side (%)	Number of Stocks
-100 to -60	-76.42	-17.69	58.73	47
-60 to -20	-35.78	-1.11	34.67	168
-20 to 20	-5.52	1.95	7.47	219
20 to 60	31.05	22.46	-8.58	33
60 to Inf	371.32	568.69	197.37	9

Table 2: Performance

the analysis period of **22.46%** versus a mean return of **31.05%**, a return capture of **72.33%**. It is important to note that employing Trendrating in the decision making process would have resulted in an outperformance in **443** out of a total of **476** stocks in the analysis universe. In other words, Trendrating would have had an accuracy rate of **93%** in terms of its ability to deliver outperformance.

Appendix

A Return Comparison - Trendrating vs. Buy & Hold

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
UIS	Unisys	0	-93	-93	100	2420	715	1705
MOT	Motorola Solutions	0	-81	-81	100	434	92	341
AA	Alcoa	-5	-86	-81	95	330	32	298
RRD	R.r.donnelley\&	-10	-85	-76	89	163	-2	165
FTR	Frontier Com-munications	-30	-58	-27	47	980	820	160
GNW	Genworth Financial	0	-97	-97	100	92	-55	147
BTU	Peabody Energy Corp	-40	-74	-33	45	1141	1000	141
DDS	Dillards	0	-85	-85	100	138	-2	140
WA-MUQ	Washington Mutual	0	-100	-100	100	34	-99	133
HAR	Harman Ind Inc	0	-87	-87	100	76	-52	128
OMX	OfficeMax	0	-91	-91	100	82	-39	121
CBS	Cbs	0	-89	-89	100	72	-48	121
SNDK	Sandisk Corp	0	-84	-84	100	106	-13	119
WYN	Wyndham Worldwide	0	-88	-88	100	90	-14	104
LNC	Lincoln National	0	-91	-91	100	44	-57	101
FITB	Fifth Third Bancorp	0	-96	-96	100	39	-61	100
CITGQ	CIT	0	-100	-100	100	0	-100	100
MTLQQ	Motors Liquidation Co	-2	-98	-97	98	-2	-98	96
X	United States Steel	-6	-86	-80	93	40	-54	95
CC	Circuit City Stores	0	-94	-94	100	0	-93	93
LM	Legg Mason	0	-85	-85	100	35	-59	93
ACAS	American Cap	0	-98	-98	100	0	-93	93
AMD	Advanced Micro Devices	0	-76	-76	100	121	29	92
IP	International Paper	0	-87	-87	100	72	-17	90
BSC	Bear Stearns Companies	0	-95	-95	100	0	-89	89
NCC	National City Corp	0	-92	-92	100	0	-89	89
SSP	E.w. Scripps	-42	-93	-51	55	54	-34	88
HOT	Strw Htl Res Wrlwd	0	-78	-78	100	71	-17	88
HIG	The Hartford Financial Services	-4	-96	-92	96	15	-73	88
CVH	Coventry Health Care	0	-86	-86	100	28	-59	87
BC	Brunswick	0	-88	-88	100	61	-25	87
BAC	Bank Of America	0	-92	-92	100	23	-63	87
WHR	Whirlpool	0	-76	-76	100	84	-1	86
WB	Wachovia	0	-95	-95	100	0	-85	85
AXP	American Express	0	-80	-80	100	63	-22	85
SCN	Prologis	-17	-96	-79	82	5	-78	84
MWW	Monster Worldwide	0	-81	-81	100	36	-46	83
NYT	New York Times	0	-80	-80	100	53	-29	82
NX	Twenty-First Century Fox Inc	0	-76	-76	100	48	-33	81

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
SOV	Sovereign Bncp	0	-86	-86	100	0	-78	78
MER	Merrill Lynch	0	-85	-85	100	0	-78	78
NWL	Newell Brands	0	-82	-82	100	35	-42	77
KEY	Keycorp	0	-80	-80	100	0	-76	76
NVDA	Nvidia	-21	-83	-62	75	30	-45	75
CEG	Constellation Energy	-17	-85	-68	80	8	-66	74
GT	Goodyear Tire & Rubber	0	-88	-88	100	23	-50	73
WFM	Whole Foods Market	0	-80	-80	100	39	-33	72
ROK	Rockwell Automation	-3	-74	-71	96	40	-32	72
RF	Regions Financial	0	-89	-89	100	-7	-78	71
AMP	Ameriprise Financial	0	-78	-78	100	41	-30	71
VLO	Valero Energy	-5	-80	-75	94	-5	-76	71
M	Macy's	0	-78	-78	100	36	-35	71
MU	Micron Technology	0	-77	-77	100	116	46	71
GE	General Electric	0	-82	-82	100	11	-59	71
EXPE	Expedia	-11	-81	-70	87	52	-19	70
MTG	Mgc Investment	0	-96	-96	100	-4	-74	70
MS	Morgan Stanley	0	-83	-83	100	25	-44	69
CNX	Consol Energy	15	-78	-93	120	27	-42	69
ATI	Allegheny Technologies	0	-82	-82	100	21	-48	69
CMA	Comerica	0	-72	-72	100	37	-32	69
AIV	Apartment Investment & Management	-18	-86	-68	79	14	-54	68
STI	Suntrust Banks	0	-89	-89	100	-0	-68	67
LIZ	Kate Spade & Co	0	-92	-92	100	-5	-72	67
TXN	Texas Instruments	0	-59	-59	100	45	-22	67
SLM	Slm	0	-84	-84	100	23	-44	67
DOW	Dow Chemical	0	-84	-84	100	37	-30	67
BDK	Black & Decker	0	-71	-71	100	59	-7	66
TIE	Titanium Metals	-7	-84	-78	92	13	-53	66
A	Agilent Technologies	-4	-66	-62	94	50	-15	65
ANF	Abercrombie & Fitch	-11	-82	-71	87	9	-56	65
TIF	Tiffany	0	-63	-63	100	58	-7	64
KLAC	Kla-tencor	0	-68	-68	100	38	-25	63
SHLD	Sears	0	-72	-72	100	44	-18	62
EK	Eastman Kodak	0	-90	-90	100	-18	-81	62
VIAB	Viacom	-13	-73	-60	83	28	-32	60
AVY	Avery Dennison	0	-68	-68	100	28	-31	60
NTAP	Netapp	0	-58	-58	100	97	38	60
JWN	Nordstrom	0	-79	-79	100	61	2	59
JCI	Johnson Controls	-4	-76	-72	95	34	-24	58
MAS	Masco	0	-83	-83	100	22	-36	58
JDSU	JDS Uniphase Corporation	0	-90	-90	100	-4	-62	58
HBAN	Huntington Bancshares	0	-93	-93	100	-17	-75	58
OR01	Citigroup	0	-97	-97	100	-31	-89	57

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
CI	Cigna	-23	-84	-61	73	23	-34	57
COL	Rockwell Collins	-3	-61	-58	95	34	-23	57
HST	Host Hotels & Resorts	0	-80	-80	100	25	-32	56
LEN	Lennar	0	-80	-80	100	27	-29	56
DFS	Discover Financial Services	0	-68	-68	100	53	-2	55
ZION	Zions Bancorp	0	-86	-86	100	-18	-73	55
AIG	American International	0	-99	-99	100	-43	-97	54
CFC	Countrywide Financial	0	-54	-54	100	0	-52	52
NBR	Nabors Industries	6	-69	-75	108	32	-20	52
SBUX	Starbucks	0	-65	-65	100	65	13	52
CTX	Centex Corp	0	-79	-79	100	-1	-53	51
AES	Aes	-15	-77	-62	81	13	-38	51
TXT	Textron	-41	-95	-54	56	-22	-74	51
IR	Ingersoll-Rand	0	-75	-75	100	-4	-55	51
NI	Nisource	0	-58	-58	100	32	-19	51
IAC	IAC InterActiveCorp	0	-49	-49	100	28	-23	51
MET	Metlife	0	-80	-80	100	8	-43	50
DUK	Duke Energy	-10	-41	-32	77	206	156	50
SPG	Simon Property	-11	-70	-58	84	42	-8	50
TEX	Terex	-29	-88	-59	67	-20	-70	50
ZBH	Zimmer Biomet	0	-51	-51	100	39	-11	49
EOG	Eog Resources	13	-49	-62	126	58	9	49
ESV	EnSCO International	6	-63	-69	110	16	-33	49
TWX	Time Warner	0	-57	-57	100	0	-49	49
MI	Marshall & Ilsley	0	-88	-88	100	-31	-79	49
CCL	Carnival	0	-66	-66	100	20	-29	48
NYX	NYSE Euronext	-8	-83	-74	90	-23	-71	48
CSX	Csx	14	-52	-66	126	59	10	48
PDCO	Patterson Companies	0	-52	-52	100	30	-18	48
EIX	Edison International	3	-56	-59	105	12	-35	47
FO	Beam Inc	0	-75	-75	100	6	-40	46
RIG	Transocean	0	-70	-70	100	4	-42	46
ALL	Allstate	0	-73	-73	100	4	-42	46
CIEN	Ciena	-13	-85	-72	85	-22	-68	46
GS	Goldman Sachs	-6	-76	-70	92	25	-21	46
FCX	Freeport-mcmoran	-24	-84	-60	72	22	-22	44
ABK	AMBAC Financial Grp	0	-99	-99	100	-53	-97	44
MDP	Meredith	-8	-80	-72	89	-0	-44	44
ITW	Illinois Tool Works	0	-51	-51	100	33	-10	44
QWST	Qwest Communications	0	-69	-69	100	4	-40	44
FII	Federated Investors	-5	-61	-55	91	10	-33	43
T	At&t	0	-48	-48	100	10	-33	42
NVLS	Novellus Systems	0	-62	-62	100	27	-15	42
PFG	Principal Financial	-29	-91	-63	69	-23	-65	42
TEL	TE Connectivity	-5	-80	-74	93	-9	-52	42

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
EBAY	Ebay	-19	-69	-50	72	13	-29	42
BA	Boeing	0	-66	-66	100	3	-38	42
COF	Capital One Financial	0	-82	-82	100	22	-19	41
OMC	Omnicom	0	-54	-54	100	22	-18	40
PBI	Pitney Bowes	0	-53	-53	100	-0	-40	40
S	Sprint Nextel International	0	-90	-90	100	-32	-72	40
IGT	Game Technology PLC	-35	-84	-49	58	-18	-57	40
EA	Electronic Arts	-21	-75	-54	72	-30	-70	39
LLY	Eli Lilly	1	-49	-49	101	6	-33	39
AET	Aetna	-13	-69	-56	81	-6	-45	39
TDC	Teradata	0	-58	-58	100	53	15	39
SNA	Snap-on	7	-57	-64	112	26	-12	39
WY	Weyerhaeuser	-14	-74	-60	81	-3	-41	38
TYC	Tyco International	-14	-61	-47	77	-14	-52	38
MOLX	Molex	-13	-64	-52	80	17	-21	38
HAL	Halliburton	-12	-64	-53	82	17	-21	37
MAR	Marriott International	0	-63	-63	100	18	-19	37
RAI	Reynolds American	-3	-51	-48	94	17	-20	37
PCP	Precision Castparts	-16	-66	-50	75	16	-20	37
CINF	Cincinnati Financial	0	-54	-54	100	3	-34	36
JAVA	Sun Microsystems	0	-84	-84	100	-12	-48	36
LXK	Lexmark Intl	-6	-58	-52	89	11	-25	36
PCAR	Paccar	0	-62	-62	100	3	-33	36
CCE	Coca-Cola Enterprises	-6	-70	-64	91	18	-19	36
CTSH	Cognizant Technology Solutions	-15	-57	-42	74	69	33	36
ETN	Eaton Corp PLC	-23	-69	-46	67	2	-34	36
WPO	Graham Holdings	-5	-61	-56	91	-9	-44	36
COP	Conocophillips	-17	-60	-43	72	-7	-42	36
TLAB	Tellabs	0	-49	-49	100	22	-13	36
MBI	Mbia	0	-88	-88	100	-43	-79	35
SYK	Stryker	-16	-58	-43	73	2	-33	35
F	Ford Motor	0	-81	-81	100	83	49	35
POM	Pepco Holdings	-17	-65	-48	74	-8	-43	35
EMN	Eastman Chemical	-11	-71	-60	84	33	-1	34
AFL	Aflac	-2	-82	-79	97	8	-26	34
CAG	Conagra Brands	0	-42	-42	100	30	-3	33
CTXS	Citrix Systems	-11	-49	-37	77	43	9	33
TSO	Tesoro	-21	-86	-65	75	-38	-72	33
GOOGL	Google Class A	-21	-63	-42	67	22	-10	32
CAH	Cardinal Health	0	-51	-51	100	20	-12	32
BHI	Baker Hughes	-17	-68	-51	75	-18	-50	32
GME	Gamestop Corp New	-16	-72	-56	78	-33	-65	32
APA	Apache	4	-52	-57	108	28	-4	32
CMI	Cummins	-25	-72	-48	66	3	-28	31
NOC	Northrop Grumman	-1	-57	-56	99	2	-29	31
SE	Spectra Energy	-9	-55	-46	84	11	-21	31

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
PFE	Pfizer	0	-49	-49	100	11	-20	31
MRK	Merck \& Co	-21	-64	-43	68	-6	-37	31
MRK	Merck	-21	-64	-43	68	-6	-37	31
DE	Deere	-28	-73	-45	62	-11	-42	31
AEE	Ameren	-23	-64	-40	63	-18	-48	31
DD	E.i. Du Pont De Nemours	-14	-63	-49	78	7	-24	31
NOV	National Oilwell Varco	-25	-76	-50	67	-10	-40	30
AYE	Allegheny Energy	-18	-68	-50	74	-34	-63	30
MTB	M\&t Bank	0	-63	-63	100	11	-18	29
RTN	Raytheon	3	-45	-47	106	14	-15	29
RX	IMS Health	-15	-57	-42	74	20	-9	29
CAT	Caterpillar	-11	-69	-58	84	7	-21	29
ASH	Ashland	-26	-88	-62	70	12	-16	29
CME	Cme	-26	-77	-51	66	-22	-51	29
FDX	Fedex	0	-62	-62	100	22	-6	28
WMB	Williams Companies	-33	-73	-40	55	-13	-41	28
FHN	First Horizon National	0	-72	-72	100	9	-19	28
JCP	Jc Penney	0	-68	-68	100	-11	-40	28
APD	Air Products \& Chemicals	-15	-58	-43	75	10	-18	28
CMS	Cms Energy	-11	-49	-38	77	18	-10	28
TMK	Torchmark	-11	-72	-61	85	-0	-27	27
ADSK	Autodesk	-32	-76	-44	58	-22	-49	27
MMM	3m	-8	-50	-42	84	25	-2	27
BJS	BJ Services Co	-17	-64	-47	73	4	-23	27
PAYX	Paychex	0	-44	-44	100	11	-15	27
NSM	Nat Semiconductor	-18	-59	-41	69	-6	-32	27
MSFT	Microsoft	-14	-57	-43	75	12	-14	26
INTC	Intel	-21	-55	-34	62	3	-23	26
IFF	International Flavors \& Fragrances	-11	-48	-38	78	12	-15	26
AEP	American Electric Power	-8	-48	-39	82	1	-25	26
STZ	Constellation Brands	-12	-54	-42	78	-7	-33	26
MRO	Marathon Oil	-24	-68	-44	65	-23	-49	26
AIZ	Assurant	-30	-81	-51	63	-30	-56	26
PLL	Pall Corp	-8	-53	-45	85	15	-10	25
CSCO	Cisco Systems	-11	-50	-39	78	14	-12	25
GD	General Dynamics	-12	-59	-47	80	1	-23	25
WLP	Anthem	-23	-66	-43	65	-9	-34	25
YHOO	Yahoo	-15	-62	-47	76	-3	-28	25
ABC	Amerisource-bergen	0	-39	-39	100	41	16	25
LUK	Leucadia National	-23	-77	-54	70	-25	-49	25
TEG	Integrus Energy	-15	-61	-46	76	6	-19	25
TER	Teradyne	-29	-71	-42	59	28	4	24
CA	Ca	-10	-42	-32	76	14	-10	24
AMAT	Applied Materials	-12	-54	-42	78	2	-22	24
CNP	Centerpoint Energy	-7	-48	-41	84	8	-15	24
MO	Altria	-5	-38	-33	86	7	-16	23
TGT	Target	0	-49	-49	100	20	-3	23
STT	State Street	-15	-82	-67	82	-24	-46	22
WFR	SunEdison	-50	-88	-38	43	-62	-85	22
KMB	Kimberly-clark	-3	-37	-35	93	14	-8	22
DTE	Dte Energy	-4	-46	-43	92	21	-1	22
SUN	Sunoco	-27	-70	-43	61	-42	-64	22

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
WAG	Walgreens Boots Alliance	0	-44	-44	100	18	-4	21
STR	Questar Corp	-15	-59	-44	74	-2	-23	21
BK	Bank Of New York Mellon	-11	-63	-52	83	-21	-43	21
UPS	United Parcel Service	0	-46	-46	100	2	-19	21
IPG	Interpublic Group Of Companies	-21	-68	-47	69	11	-9	20
WFT	Weatherford International	-51	-75	-23	31	-51	-72	20
GPC	Genuine Parts	0	-46	-46	100	2	-18	20
UNH	Unitedhealth	-23	-72	-49	69	-27	-48	20
EXC	Exelon	-17	-51	-34	67	-20	-40	20
SWY	Safeway Inc	-15	-50	-35	70	-19	-38	19
HON	Honeywell International	-25	-62	-37	59	-17	-36	19
NOVL	Novell	-11	-57	-46	81	-21	-40	19
SLB	Schlumberger	-26	-64	-38	59	-15	-34	19
R	Ryder System	0	-59	-59	100	6	-12	19
XTO	XTO Energy Inc	-4	-48	-44	92	9	-9	19
L	Loews	-32	-64	-33	51	-9	-28	18
HES	Hess	-8	-62	-54	88	-22	-40	18
JNPR	Juniper Networks	-20	-62	-42	68	-2	-20	18
HSP	Hospira	-10	-50	-40	81	37	20	17
UTX	United Technologies	-18	-51	-33	64	8	-9	17
GENZ	Genzyme General	-17	-36	-18	52	-17	-34	17
RRC	Range Resources	-5	-48	-42	89	14	-3	17
KO	Coca-cola	-4	-38	-34	89	10	-7	17
EMC	EMC Corp	-19	-52	-33	63	11	-6	17
GLW	Corning	-20	-67	-47	70	-3	-20	17
VZ	Verizon Communications	-3	-42	-39	92	-7	-24	17
PEP	Pepsico	-13	-40	-26	67	-4	-20	16
MCK	Mckesson	-20	-56	-36	64	12	-5	16
SII	Smith International	-38	-74	-37	49	-47	-63	16
DVN	Devon Energy	-8	-56	-48	86	-1	-17	16
OXY	Occidental Petroleum	-4	-47	-44	92	21	6	16
EMR	Emerson Electric	-26	-56	-30	53	-9	-25	15
AGN	Allergan	-16	-54	-38	70	13	-2	15
EP	El Paso Corporation	-28	-69	-41	59	-28	-43	15
CSC	Computer Sciences	-4	-51	-47	93	31	16	15
DOV	Dover	-15	-52	-37	71	5	-10	15
TRV	Travelers Companies	-11	-43	-32	75	7	-7	15
DYNIQ	Dynegy	-35	-85	-50	59	-60	-75	14
LUV	Southwest Airlines	-17	-59	-42	72	8	-6	14
DIS	Walt Disney	-11	-52	-40	78	14	-0	14
LLL	L-3 Communications	-14	-46	-31	69	-4	-18	14
ADI	Analog Devices	-15	-49	-35	70	13	-0	14
FLR	Fluor	-25	-59	-34	58	-25	-38	13
COST	Costco Wholesale	-19	-45	-26	58	-2	-15	13
MDT	Medtronic	-20	-52	-31	61	1	-13	13
HPQ	Hewlett-Packard	-17	-49	-33	66	15	2	13
BAX	Baxter International	8	-20	-28	138	14	1	13

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
GPS	Gap	-11	-55	-45	81	11	-2	12
EFX	Equifax	-10	-46	-35	77	-3	-15	12
SRE	Sempra Energy	-14	-41	-27	65	2	-10	12
ETR	Entergy	-23	-49	-27	54	-20	-32	12
FIS	Fidelity National Information Services	-8	-46	-39	83	13	1	12
PH	Parker-hannifin	-33	-63	-30	48	-17	-28	11
PBG	Pepsi Bottling	-10	-58	-48	83	6	-5	11
NEE	Nextera Energy	-9	-45	-36	80	-11	-22	11
AKAM	Akamai Technologies	-12	-73	-62	84	-16	-27	11
PGR	Progressive	-10	-48	-38	78	4	-6	10
PG	Procter & Gamble	-18	-40	-22	56	-8	-17	10
MCHP	Microchip Technology	-21	-47	-26	56	2	-8	9
NSC	Norfolk Southern	-3	-47	-44	94	13	4	9
ETFC	Etrade Financial	0	-83	-83	100	-42	-51	9
ADM	Archer Daniels Midland	-28	-67	-39	58	-24	-33	9
MON	Monsanto	-6	-41	-35	86	-18	-27	9
HUM	Humana	-44	-75	-31	41	-34	-42	8
AAPL	Apple	-33	-61	-28	46	14	6	8
BMJ	Bristol-myers Squibb	0	-35	-35	100	2	-5	7
MYL	Mylan N.V.	0	-59	-59	100	38	31	7
WEN.2	Wendy's Intl	-19	-26	-6	25	-19	-26	6
BF.B	Brown-forman	-15	-38	-23	61	-4	-10	6
LLTC	Linear Technology	-21	-42	-20	48	2	-4	6
KR	Kroger	-8	-27	-19	71	-17	-23	6
FRX	Forest Laboratories	-19	-48	-29	60	-7	-12	5
AVB	Avalonbay Communities	-35	-57	-22	39	-8	-13	5
PPL	Ppl	-24	-53	-29	55	-34	-38	4
VMC	Vulcan Materials Co	-32	-56	-25	44	-29	-33	4
CVX	Chevron	-18	-40	-21	54	-14	-18	4
LH	Laboratory Corp Of America	-13	-29	-16	55	3	-1	4
NUE	Nucor	-7	-57	-50	87	-18	-21	4
HSY	The Hershey	-5	-22	-17	77	-6	-9	4
CBH	Commerce Bancorp NJ	-5	-8	-4	43	-5	-8	4
VRSN	Verisign	-23	-55	-31	57	-33	-36	3
JNS	Janus Capital	-63	-88	-25	28	-56	-59	3
AN	Autonation	0	-73	-73	100	25	22	2
D	Dominion Resources	-27	-42	-15	36	-16	-18	2
SO	Southern	-15	-31	-16	50	-12	-14	2
XOM	Exxon Mobil	-20	-34	-13	40	-25	-27	2
KBH	Kb Home	0	-63	-63	100	-35	-37	2
TE	Teco Energy	-19	-50	-31	61	-4	-6	1
TSN	Tyson Foods	-19	-71	-52	73	-19	-20	1
EQR	Equity Residential	-27	-54	-27	51	-6	-7	1
JEC	Jacobs Engineering	-41	-73	-31	43	-60	-61	1
NBL	Noble Energy	-22	-58	-37	63	-9	-10	1
GAS	Nicor	-13	-35	-21	61	0	-1	1

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
PCL	Plum Creek Timber Co	-30	-48	-18	37	-17	-18	1
AOC	Aon plc	-14	-28	-14	50	-19	-20	0
MUR	Murphy Oil	-37	-56	-19	34	-36	-36	0
CM-CSA	Comcast	-10	-39	-28	73	-8	-8	0
PX	Praxair	-17	-46	-29	63	-9	-9	0
TT	Trane	-6	-6	0	-0	-0	-0	0
HET	Harrah's Entertainment Corp	-1	-1	0	-0	1	1	0
PNW	Pinnacle West Capital	-33	-46	-13	28	-14	-14	-0
CVS	Cvs Health	-17	-40	-22	56	-19	-19	-0
ITT	ITT Inc.	-31	-51	-20	40	-25	-25	-0
BBY	Best Buy	-24	-67	-42	63	-25	-25	-0
GR	Goodrich	-38	-62	-24	39	-10	-9	-1
PEG	Public Service Enterprise	-26	-51	-25	49	-33	-32	-1
GIS	General Mills	0	-17	-17	102	23	24	-1
NKE	Nike	-19	-40	-21	52	2	3	-1
IBM	IBM	-4	-34	-29	87	20	21	-1
FE	Firstenergy	-37	-51	-13	26	-38	-36	-2
CCU.1	Clear Channel Commun.	0	-22	-22	100	2	4	-2
BCR	C R Bard	-19	-26	-7	26	-20	-18	-2
EXPD	Expeditors International Of Washington	-6	-46	-40	87	-24	-22	-2
BSX	Boston Scientific	-14	-53	-39	74	-25	-23	-3
CTL	Centurylink	-31	-47	-17	35	-15	-13	-3
AW	Allied Waste	-11	-29	-17	61	-11	-8	-3
CB	Chubb Corp	-14	-36	-22	62	-13	-10	-3
ABT	Abbott Laboratories	-14	-26	-12	48	-7	-4	-3
TAP	Molson Coors Brewing	-16	-39	-24	60	-16	-13	-3
PTV	Pactiv Corp	-9	-60	-50	84	-13	-9	-4
HPC	Hercules	-34	-31	3	-9	-5	-1	-4
SCHW	Charles Schwab	-32	-56	-24	43	-30	-26	-4
WMT	Wal-mart Stores	0	-4	-4	100	8	12	-4
MKC	Mccormick	-17	-25	-8	31	-9	-5	-5
ED	Consolidated Edison	-21	-33	-12	35	-12	-7	-5
CLX	Clorox	-17	-30	-13	44	-11	-6	-5
COV	Covidien	-25	-37	-12	31	-25	-20	-6
APC	Anadarko Petroleum	-37	-59	-22	37	-11	-5	-6
PPG	Ppg Industries	-42	-59	-17	29	-23	-17	-6
JNJ	Johnson \& Johnson	-16	-30	-14	47	-10	-3	-6
ORCL	Oracle	-20	-39	-19	49	2	9	-7
JBL	Jabil Circuit	-52	-79	-28	35	7	14	-7
CPB	Campbell Soup	-20	-30	-10	33	-12	-5	-7
XLNX	Xilinx	-12	-33	-22	65	7	15	-7
HNZ	Heinz	-25	-34	-9	27	-16	-8	-8
WWY	Wrigley	0	-7	-7	100	28	37	-8
BMS	Bemis	-15	-38	-22	59	-0	8	-9
KFT	Mondelez International Inc.	-22	-36	-14	39	-25	-17	-9
DHR	Danaher	-38	-45	-7	16	-23	-14	-9
STJ	St Jude Medical Inc	-5	-37	-32	87	-19	-9	-9
PGN	Progress Energy	-23	-35	-12	35	-25	-15	-10

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
HCBK	Hudson City Bancorp	-15	-43	-28	65	-18	-9	-10
MCO	Moody's	-11	-56	-45	80	-35	-25	-10
K	Kellogg	-22	-32	-9	30	-9	1	-10
PCG	Pg \&e	-30	-31	-1	2	-7	4	-10
KIM	Kimco Realty	-76	-81	-5	6	-73	-63	-10
ADBE	Adobe Systems	-43	-63	-20	32	-25	-14	-11
XEL	Xcel Energy	-22	-28	-6	21	-17	-6	-11
PNC	Pnc Financial Services	-38	-72	-34	47	-30	-20	-11
ESRX	Express Scripts Holding	-25	-40	-15	37	7	18	-11
BNI	Burlington Northern	-20	-38	-19	48	7	18	-11
ECL	Ecolab	-35	-42	-7	17	-24	-13	-11
DHI	D.r. Horton	-13	-67	-54	81	-29	-17	-12
TJX	Tjx Companies	-10	-36	-26	73	15	27	-12
GILD	Gilead Sciences	-19	-19	0	-0	-18	-6	-13
HOG	Harley-davidson	-63	-82	-19	23	-59	-46	-13
VAR	Varian Medical Systems	-33	-47	-14	30	-23	-10	-13
PKI	Perkinelmer	-44	-58	-13	23	-34	-21	-13
JPM	Jpmorgan Chase	-32	-64	-32	50	-18	-5	-13
MMC	Marsh \& Mclennan Cos	-26	-33	-7	20	-30	-17	-13
SYY	Sysco	-33	-38	-5	13	-24	-10	-14
YUM	Yum Brands	-24	-42	-18	42	-22	-9	-14
HD	The Home Depot	0	-33	-33	100	-7	7	-14
LMT	Lockheed Martin	-35	-45	-10	22	-43	-28	-14
BMC	BMC Software	-16	-38	-22	58	-2	13	-15
BXP	Boston Properties	-50	-66	-15	23	-42	-27	-15
EQ	Embarq	-37	-49	-12	25	-30	-15	-15
WM	Waste Management	-23	-32	-9	29	-12	3	-15
BDX	Becton Dickinson	-22	-28	-5	20	-21	-6	-15
SEE	Sealed Air	-31	-55	-24	44	-21	-6	-16
CHK	Chesapeake Energy	-53	-71	-18	26	-50	-34	-16
INTU	Intuit	-39	-36	3	-9	-19	-3	-17
WYE	Wyeth	-20	-32	-12	37	-3	14	-17
BEN	Franklin Resources	-52	-66	-14	21	-25	-8	-17
MCD	Mcdonald's	-14	-14	0	-0	-11	6	-17
CTAS	Cintas	-28	-46	-18	40	-41	-23	-18
EDS	Electronic Data Systems-EDS	0	-23	-23	100	2	20	-18
DELL	Dell	-62	-67	-6	9	-60	-41	-19
SHW	Sherwin-williams	-11	-26	-15	59	-13	6	-20
AVP	Avon Products	-48	-62	-13	21	-40	-20	-20
GWW	Ww Grainger	-24	-32	-7	23	-9	11	-20
SAF	Safeco Corp	0	-24	-24	100	2	23	-21
WAT	Waters	-59	-61	-2	3	-42	-22	-21
CL	Colgate-palmolive	-37	-30	7	-23	-15	5	-21
CHRW	C.h.robinson Worldwide	-18	-30	-12	41	-12	9	-21
BRCM	Broadcom Corp	-28	-48	-20	41	-1	20	-21

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
CELG	Celgene	-6	-18	-12	67	-0	20	-21
CPWR	Compuware Corp	-34	-41	-7	18	-40	-19	-21
ADP	Automatic Data Processing	-39	-30	9	-30	-25	-4	-22
VNO	Vornado Realty Trust	-55	-67	-12	17	-42	-20	-22
UNP	Union Pacific	-34	-46	-13	27	-20	2	-22
UNM	Unum	-46	-66	-20	30	-40	-18	-22
TMO	Thermo Fisher Scientific	-50	-50	-0	0	-40	-17	-23
WU	The Western Union	-50	-57	-7	12	-46	-22	-23
LEG	Leggett \& Platt	-30	-41	-12	28	-7	17	-24
BLL	Ball	-26	-37	-11	30	-10	15	-25
USB	Us Bancorp	-54	-72	-18	25	-54	-29	-25
WFC	Wells Fargo	-32	-73	-41	57	-36	-11	-25
SPLS	Staples	-34	-41	-7	18	-19	7	-25
EL	Estee Lauder Companies	-40	-54	-14	26	-15	11	-25
BBT	Bb \&t	-36	-57	-20	36	-43	-17	-26
BUD	Anheuser-Busch	-13	-13	0	-0	5	31	-26
DRI	Darden Restaurants	0	-51	-51	100	0	27	-26
PRU	Prudential Financial	-78	-88	-10	11	-73	-47	-26
APOL	Apollo Educat Grp	-41	-41	0	-0	-40	-14	-26
FISV	Fiserv	-51	-48	4	-8	-39	-13	-26
FDO	Family Dollar Stores	0	-18	-18	100	18	45	-27
BRL	Barr Pharmaceuticals	-2	-28	-26	94	-4	24	-28
SIAL	Sigma Aldrich	-41	-42	-1	2	-35	-7	-28
UST	UST Inc	-9	-9	0	-0	-1	27	-28
MIL	Millipore	-42	-39	3	-7	-29	-1	-28
KG	King Pharmaceuticals	-29	-40	-11	27	-9	20	-29
MWV	MeadWestvaco	-66	-75	-9	12	-38	-9	-29
HAS	Hasbro	-15	-17	-2	11	-4	25	-29
NTRS	Northern Trust	-61	-55	6	-10	-61	-32	-29
NEM	Newmont Mining	-28	-56	-28	49	-33	-3	-30
MAT	Mattel	-42	-45	-3	7	-26	5	-31
LTD	L Brands	-57	-67	-10	14	-30	2	-32
MHS	Medco Health Solutions	-46	-39	8	-20	-7	26	-33
TROW	T Rowe Price	-62	-65	-4	6	-47	-13	-34
ALTR	Altera Corp.	-28	-31	-3	9	-17	17	-35
QLGC	QLogic Corp	-30	-37	-7	18	-2	33	-35
CVG	Convergys	-74	-75	-1	2	-70	-35	-36
DGX	Quest Diagnostics	-25	-24	2	-6	-22	14	-36
BIIB	Biogen	-35	-31	3	-10	-43	-6	-37
ACS	Affiliated Computer	-29	-21	8	-38	-5	32	-37
PSA	Public Storage	-32	-35	-2	7	-26	11	-37
AZO	Autozone	-19	-26	-7	28	-6	32	-38
JNY	Jones Group	-66	-84	-18	22	-39	0	-40
RHI	Robert Half International	-37	-47	-10	21	-41	-1	-40
AMGN	Amgen	0	-14	-14	100	-19	22	-41
LSI	LSI	-51	-54	-3	5	-28	13	-41
QCOM	Qualcomm	-20	-26	-6	23	-25	18	-42
PHM	Pulte group	-59	-32	26	-81	-49	-5	-44

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
HRB	H. \& R.block	-34	-25	9	-37	-23	22	-45
LOW	Lowe's Companies	-25	-41	-16	38	-44	3	-47
VFC	Vf	-40	-42	-2	4	-41	7	-48
RSHCQ	RS Legacy Corp	-55	-61	-6	10	-34	16	-49
KSS	Kohl's	-46	-45	0	-1	-35	18	-53
THC	Tenet Healthcare	-65	-82	-18	22	-49	6	-55
SYMC	Symantec	-46	-38	8	-21	-45	11	-56
AMZN	Amazon.com	-51	-62	-11	18	-15	45	-60
ROH	Rohm \& Haas	-21	-16	6	-36	-15	49	-64
BBBY	Bed Bath \& Beyond	-54	-42	12	-29	-35	31	-66
SNV	Synovus Financial Corp	-66	-86	-21	24	-59	31	-90
LEH	Lehman Bros	0	-52	-52	100	-55	50	-105
BIG	Big Lots	0	-21	-21	100	-26	81	-107
FNMA	Fannie Mae	0	-33	-33	100	0	162	-162
SVU	Supervalu	-23	-76	-53	70	-37	137	-174
FMCC	Freddie Mac	0	-32	-32	100	0	177	-177

Table 3: Drawdown and Return Comparison