



Trend Capture Driven Risk Control - An Analysis on Developed Europe 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 Developed Europe 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 534 stocks*
- *Average percentage drawdown reduction of 75%*
- *Average drawdown using Trendrating was -12% versus -60% for buy & hold, an average gain of 48% due to loss minimisation*

Trend capture offers significant upside potential through loss minimisation, and this is evident from the mean return of **15.04%** from employing the Trendrating investment strategy versus a mean return of **-15.58%** from a buy & hold strategy on the **534** stocks analysed in this study. This return difference of **30.63%** is largely facilitated by the drawdown reduction of **48%**.

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 provides a timely and accurate indication of negative price trends 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 securities whose price is likely to deteriorate places the portfolio in a strong position as it begins its recovery phase from a higher point than portfolios that have experienced deeper drawdowns.

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 **Henkel** 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 **87.52%** versus the buy & hold performance of **21.09%**.

The price evolution of **Renault** 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.

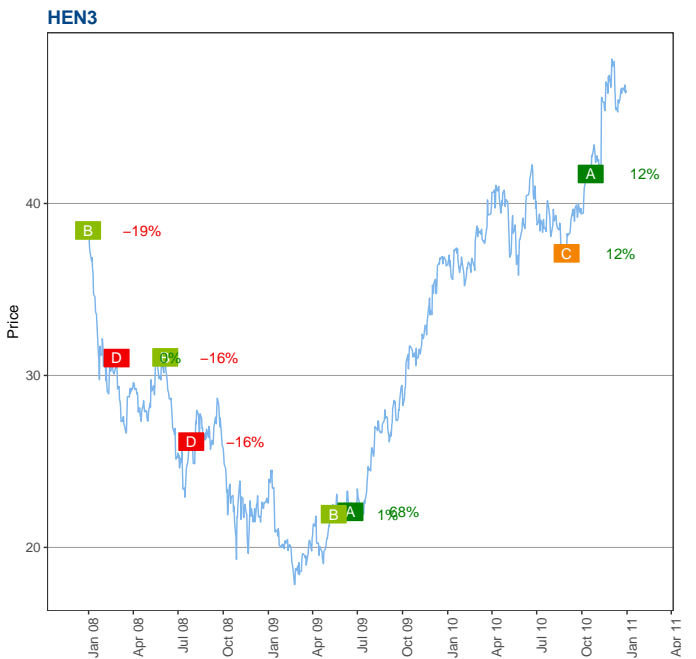


Figure 1: Henkel

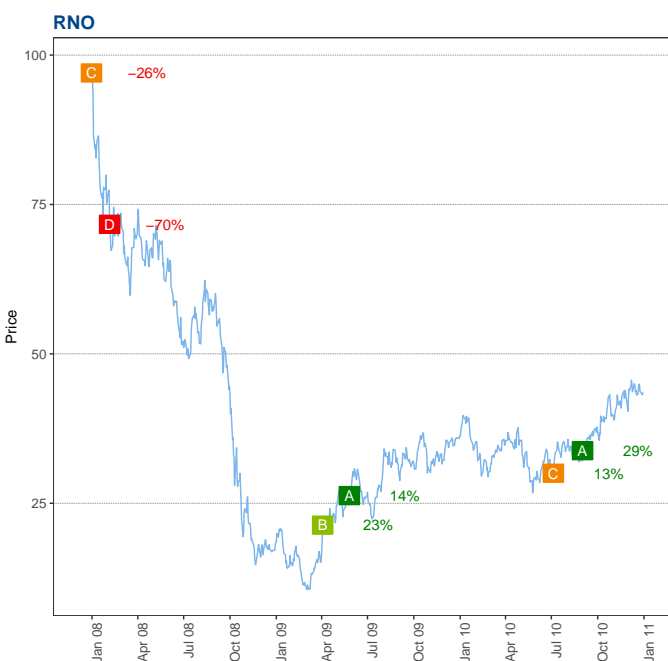


Figure 2: Renault

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:

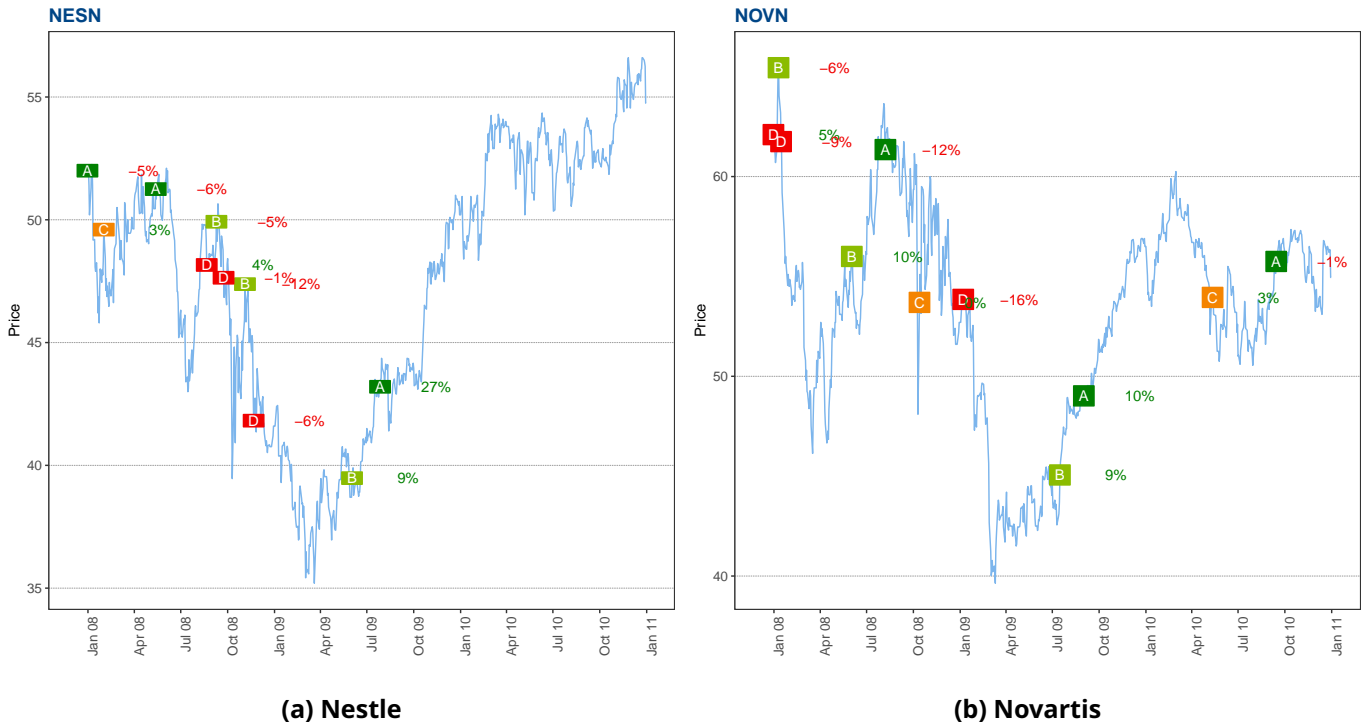


Figure 4:

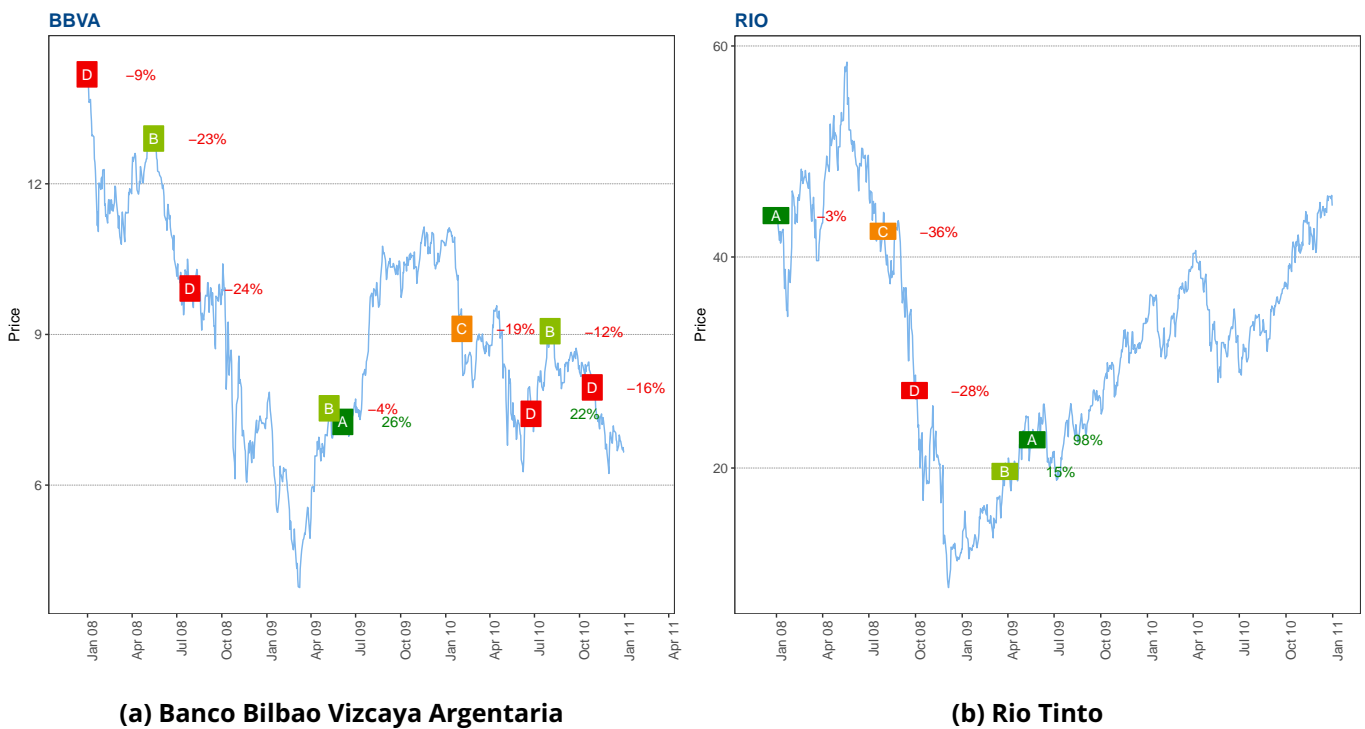


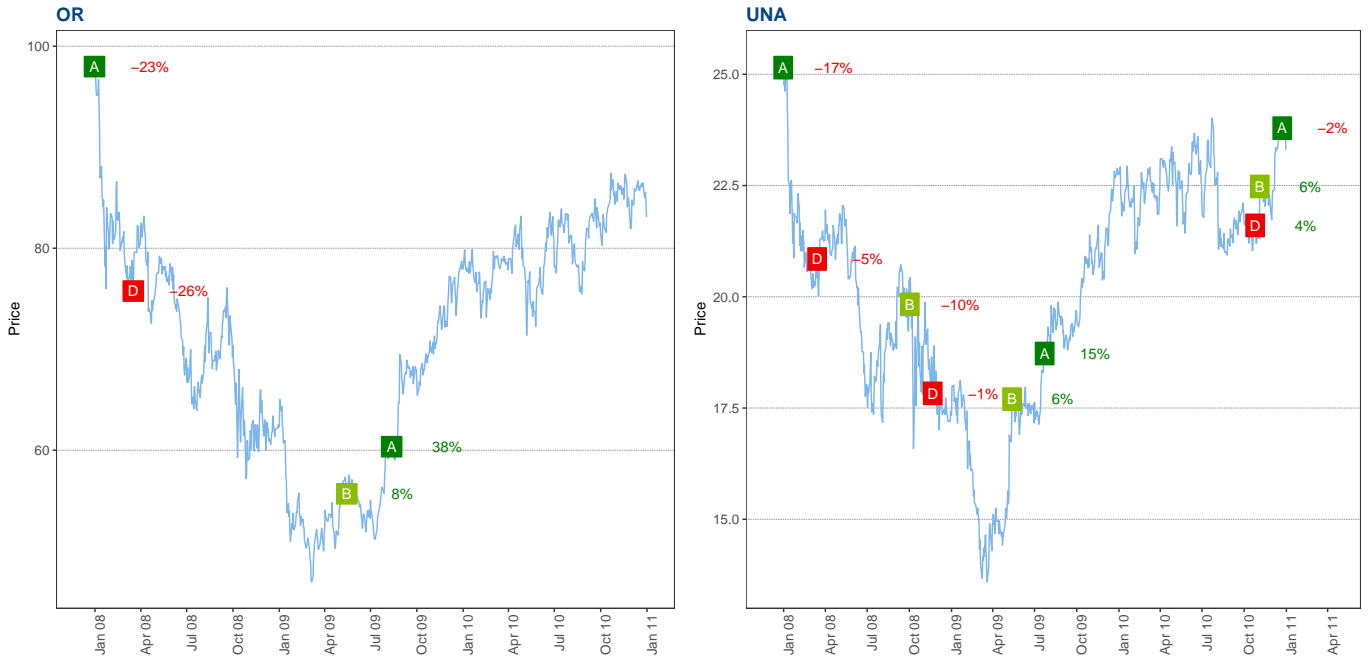
Figure 5:



(a) Standard Chartered

(b) Infineon Technologies

Figure 6:



(a) L'oreal

(b) Unilever

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 **56.27%** and as high as **87.91%**.

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	-8.98	-3.70	5.28	58.83	17
-40 to -20	-33.14	-14.49	18.65	56.27	79
-60 to -40	-50.78	-12.62	38.16	75.15	163
-80 to -60	-70.05	-12.46	57.59	82.22	184
-100 to -80	-88.44	-10.69	77.74	87.91	91

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 **60 to Inf** 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	-77.11	-22.08	55.04	76
-60 to -20	-37.43	-1.71	35.72	181
-20 to 20	-1.97	21.99	23.95	183
20 to 60	34.01	53.92	19.91	70
60 to Inf	95.54	92.58	-2.97	24

Table 2: Performance

the analysis period of **92.58%** versus a mean return of **95.54%**, a return capture of **97%**. It is important to note that employing Trendrating in the decision making process would have resulted in an outperformance in **510** out of a total of **534** stocks in the analysis universe. In other words, Trendrating would have had an accuracy rate of **96%** 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 (%)
PSM	ProSieben-Sat.1 Media SE	0	-95	-95	100	390	37	353
RHA	Rhodia	0	-92	-92	100	290	-6	297
IFX	Infineon Technologies	0	-95	-95	100	204	-3	208
TNI	Trinity Mirror	0	-94	-94	100	101	-80	181
LXS	Lanxess	0	-68	-68	100	245	76	169
JM	J.m	0	-79	-79	100	186	19	167
CGCBV	Cargotec	0	-80	-80	100	189	23	166
AKE	Arkema	0	-78	-78	100	185	20	165
FI-N	Georg Fischer	0	-83	-83	100	140	-18	158
METSO	Metso	-15	-81	-66	82	169	12	157
IIA	Immofinanz	0	-96	-96	100	102	-54	156
CON	Continental	-11	-87	-76	87	118	-31	149
SWEDA	Swedbank	0	-90	-90	100	110	-36	146
IEA	Immoeast	0	-97	-97	100	107	-36	144
XTA	Xstrata	-3	-85	-82	96	113	-25	138
GKN	Gkn	0	-80	-80	100	154	17	138
PGS	Petroleum Geo-services	-18	-87	-69	79	79	-42	122
GN	Gn Store Nord	0	-78	-78	100	148	27	121
KN	Natixis	0	-90	-90	100	58	-58	116
MF	Wendel	0	-84	-84	100	78	-30	109
TRELB	Trelleborg	0	-83	-83	100	121	15	106
RNO	Renault	0	-89	-89	100	47	-55	102
OP1Q	Cattles	0	-100	-100	100	0	-100	100
PG	Seat Pagine Gialle	0	-99	-99	100	0	-99	99
CKL1	Anglo Irish Bank	0	-99	-99	100	0	-98	98
AGSN	Ageas	0	-97	-97	100	7	-91	98
SDRL	Seadrill	-0	-69	-68	100	146	49	98
KER	Kering	0	-71	-71	100	106	8	97
KBC	Kbc	0	-94	-94	100	23	-73	96
SY1	Symrise	0	-63	-63	100	103	6	96
HRX	Hypo Real Estate Holdings	0	-98	-98	100	0	-96	96
EBS	Erste Group Bank	0	-86	-86	100	66	-27	93
OML	Old Mutual	0	-82	-82	100	66	-27	93
RHM	Rheinmetall	0	-69	-69	100	103	11	93
BB	Bradford \& Bingley	0	-93	-93	100	0	-93	93
AKA	Akastor	0	-82	-82	100	59	-31	91
SIK	Sika	0	-68	-68	100	86	-4	90
BBA	Bba Aviation	0	-71	-71	100	98	8	90
HBOS	HBOS	0	-92	-92	100	0	-90	90
AIB	Allied Irish Banks	-8	-98	-90	92	-8	-98	90
RIEN	Rieter	0	-79	-79	100	60	-30	90
RIO	Rio Tinto	-3	-80	-77	96	91	2	89
JYSK	Jyske Bank	0	-78	-78	100	57	-31	88
BDEV	Barratt Developments	0	-91	-91	100	17	-70	88
FR	Valeo	0	-71	-71	100	138	51	87
MTX	Mtu Aero Engines	0	-68	-68	100	112	27	86
TOM2	Tomtom	-22	-95	-72	76	4	-81	85
TGM	Tognum	0	-68	-68	100	80	-4	84
NEX	National Express	-5	-88	-83	94	23	-61	84

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
PWTN	Panalpina World Transport	0	-80	-80	100	45	-39	83
WEIR	Weir Group Plc	-15	-66	-51	77	202	120	82
BRBY	Burberry	0	-72	-72	100	179	97	82
PFD	Premier Foods	0	-92	-92	100	-8	-89	82
SU	Schneider Electric	0	-57	-57	100	102	21	81
KESKOB	Kesko	0	-60	-60	100	73	-7	80
DAI	Daimler	-14	-74	-60	81	56	-24	80
SEBA	Skandinaviska Enskilda Banken	0	-81	-81	100	46	-34	80
UHR	The Swatch	0	-65	-65	100	102	22	80
MAN	Man	-21	-76	-54	72	58	-22	79
CDI	Christian Dior	0	-64	-64	100	98	19	79
F	Fiat Chrysler Automobiles NV	0	-80	-80	100	66	-13	79
SCVB	Scania B	0	-66	-66	100	79	0	79
BBVA	Banco Bilbao Vizcaya Argentaria	0	-72	-72	100	26	-53	79
KBCA	Kbc Ancora Cva	0	-97	-97	100	-6	-83	77
NOBN	Nobel Biocare Holding	6	-74	-80	108	6	-71	77
RF	Eurazeo	0	-81	-81	100	46	-30	76
BUL	Bulgari	0	-70	-70	100	59	-15	74
OTE1V	Outotec	-23	-77	-54	70	97	23	74
NRE1V	Nokian Tyres	-9	-70	-61	87	87	14	73
	Natl Bank Greece	-12	-84	-72	86	-12	-84	72
RBS	Royal Bank Of Scotland	0	-97	-97	100	-18	-89	72
DEXBT	Dexia	0	-93	-93	100	-14	-85	71
PC	Pirelli \& C	0	-81	-81	100	49	-22	71
RBI	Raiffeisen Bank International	0	-87	-87	100	10	-60	71
INCH	Inchcape	0	-91	-91	100	21	-50	70
ITV	Itv	0	-80	-80	100	52	-18	70
OERL	Oc Oerlikon	0	-95	-95	100	-23	-93	69
ERA	Eramet	22	-71	-93	131	42	-27	69
AF	Air France - Klm	0	-74	-74	100	25	-43	68
WOS	Wolseley	0	-81	-81	100	0	-67	67
HEN3	Henkel	0	-54	-54	100	88	21	66
SCHA	Schibsted	-21	-85	-64	76	57	-8	66
BMW	BMW	0	-60	-60	100	105	39	66
ILB	Permanent TSB Group Holdings	0	-95	-95	100	-1	-67	66
TEL	Telenor	-19	-74	-55	74	38	-27	65
LLOY	Lloyds Banking	0	-91	-91	100	-7	-72	65
ROCKB	Rockwool International	0	-79	-79	100	23	-41	65
PHIA	Royal Philips	0	-63	-63	100	42	-22	65
ENRO	Eniro	-33	-97	-65	67	-33	-97	65
AL	Alliance \& Leicester	0	-67	-67	100	0	-64	64
UG	Peugeot	-5	-78	-73	93	18	-45	64
DANSKE	Danske Bank	0	-83	-83	100	35	-28	63
DNB	Dnb	-13	-80	-66	83	66	4	62
MKS	Marks And Spencer	0	-64	-64	100	28	-34	62

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
FSA	UnipolSai	-16	-82	-66	81	-16	-78	62
YAR	Yara International	37	-64	-100	157	95	34	61
LR	Legrand	0	-53	-53	100	91	31	61
ARO	Arcandor AG	0	-99	-99	100	-39	-99	61
IVG	Ivg Immobilien	0	-86	-86	100	-13	-73	60
MNDI	Mondi	0	-72	-72	100	80	21	60
G	Assicurazioni Generali	-2	-68	-66	97	7	-52	59
LHN	Lafargeholcim	0	-74	-74	100	23	-36	59
KSP	Kingspan	0	-80	-80	100	31	-28	59
	I.F.I.L.	-18	-77	-58	76	-18	-77	58
QCE	Global PVQ	-39	-97	-59	60	-39	-97	58
BVA	Bk Valencia	0	-58	-58	100	0	-58	58
POP	Banco Popular Esp	0	-71	-71	100	-9	-67	58
SAND	Sandvik	0	-63	-63	100	75	18	57
FLS	Flsmidth	-32	-78	-46	59	59	2	57
STB	Storebrand	0	-81	-81	100	34	-23	57
FCC	Fomento De Construcciones Y Contratas	-5	-66	-61	93	-5	-62	57
	TalkTalk Telecom	-6	-75	-69	92	12	-45	56
SAA1V	Sanoma	0	-57	-57	100	39	-17	56
PPHN	Petroplus Holdings	-30	-90	-59	66	-30	-86	56
UBI	Unione Di Banche Italiane	0	-67	-67	100	-9	-65	56
HEXAB	Hexagon	-21	-79	-58	73	89	34	56
WRT1V	Waertsilae	-28	-70	-42	60	65	10	55
AGN	Aegon	0	-85	-85	100	-7	-62	55
MS	Mediaset	0	-55	-55	100	20	-34	54
PAS	Banco Pastor	0	-71	-71	100	-11	-65	54
SGO	Compagnie De Saint-gobain	0	-70	-70	100	21	-33	54
RR	Rolls-Royce Holdings	-6	-54	-48	88	71	17	54
DCO	Danisco	0	-59	-59	100	95	41	54
BMPS	Banca Monte Paschi Siena	0	-74	-74	100	-18	-72	53
DEC	Jc Decaux	-15	-72	-57	79	39	-14	53
DSV	Dsv	-13	-67	-54	80	63	10	53
BT.A	Bt	-0	-74	-74	100	19	-34	53
BPI	Banco Bpi	0	-74	-74	100	-21	-73	52
GAS	Gas Natural Sdg	-0	-79	-79	100	-19	-71	52
PAH3	Porsche Automobil Derwent	-10	-79	-69	88	-5	-57	52
DLN	London Plc Reit	0	-67	-67	100	62	10	52
SLHN	Swiss Life	-14	-84	-70	84	6	-46	52
CARLB	Carlsberg	-7	-70	-63	90	63	12	51
BKIR	Bank Of Ireland Rg	0	-99	-99	100	-43	-94	51
GTK	Gtech	-12	-63	-52	81	-12	-63	51
PUM	Puma	0	-62	-62	100	41	-9	50
SYDB	Sydbank	0	-73	-73	100	19	-31	50
VIE	Veolia Environnement	-9	-75	-66	88	-15	-65	50
IPR	International Power	-5	-60	-55	91	46	-4	50
LIN	Linde	-3	-47	-43	93	75	26	50
TITK	Titan Cement	0	-63	-63	100	2	-47	49
TPK	Travis Perkins	0	-81	-81	100	60	11	49

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
HDD	Heidelberger Druckmaschinen	0	-88	-88	100	-26	-75	48
BCP	Bcp R	0	-78	-78	100	-30	-78	48
DMGT	Daily Mail \ & General Trust	0	-58	-58	100	63	16	48
PMI	Bca Pop. Milano	-24	-72	-48	66	-24	-72	48
WPP	WPP	0	-52	-52	100	0	-47	47
DBK	Deutsche Bank	0	-81	-81	100	-6	-52	47
VK	Vallourec	-19	-71	-52	74	31	-15	46
BLND	British Land	0	-67	-67	100	6	-40	46
RUKN	Swiss Re	0	-85	-85	100	9	-37	46
SHI	Sig	0	-87	-87	100	-33	-79	46
SKAB	Skanska	0	-56	-56	100	55	9	45
LHA	Deutsche Lufthansa	0	-57	-57	100	35	-10	45
STERV	Stora Enso	0	-74	-74	100	20	-25	45
PARG	Pargesa	0	-58	-58	100	8	-37	45
MEDA A	Meda A	0	-48	-48	100	12	-33	45
MGGT	Meggitt	-12	-66	-54	81	56	11	44
ABI	Anheus.-busch Inbev	-4	-64	-60	94	94	50	44
ALV	Allianz	0	-68	-68	100	4	-40	44
BME	Bolsas Y Mercados Espanoles Shmsf	-14	-71	-57	80	-18	-62	44
ALU	Alcatel-lucent	0	-82	-82	100	-12	-56	44
RTO	Rentokil Initial	0	-74	-74	100	24	-20	44
VOE	Voestalpine	-33	-81	-47	59	15	-28	43
TCHNR	Technicolor	0	-96	-96	100	-52	-95	43
DPB	Deutsche Postbank	-34	-88	-54	61	-23	-66	43
GFC	Gecina	0	-75	-75	100	20	-23	43
ANA	Acciona	-33	-77	-44	57	-33	-76	43
SAN	Banco Santander	-17	-73	-56	77	-3	-46	43
JMAT	Johnson Matthey	-5	-64	-60	93	51	8	43
DRTY	Darty	0	-74	-74	100	11	-32	42
KINV B	Kinnevik Inv. -b-	-21	-69	-48	70	35	-7	42
CGG	CGG	-26	-80	-54	67	-0	-42	42
ML	Cie Generale Des Etablissements Michelin	0	-71	-71	100	12	-29	41
MC	Lvmh	-9	-53	-44	83	90	49	41
HEIA	Heineken	-8	-55	-48	86	24	-17	41
NEX	Nexans	-14	-69	-55	79	9	-31	41
BKT	Bankinter	-26	-69	-43	62	-26	-67	41
DXNS	Dixons Retail	0	-90	-90	100	-28	-69	41
AL	Alleanza Assicurazioni	0	-64	-64	100	10	-31	40
HTO	Hellenic Telecommunications Organizations	-27	-79	-53	66	-35	-76	40
REN	Relx	0	-47	-47	100	8	-32	40
WKL	Wolters Kluwer	0	-49	-49	100	13	-27	40
HEIO	Heineken	-10	-57	-47	83	24	-16	40
LGEN	Legal \ & General	0	-82	-82	100	14	-26	40
EIG	Ei	0	-93	-93	100	-36	-76	40
FGR	Eiffage	-8	-62	-54	87	-11	-51	40
NESTE	Neste	-10	-64	-54	84	-11	-50	40

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
	Punch Taverns	0	-96	-96	100	-51	-90	39
MAB	Mitchells \& Butlers	0	-70	-70	100	22	-17	39
FRA	Fraport I	-8	-58	-51	87	26	-12	39
SKFB	Skf	0	-48	-48	100	113	75	39
TW.	Taylor Wimpey	0	-98	-98	100	-42	-80	38
CPR	Cimpor - Cimentos De Portugal S.g.p.s.sa	0	-50	-50	100	22	-15	37
CSGN	Credit Suisse	0	-67	-67	100	-8	-45	37
AKZA	Akzo Nobel	0	-58	-58	100	22	-15	37
FDR	Fonciere Des Regions	0	-61	-61	100	21	-16	37
WG	John Wood Group	-23	-64	-41	64	66	29	37
WIE	Wienerberger	0	-87	-87	100	-22	-58	36
LG	Lafarge	-29	-76	-47	62	-19	-56	36
PHR	Pharol	-4	-51	-46	92	30	-6	36
REC	Rec Silicon	-49	-93	-44	48	-55	-91	36
BES	Banco Espirito Santo	-34	-71	-36	51	-34	-70	35
SAB	Banco De Sabadell	-25	-60	-35	59	-25	-60	35
DPW	Deutsche Post	-12	-72	-59	83	-11	-46	35
SCYR	Sacyr	-43	-87	-43	50	-47	-82	35
ASML0	ASML Holding	0	-51	-51	100	68	33	35
SOLB	Solvay	0	-56	-56	100	18	-17	35
GIVN	Givaudan	0	-47	-47	100	31	-4	35
EI	Essilor International	0	-40	-40	100	45	10	35
PSN	Persimmon	0	-77	-77	100	-14	-48	34
PUB	Publicis Groupe	0	-42	-42	100	80	46	34
A2A	A2a	-26	-70	-44	63	-33	-67	34
GLE	Societe Generale	0	-79	-79	100	-20	-54	34
HMSO	Hammerson	0	-70	-70	100	-5	-39	34
ELISA	Elisa	0	-53	-53	100	11	-23	34
ZOT	Zardoya Otis	-4	-48	-44	91	-12	-46	33
BRI	Brisa	-3	-57	-54	94	-15	-48	33
WMH	William Hill	0	-71	-71	100	-21	-54	33
ATK	Ws Atkins	-9	-63	-54	86	-6	-39	33
DEB	Debenhams	0	-72	-72	100	26	-7	33
HOME	Home Retail	0	-50	-50	100	-10	-43	33
PRU	Prudential	-3	-70	-67	95	30	-2	32
FAE	Faes Farma	-38	-74	-36	49	-38	-70	32
PPC	Public Power	-27	-75	-48	64	-38	-70	32
GBLB	Groupe Bruxelles Lambert	0	-45	-45	100	4	-28	32
LOCAL	Solocal	0	-57	-57	100	-18	-50	32
ALB	Corporacion Financiera Alba	0	-56	-56	100	15	-17	32
ADP	Aeroports De Paris Adp	7	-48	-55	114	16	-16	32
REX	Rexam	0	-47	-47	100	11	-21	32
ZURN	Zurich Insurance	0	-62	-62	100	5	-27	32
BEI	Beiersdorf	-1	-46	-44	97	10	-22	32
ICP	Intermediate Capital Group	-29	-87	-58	67	-12	-43	32
INTU	Intu Properties	0	-74	-74	100	-25	-56	32
EDP	Edp-energias De Portugal	-11	-50	-38	77	-13	-44	31

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
TEL2B	Tele2 AB	-19	-56	-37	66	39	8	31
MTGB	Modern Times	-35	-75	-41	54	29	-2	31
AI	Air Liquide	-9	-40	-31	78	40	9	31
SOON	Sonova	-18	-65	-47	73	25	-6	31
LSE	London Stock Exchange	-35	-81	-46	56	-27	-58	31
CLS1	Celesio N	0	-68	-68	100	-26	-56	31
GBB	Bourbon	0	-63	-63	100	16	-15	30
INDUA	Industrievaerden	0	-61	-61	100	36	6	30
RAND	Randstad	0	-64	-64	100	77	46	30
ROG	Roche	0	-37	-37	100	0	-30	30
UTDI	United Internet	-26	-74	-49	65	3	-27	30
ZC	Zodiac Aerospace	-13	-57	-44	77	59	28	30
MIG	Marfin Investment	-57	-89	-32	36	-57	-87	30
NKT	Nkt	-20	-82	-62	76	-5	-35	30
GETIB	Getinge	-20	-53	-33	62	14	-16	29
CS	Axa	0	-79	-79	100	-24	-53	29
CA	Carrefour	-13	-57	-44	78	-13	-42	29
CAP	Cap Gemini	-10	-49	-39	80	10	-19	29
SSABA	Ssab	-17	-71	-54	77	-7	-36	29
TIT	Telecom Italia	-18	-65	-46	72	-26	-54	28
G1A	Gea	-34	-69	-35	50	19	-9	28
SZG	Salzgitter	-15	-61	-46	75	-15	-43	28
RDSA	Royal Dutch Shell	-2	-47	-45	96	14	-14	28
PLT	Parmalat	0	-57	-57	100	5	-23	28
RTRKS	Rautaruukki	0	-68	-68	100	-13	-41	28
IBE	Iberdrola	0	-57	-57	100	-15	-43	28
WCH	Wacker Chemie	-34	-76	-42	55	-6	-34	28
VER	Verbund	1	-50	-52	103	-14	-41	28
INF	Informa	-6	-69	-63	91	-13	-41	27
SAF	Safran	-6	-52	-46	88	116	89	27
WTB	Whitbread	0	-51	-51	100	55	28	27
NWG	Northumbrian Water Group	-3	-39	-36	92	24	-3	27
NXT	Next	-15	-48	-34	69	49	22	27
BKG	The Berkeley	0	-55	-55	100	-7	-34	27
CFR	Richemont A	-18	-50	-32	64	-18	-45	27
MB	Mediobanca	0	-66	-66	100	-22	-49	27
EDF	Electricite De France	-19	-66	-48	72	-36	-62	27
LISN	Lindt \& Spruengli	-11	-55	-44	80	2	-24	26
0N1N	Arriva	-25	-54	-29	54	23	-3	26
AV.	Aviva	0	-75	-75	100	-14	-40	26
SAMPO	Sampo	0	-51	-51	100	36	11	26
FER	Ferrovial	0	-70	-70	100	-3	-28	25
ATL	Atlantia	-16	-64	-48	75	-13	-38	25
BARC	Barclays	0	-90	-90	100	-22	-47	25
TFI	Television Francaise 1 Sa Tf1	0	-72	-72	100	-4	-29	25
VOLVB	Volvo	-21	-72	-51	71	34	9	25
BN	Danone	-10	-45	-35	78	6	-19	25
FUR	Fugro	-27	-64	-37	58	41	16	24
TUI1	Tui	-24	-82	-58	71	-20	-44	24
ACX	Acerinox	0	-52	-52	100	2	-22	24
INVEB	Investor	0	-37	-37	100	22	-2	24
TL5	Mediaset Espana Comunicacion Sa	0	-75	-75	100	-24	-48	24

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
LI	Klepierre	-13	-71	-58	82	3	-21	24
UPM	Upm-kymmene	-22	-69	-46	68	20	-4	24
HOT	Hochtief	-35	-78	-43	55	-7	-31	24
RWE	Rwe	-22	-52	-29	57	-24	-48	24
SCAB	Svenska Cellulosa Sca	0	-55	-55	100	16	-7	24
TKA	Telekom Austria	-4	-57	-54	94	-21	-45	23
GAM	Gamesa Corporacion Tecnologica	-59	-86	-27	32	-59	-82	23
LDO	Leonardo	-29	-60	-31	52	-34	-57	23
NOKIA	Nokia	-48	-75	-27	36	-48	-71	23
AIR	Airbus	0	-61	-61	100	3	-20	23
VOW	Volkswagen	-37	-60	-23	38	-9	-32	23
UBM	Ubm	0	-43	-43	100	28	6	22
UU.	United Utilities	-11	-43	-32	74	0	-22	22
DB1	Deutsche Boerse	-32	-77	-46	59	-40	-62	22
IGG	Ig	-21	-59	-38	64	48	26	22
ABE	Abertis Infraestructuras	-4	-54	-50	93	-14	-36	22
OR	L'oreal	-23	-52	-29	56	6	-15	22
HUSQB	Husqvarna	0	-61	-61	100	8	-13	22
SIE	Siemens	-37	-67	-30	45	7	-15	22
NHY	Norsk Hydro	-35	-74	-39	53	-19	-40	21
CHTR	Charter International	-29	-59	-29	50	-29	-51	21
SHB A	Svenska Handelsbnk A	-9	-59	-50	85	25	4	21
MMB	Lagardere Sca	0	-63	-63	100	-19	-40	21
RHK	Rhoen-klinikum	-12	-35	-23	65	-1	-21	20
CLN	Clariant	-14	-64	-50	78	105	84	20
HEI	Heidelbergce-ment	-32	-81	-49	61	-32	-52	20
DG	Vinci	-7	-55	-48	87	0	-20	20
ISP	Intesa Sanpaolo	0	-74	-74	100	-43	-62	20
ECM	Electrocom-ponents	0	-44	-44	100	47	27	20
SAZ	Stada Arzneimittel	-41	-76	-35	46	-20	-40	20
ON3I	Tomkins	0	-47	-47	100	103	84	19
OPAP	Opap Br	-29	-63	-33	53	-34	-53	19
BWY	Bellway	0	-55	-55	100	-1	-20	18
SYNN	Syngenta	1	-44	-45	103	12	-5	18
IAP	Icap	-30	-72	-41	58	-9	-26	18
YTY1V	Yit	-41	-75	-35	46	42	24	17
MAP	Mapfre	-13	-54	-41	76	-14	-31	17
GNK	Greene King	0	-63	-63	100	-9	-25	17
IDR	Indra Sistemas	-14	-34	-19	57	-14	-31	17
RI	Pernod Ricard	-12	-50	-38	76	13	-4	17
ENEL	Enel	-10	-59	-50	83	-32	-48	16
REP	Repsol	-18	-52	-34	65	2	-14	16
FGP	Firstgroup	-32	-76	-44	58	-35	-51	16
ATO	Atos	-13	-56	-42	76	29	13	16
TEC	Technip	-22	-69	-46	68	42	27	15
SBRY	J.sainsbury	0	-44	-44	100	4	-12	15
FOR-TUM	Fortum	-33	-59	-26	44	-12	-27	15
ANDR	Andritz	-26	-61	-35	57	81	66	15
EN	Bouygues	-7	-61	-55	89	-29	-43	14
OMV	Omv	-38	-70	-32	46	-30	-44	14
LCL	Ladbrokes Coral	0	-57	-57	100	-41	-55	14
ALO	Alstom	-22	-58	-37	63	-37	-51	14

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
III	3i	-44	-82	-39	47	-34	-47	14
UCB	Ucb	0	-43	-43	100	-4	-17	14
VIV	Vivendi	-21	-48	-27	57	-22	-36	14
PROX	Proximus	-10	-36	-26	72	-12	-26	13
LOGN	Logitech International	-38	-78	-40	51	-44	-57	13
AMFW	Amec Foster Wheeler	-21	-55	-34	61	50	37	13
BAY	International Consolidated Airlines	0	-65	-65	100	1	-12	13
MUV2	Munich Reinsurance	-4	-39	-35	89	-2	-15	12
ELUXB	Electrolux	0	-51	-51	100	88	76	12
GCC	C \& c	-48	-81	-33	41	-5	-17	12
EMG	Man	-21	-73	-52	72	-36	-48	12
NK	Imerys	0	-58	-58	100	8	-4	12
POH1S	Pohjola Bank	0	-64	-64	100	-3	-15	12
SVT	Severn Trent	-16	-39	-23	60	9	-3	12
KCO	Kloeckner	-28	-80	-52	65	-0	-12	12
UBI	Ubisoft Entertainment	-66	-82	-16	20	-66	-77	11
ENGI	Engie	-16	-43	-27	62	-22	-33	11
NDA SEK	Nordea Bank	-13	-63	-50	79	-2	-13	11
ADEN	Adecco	0	-49	-49	100	11	0	11
ACA	Credit Agricole	0	-71	-71	100	-45	-55	11
SGL	Sgl Carbon	-16	-62	-46	74	-16	-27	11
HMB	H \& M Hennes \& Mauritz	-2	-36	-35	95	24	14	11
BAMNB	Koninklijke Bam Groep	-49	-72	-22	31	-53	-64	10
GALP	Galp Energia	-31	-67	-36	54	-12	-22	10
HO	Thales	-18	-38	-20	52	-26	-36	10
TSCO	Tesco	-13	-40	-27	67	-1	-11	10
CO	Casino, Guichard-perrachon	-19	-41	-22	54	8	-2	10
AGS	Aegis	-17	-60	-42	71	30	20	10
CIBN	Ciba Holding AG	0	-52	-52	100	4	-5	10
TEF	Telefonica	-14	-43	-28	66	-14	-24	9
SKY	Sky	-8	-47	-39	83	28	19	9
WIN	Diebold Nixdorf	-21	-57	-37	64	3	-6	9
SWV	SolarWorld AG	-73	-83	-10	12	-73	-82	9
NAT	National Portefeuille	-12	-39	-27	70	-17	-26	9
KNIN	Kuehne + Nagel International	0	-50	-50	100	28	20	9
UL	Unibail-rodamco	0	-42	-42	100	7	-1	8
ORK	Orkla	-41	-68	-27	40	-38	-46	8
NESN	Nestle	-10	-32	-22	68	14	5	8
BA.	Bae Systems	-22	-41	-18	45	-26	-34	8
IHG	InterContinental Hotels	0	-50	-50	100	49	41	8
FP	Total	-20	-42	-22	53	-22	-30	8
LUX	Luxottica	-17	-56	-39	70	13	5	8
BLT	Bhp Billiton	-5	-51	-47	91	73	65	8
RY4B	Ryanair Holdings	-19	-57	-38	67	-11	-19	8
DELB	Delhaize	0	-41	-41	100	-1	-8	8
NOVN	Novartis	-12	-36	-24	66	-5	-12	6
PNN	Pennon	-13	-44	-30	69	1	-5	6

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
SWMA	Swedish Match	-18	-35	-17	47	32	26	6
SZE	Suez	-16	-47	-31	65	-29	-36	6
CASS	Cattolica Ass	-28	-61	-33	54	-37	-42	6
GAM	Gam	-78	-88	-11	12	-78	-83	6
BNP	Bnp Paribas	-36	-71	-36	50	-28	-34	6
DSM	Koninklijke Dsm	-19	-51	-32	62	37	32	6
HNR1	Hannover Rueck	-10	-50	-40	79	33	27	5
HAS	Hays	0	-52	-52	100	17	12	5
SGE	Sage	-10	-35	-26	73	24	19	5
MAER-SKB	A.p. Moeller - Maersk	-15	-58	-43	74	-2	-7	5
NOVOB	Novo-Nordisk B	-6	-30	-24	79	93	88	5
VWS	Vestas Wind Systems	-63	-72	-8	12	-63	-68	5
VOD	Vodafone	-14	-45	-31	70	-7	-12	5
TKA	Thyssenkrupp	-35	-68	-34	49	-15	-19	4
ENI	Eni	-27	-51	-24	47	-30	-35	4
CCL	Carnival	0	-52	-52	100	39	34	4
TCG	Thomas Cook	-5	-55	-50	91	-30	-33	3
ABF	Associated British Foods	-15	-32	-17	54	34	31	3
OMDJ	Cadbury	-13	-33	-19	60	31	28	2
CNA	Centrica	-12	-35	-23	65	6	4	2
DRX	Drax	-29	-46	-17	37	-37	-39	2
MRK	Merck	-14	-35	-22	61	-31	-32	2
DTE	Deutsche Telekom	-33	-47	-14	30	-34	-36	1
SGSN	Sgs	-4	-33	-29	87	17	16	1
UNA	Unilever	-17	-46	-29	63	-6	-7	1
SCMN	Swisscom	-17	-34	-17	50	-6	-7	1
TELIA	Telia	-34	-47	-14	29	-11	-12	1
FRE3	Fresenius Pfd	-30	-45	-14	32	13	13	0
ORA	Orange	-30	-43	-13	30	-36	-37	0
OMX	OMX	0	-2	-2	100	0	-0	0
ACS	Acs Br	0	-37	-37	100	-14	-14	0
ABBN	Abb	-36	-63	-26	42	-31	-32	0
HGM	Hagemeyer	-1	-1	0	-0	3	3	0
SCTN	Scottish \& Newcastle	-3	-3	0	-0	8	8	0
REL	RELX	-1	-1	0	-0	-1	-1	0
	Kelda	-1	-1	0	-0	0	0	0
	Neuf Cegetel	-1	-1	0	-0	4	4	0
TA	Tele Atlas	-22	-22	0	-0	6	6	0
BOB	Business Objects	-0	-0	0	-0	6	6	0
OIC0	Burren Energy	0	0	0	NaN	1	1	0
BGY	British Energy	-13	-13	0	-0	41	41	0
DRX	Elan Corporation	-57	-77	-20	26	-72	-72	-0
RATOB	Ratos	-12	-42	-31	73	41	41	-0
OI13	Emap	-49	-49	0	-0	-49	-49	-0
SDR	Schroders	-42	-51	-10	19	42	42	-0
ENG	Enagas	-20	-47	-27	58	-26	-25	-1
SSE	Sse	-24	-38	-14	36	-26	-25	-1
BRE	Brit Insurance Holdings	0	-36	-36	100	-20	-19	-1
DSY	Dassault Systemes	-21	-37	-16	44	38	39	-1
HSBA	Hsbc	-13	-58	-45	77	-12	-10	-1
BNZL	Bunzl	-16	-32	-17	52	-0	1	-1
SAN	Sanofi	-31	-40	-8	21	-26	-24	-2
LONN	Lonza	-44	-52	-7	14	-48	-45	-2
COLOB	Coloplast B	-7	-29	-22	77	69	71	-2
SYST	Synthes	-12	-27	-15	56	-13	-10	-3
SHP	Shire	0	-37	-37	100	31	34	-3

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
ATCO A	Atlas Copco A	-14	-50	-35	71	73	76	-3
REE	RED ELECTRICA CORP SA	-16	-37	-21	57	-22	-19	-3
AC	Accor	0	-54	-54	100	-15	-11	-4
RSL.XX1	Resolution	-6	-7	-1	21	-3	1	-4
HOLMB	Holmen	-19	-44	-25	56	-12	-8	-4
GBF	Bilfinger	-19	-54	-36	66	25	30	-4
STL	Statoil	-20	-43	-23	54	-23	-18	-5
NZYMB	Novozymes A/S	-31	-43	-12	27	28	34	-5
CNP	Cnp Assurances	-27	-55	-29	52	-45	-39	-6
CAST	Castellum	0	-35	-35	100	30	36	-6
BOKA	Koninklijke Boskalis Westminster	-46	-68	-22	32	-21	-14	-7
GFS	G4s	-36	-36	0	-0	-3	4	-7
TRN	Terna	-14	-23	-9	40	6	15	-8
MRW	Wm Morrison Supermarkets	-9	-32	-22	70	-25	-17	-8
OBEL	Orange Belgium	-39	-36	3	-10	-30	-22	-8
CWC	Cable \& Wireless Communications	-36	-38	-1	3	-29	-20	-9
CORA	Corio	-27	-56	-29	52	-15	-6	-9
AZN	Astrazeneca	0	-19	-19	100	26	35	-9
SMIN	Smiths	-23	-36	-13	37	13	23	-9
SGC	Stagecoach	-47	-64	-16	26	-35	-26	-10
OUT1V	Outokumpu	-39	-69	-30	43	-44	-35	-10
GRF	Grifols	-37	-46	-9	20	-44	-34	-10
BBY	Balfour Beatty	-10	-55	-45	83	-39	-28	-11
TRIL	Thomson Reuters	0	-39	-39	100	10	21	-12
CBG	Close Brothers	-38	-59	-21	35	-22	-10	-12
AML	Amlin	0	-19	-19	100	25	37	-12
DGE	Diageo	-19	-32	-13	41	-3	10	-12
KPN	Koninklijke Kpn	-18	-35	-16	47	-25	-12	-13
ITRK	Intertek	-11	-36	-24	68	66	79	-13
SL	Standard Life	-32	-48	-16	33	-28	-15	-14
PERSON	Pearson	0	-29	-29	100	24	38	-14
ITX	Inditex	-19	-44	-24	56	19	33	-14
INVP	Investec	-31	-63	-32	50	3	18	-14
SECUB	Securitas	-26	-28	-2	7	-16	-1	-15
ERICB	Ericsson	0	-41	-41	100	-12	3	-15
ASSA B	Assa Abloy B	0	-46	-46	100	30	46	-16
TT	TUI Travel	0	-42	-42	100	-33	-16	-17
GEBN	Geberit	-14	-40	-26	64	21	39	-18
SBMO	Sbm Offshore	-43	-59	-17	28	-39	-20	-18
KCR	Konecranes	-37	-58	-20	35	12	31	-19
RSA	RSA Insurance	-6	-22	-16	71	-31	-12	-19
ATLN	Actelion N	-24	-24	-0	0	-21	-2	-19
IW4	Iw4	0	-19	-19	100	-7	13	-20
BG	Bg	-3	-42	-39	92	-8	13	-21
BALN	Baloise-holding	-32	-59	-27	46	-40	-18	-22
SCHP	Schindler	-31	-40	-9	24	30	52	-22
TNS	Taylor Nelson Sofres	0	-29	-29	100	-6	16	-22
IMB	Imperial Brands	-40	-40	0	-0	-39	-17	-22
WHA	Wereldhave	-22	-39	-17	44	-25	-2	-23
AHO	Ahold	-24	-30	-6	22	-20	4	-23
SAP	Sap	-34	-34	-0	0	-16	7	-23
SRP	Serco	-9	-29	-21	70	-3	20	-23

Ticker	Name	Trendrating Mean Drawdown (%)	Mean Draw-down (%)	Draw-down Reduction (%)	Percentage Drawdown Reduction (%)	Trendrating Return (%)	Buy & Hold Return (%)	Return Outperformance (%)
FME	Fresenius Medical Care	-26	-29	-3	11	-6	18	-24
CRH	Crh	-47	-42	5	-12	-47	-23	-24
TATE	Tate \& Lyle	-16	-48	-32	67	-8	16	-24
STAN	Standard Chartered	-39	-64	-24	38	-12	13	-25
PSPN	Psp Swiss Property	-17	-25	-8	31	24	49	-25
SCR	Scor	-3	-37	-34	93	-17	9	-26
TOP	Topdanmark	-12	-35	-23	66	-26	0	-27
MHG	Marine Harvest	-21	-72	-51	71	50	77	-27
SN.	Smith \& Nephew	-18	-29	-11	37	-10	17	-27
ULVR	Unilever	-39	-35	4	-11	-23	4	-27
KRZ	Kerry	-35	-40	-5	13	-12	15	-27
SDF	K+S	23	-32	-55	172	19	47	-27
ISAT	Inmarsat	-47	-39	7	-19	-4	24	-28
COB	Cobham	-26	-23	3	-13	-31	-3	-28
IBLA	Iberia (Lineas AER DE Espana)	-23	-58	-35	60	-23	6	-29
BAB	Babcock International	-7	-38	-31	83	-29	1	-30
CPI	Capita	-14	-15	-2	12	-31	-0	-31
AGK	Aggreko	-0	-34	-34	99	146	178	-33
BP.	Bp	-59	-51	8	-17	-57	-24	-33
ALFA	Alfa Laval	-26	-49	-23	48	21	56	-35
ADM	Admiral	-22	-36	-14	38	2	38	-35
LOG	Logica	-44	-50	-6	12	-24	11	-36
SRG	Snam	-13	-17	-4	21	-10	27	-36
RB.	Reckitt Benckiser	-25	-21	4	-20	-16	21	-37
EXR	Expro International Group	-10	-18	-7	41	20	56	-37
NEO	Neopost	-30	-24	6	-24	-45	-8	-38
PFG	Provident Financial	0	-16	-16	100	-34	5	-38
TLW	Tullow Oil	12	-36	-48	134	55	94	-38
SW	Sodexo	-27	-23	3	-15	-18	23	-41
GSK	Glaxosmithkline	-41	-23	18	-78	-45	-3	-42
CPG	Compass	2	-23	-25	108	45	88	-43
BATS	British American Tobacco	-26	-26	0	-0	-18	25	-43
IMI	IMI	-14	-44	-30	68	94	140	-46
TAA	Tandberg	-59	-48	10	-21	-3	49	-52
KNEBV	Kone	-37	-42	-4	10	21	74	-52
RMS	Hermes International	0	-28	-28	100	26	81	-55
KGF	Kingfisher	0	-37	-37	100	15	81	-66
ARM	Arm Holdings	-11	-36	-25	69	173	241	-68
ISYS	Invensys	-42	-46	-4	9	-19	56	-75
PAGE	Pagegroup	-54	-43	11	-26	-9	93	-102

Table 3: Drawdown and Return Comparison