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HOLTfolio Analysis



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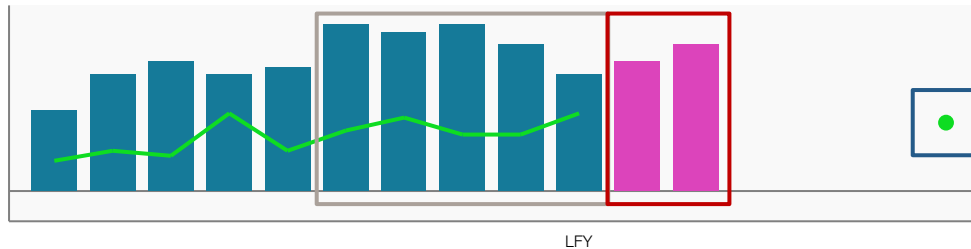
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HOLT Scorecard Factors, illustrated

Relative Wealth Chart

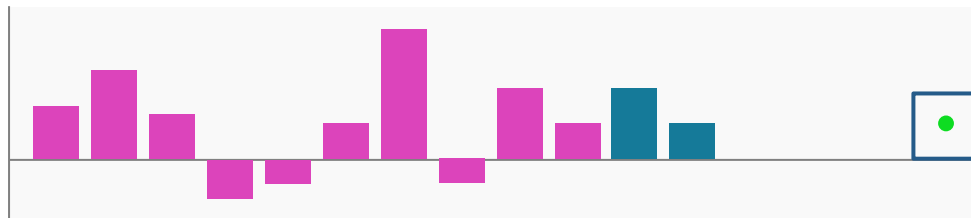
CFROI (%) – Economic Returns

■ CFROI ● Market Implied — Discount Rate

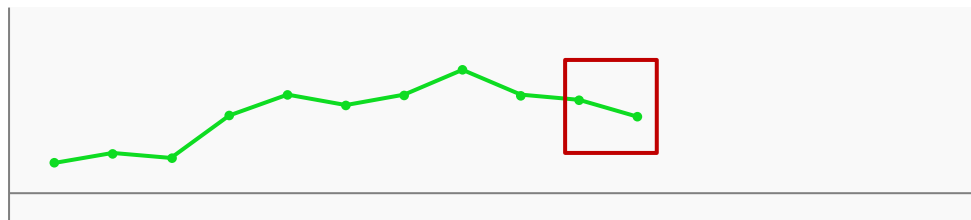


Asset Growth (%) – Change In Invested Capital

■ Asset Growth ● Market Implied



Total Shareholder Return (relative to local market index)



Operational Quality ☐

Does the company exhibit high operational quality characteristics?

Companies with high and stable CFROI levels earn higher Quality scores, while those with low and/or volatile CFROI levels receive lower scores.

Momentum ☐

Is market sentiment strong?

Companies with improving forecast CFROI levels (based on consensus EPS estimates) and strong price momentum earn high Momentum scores.

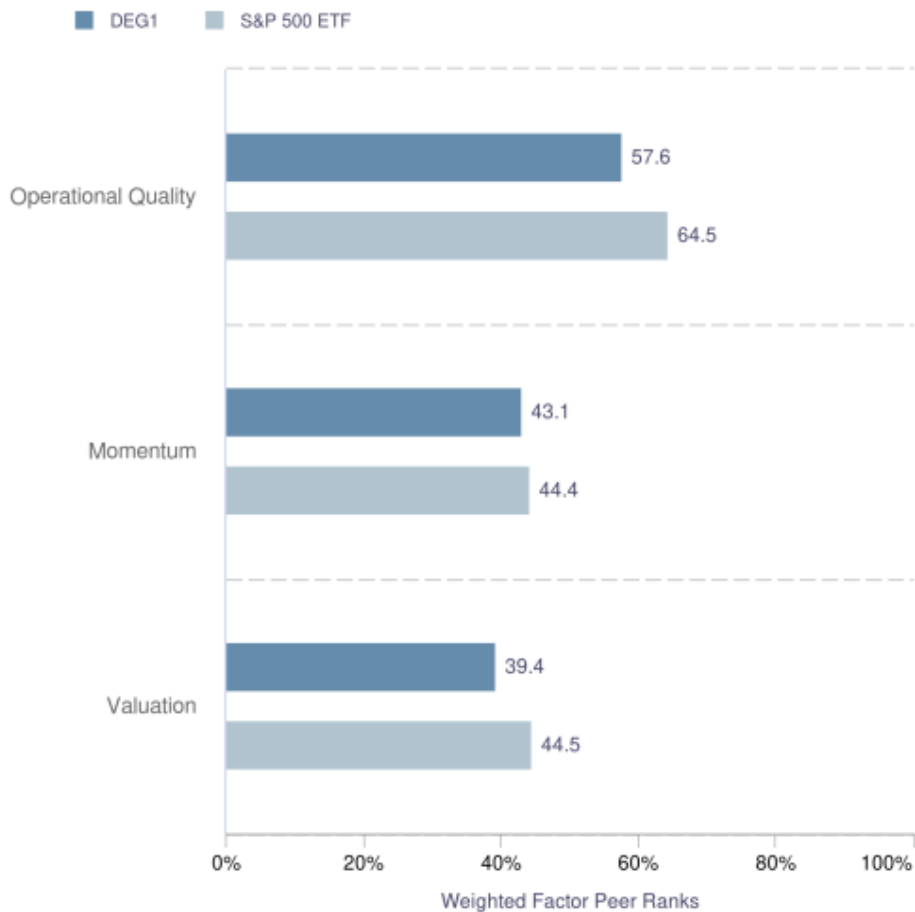
Valuation ☐

Is the stock attractively valued?

Stocks with low prices relative to their warranted prices on HOLT's DCF framework and those with low accounting- and inflation-adjusted multiples earn high Valuation scores.

Scorecard Factor Exposure

Weighted Factor Exposure

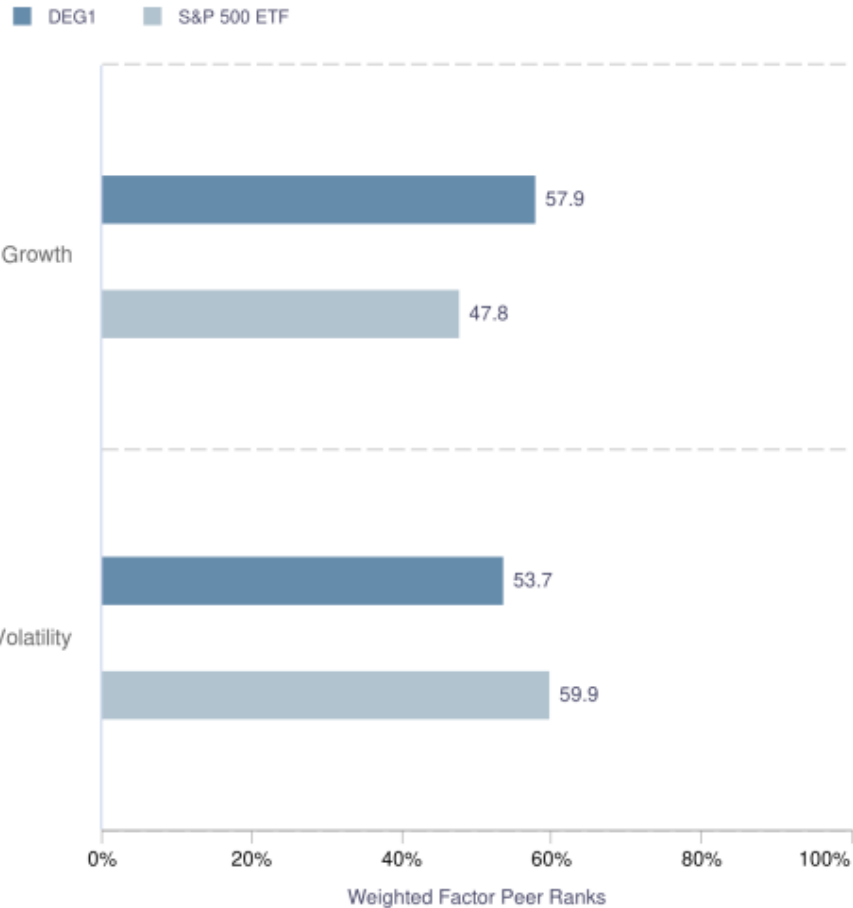


Scorecard Factor Relative Weight by Quintile

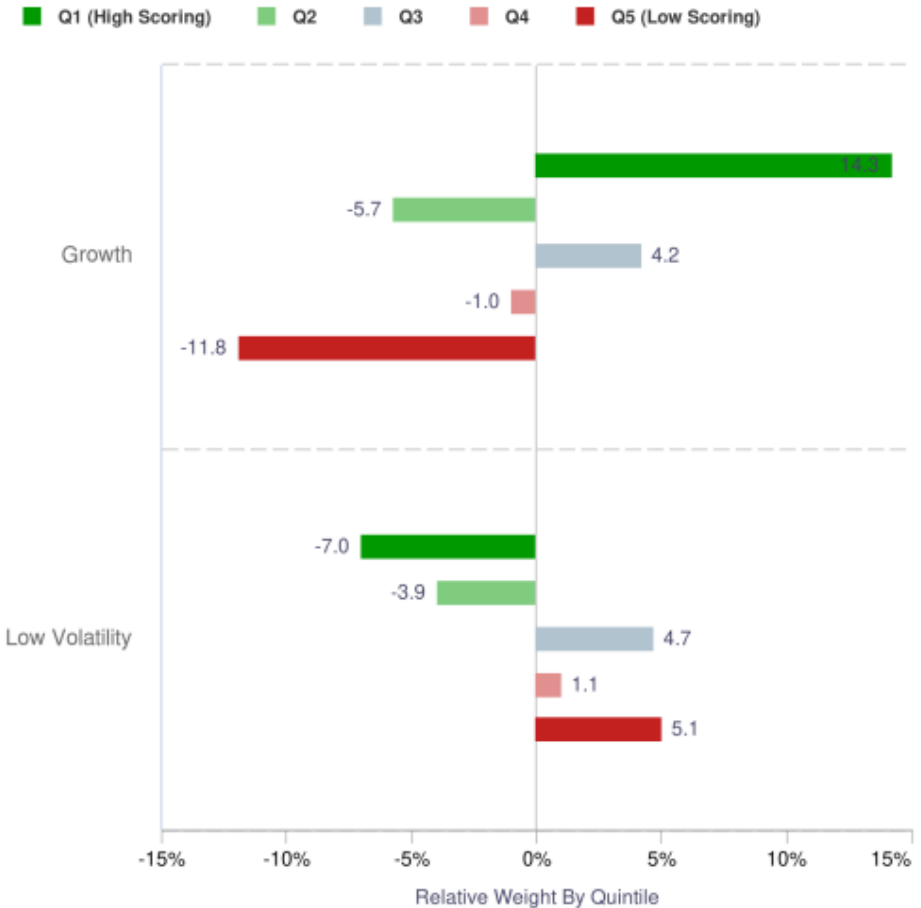


Descriptive Factor Exposure

Weighted Factor Exposure



Descriptive Factor Relative Weight by Quintile



HOLT's Investment Styles

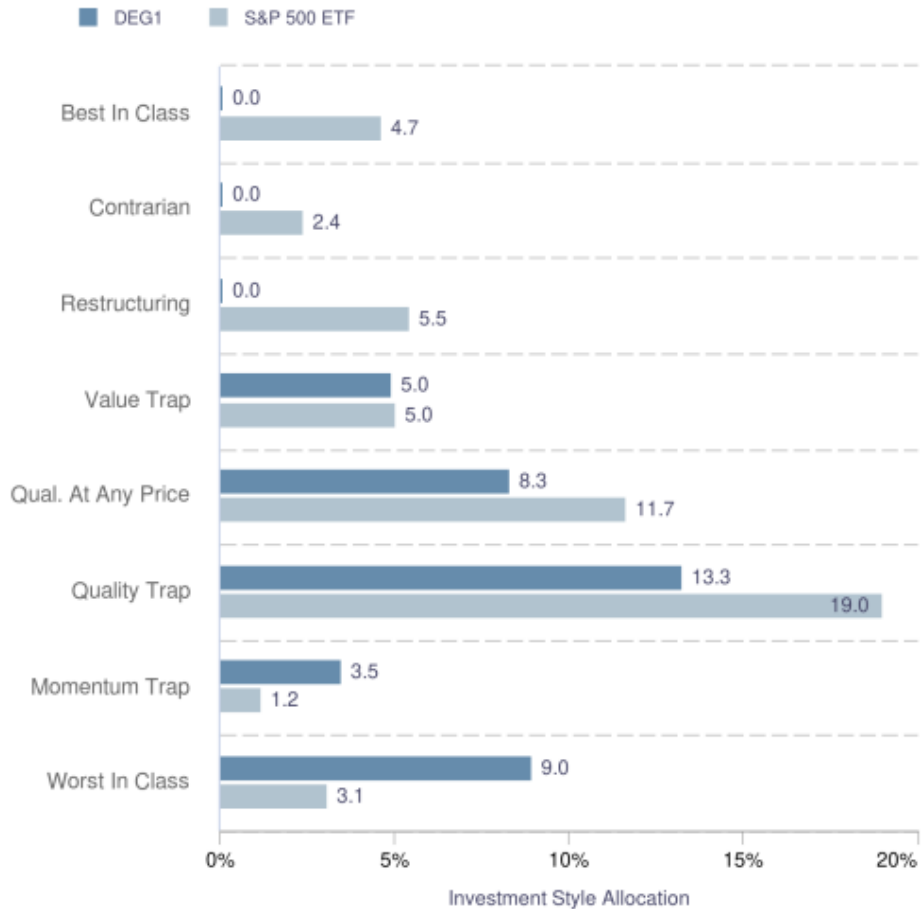
Investment Style	HOLT Factors		
	Operational Quality	Momentum	Valuation
Best In Class	Good	Strong	Cheap
Contrarian	Good	Weak	Cheap
Restructuring	Poor	Strong	Cheap
Value Trap	Poor	Weak	Cheap
Quality At Any Price	Good	Strong	Expensive
Quality Trap	Good	Weak	Expensive
Momentum Trap	Poor	Strong	Expensive
Worst In Class	Poor	Weak	Expensive

Green = top ranking 40% of the Region Size Relative peers

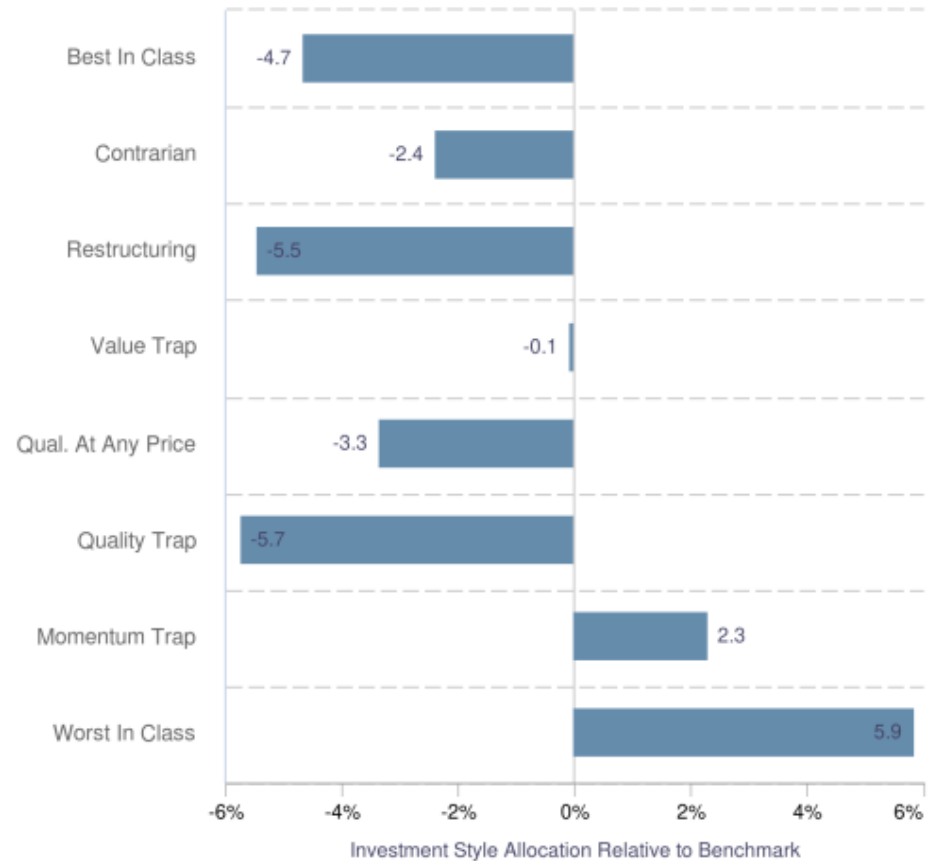
Red = bottom ranking 40% of the Region Size Relative peers

Investment Style Allocation

Investment Style Allocation (gross weights)



Investment Style Allocation (active weights)



Style Migration Matrix

■ Best in Class
 ■ Restructuring
 ■ Quality Trap
 ■ Momentum Trap
 ■ Contrarian
 ■ Quality at any Price
 ■ Value Trap
 ■ Worst in Class
 ■ Style Neutral

Name	Weight (%)	Sep	Oct	Nov	Dec	Jan 2022	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2023	Curr.
APPLE INC	5.75																		
MICROSOFT CORP	4.83																		
MASTERCARD INC	4.28																		
ALPHABET INC	4.17																		
BERKSHIRE HATHAWAY	3.18																		
CHEVRON CORP	3.04																		
NVIDIA CORP	2.91																		
BROADCOM INC	2.61																		
JPMORGAN CHASE & CO	2.59																		
DISNEY (WALT) CO	2.48																		
WELLS FARGO & CO	2.40																		
WALMART INC	2.28																		
LILLY (ELI) & CO	2.27																		
COSTCO WHOLESALE CORP	2.24																		
CHUBB LTD	2.23																		
ORACLE CORP	1.98																		
TJX COS INC (THE)	1.95																		
MCDONALD'S CORP	1.84																		
NORFOLK SOUTHERN CORP	1.80																		
INTUITIVE SURGICAL INC	1.80																		
MONDELEZ INTERNATIONAL INC	1.79																		
OTIS WORLDWIDE CORP	1.79																		
MORGAN STANLEY	1.78																		
IDEXX LABS INC	1.71																		
BOSTON SCIENTIFIC CORP	1.71																		

Style Migration Matrix

■ Best in Class
 ■ Restructuring
 ■ Quality Trap
 ■ Momentum Trap
 ■ Contrarian
 ■ Quality at any Price
 ■ Value Trap
 ■ Worst in Class
 ■ Style Neutral

Name	Weight (%)	Sep	Oct	Nov	Dec	Jan 2022	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2023	Curr.
LAM RESEARCH CORP	1.70																		
PIONEER NATURAL RESOURCES CO	1.67																		
AMAZON.COM INC	1.65																		
NIKE INC -CL B	1.64																		
GENERAL MOTORS CO	1.62																		
TESLA INC	1.61																		
SOLAREDEGE TECHNOLOGIES INC	1.54																		
ADVANCED MICRO DEVICES	1.54																		
COOPER COS INC (THE)	1.52																		
PROLOGIS INC	1.51																		
SERVICENOW INC	1.33																		
WILLIAMS COS INC	1.27																		
JUNIPER NETWORKS INC	1.25																		
HUMANA INC	1.24																		
ETSY INC	1.20																		
PALO ALTO NETWORKS INC	1.19																		
AIRBNB INC	1.18																		
MODERNA INC	1.18																		
ESTEE LAUDER COMPANIES INC	1.18																		
PLUG POWER INC	1.18																		
ACTIVISION BLIZZARD INC	1.16																		
DEXCOM INC	1.12																		
HOWMET AEROSPACE INC	1.10																		
CROWN HOLDINGS INC	1.07																		
SEAGEN INC	1.05																		

Style Migration Matrix

Best in Class Restructuring Quality Trap Momentum Trap Contrarian Quality at any Price Value Trap Worst in Class Style Neutral

Name	Weight (%)	Sep	Oct	Nov	Dec	Jan 2022	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2023	Curr.
PUBLIC STORAGE	0.90																		

Portfolio Holdings Value Trap

Poor Quality

Weak Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Portfolio Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
PXD	PIONEER NATURAL RESOURCES CO	USA	Energy	55.56	1.67	43	28	14	92	54	27
WFC	WELLS FARGO & CO	USA	Financials	184.08	2.40	23	21	8	86	40	58
PSA	PUBLIC STORAGE	USA	Real Estate	52.76	0.90	64	40	35	83	36	91

Portfolio Holdings

Quality at any Price

Good Quality

Strong Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Portfolio Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
OTIS	OTIS WORLDWIDE CORP	USA	Industrials	34.98	1.79	77	95	79	17	85	85
MCD	MCDONALD'S CORP	USA	Consumer Discretionary	195.27	1.84	54	66	69	30	38	96
ETSY	ETSY INC	USA	Consumer Discretionary	16.81	1.20	67	61	83	34	93	4
MDLZ	MONDELEZ INTERNATIONAL INC	USA	Consumer Staples	89.78	1.79	82	97	87	11	22	95
IDXX	IDEXX LABS INC	USA	Health Care	41.80	1.71	45	88	69	5	88	39

Portfolio Holdings

Quality Trap

Good Quality

Weak Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Portfolio Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
EL	ESTEE LAUDER COMPANIES INC	USA	Consumer Staples	91.25	1.18	11	78	13	3	29	49
AAPL	APPLE INC	USA	Information Technology	2427.06	5.75	19	88	7	24	38	42
MSFT	MICROSOFT CORP	USA	Information Technology	2026.85	4.83	42	89	24	32	67	65
AMD	ADVANCED MICRO DEVICES	USA	Information Technology	139.87	1.54	10	61	2	33	85	5

Portfolio Holdings Momentum Trap

Poor Quality **Strong** Momentum **Expensive** Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Portfolio Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
TJX	TJX COS INC (THE)	USA	Consumer Discretionary	93.33	1.95	37	36	80	31	44	82
SEDG	SOLAREDGE TECHNOLOGIES INC	USA	Information Technology	17.63	1.54	27	30	88	12	90	9

Portfolio Holdings Worst in Class

Poor Quality

Weak Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Portfolio Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
TSLA	TESLA INC	USA	Consumer Discretionary	662.07	1.61	2	35	1	10	99	1
ABNB	AIRBNB INC	USA	Consumer Discretionary	76.52	1.18	4	7	26	28	99	15
DXCM	DEXCOM INC	USA	Health Care	45.80	1.12	7	27	35	1	92	27
SGEN	SEAGEN INC	USA	Health Care	26.08	1.05	3	10	14	17	52	49
COO	COOPER COS INC (THE)	USA	Health Care	16.64	1.52	9	37	19	13	57	71
DIS	DISNEY (WALT) CO	USA	Communication Services	196.59	2.48	11	15	32	37	37	36

Areas of Opportunity Best In Class

Good Quality

Strong Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
URI	UNITED RENTALS INC	USA	Industrials	31.67	0.09	100	83	99	90	82	18
SNA	SNAP-ON INC	USA	Industrials	13.48	0.04	98	84	94	63	23	68
TPR	TAPESTRY INC	USA	Consumer Discretionary	10.64	0.03	93	63	89	67	10	23
MO	ALTRIA GROUP INC	USA	Consumer Staples	86.44	0.24	91	75	67	70	4	90
JNJ	JOHNSON & JOHNSON	USA	Health Care	424.04	1.25	97	93	68	74	41	99
BMJ	BRISTOL-MYERS SQUIBB CO	USA	Health Care	153.46	0.45	99	74	75	97	49	96
ELV	ELEVANCE HEALTH INC	USA	Health Care	117.45	0.35	92	92	66	61	50	73
GILD	GILEAD SCIENCES INC	USA	Health Care	107.44	0.31	94	82	81	63	11	93
ABC	AMERISOURCEBERGEN CORP	USA	Health Care	31.82	0.08	99	92	91	71	59	94
AFL	AFLAC INC	USA	Financials	43.18	0.12	97	67	91	74	45	78
AJG	ARTHUR J GALLAGHER & CO	USA	Financials	39.69	0.12	99	100	85	64	83	93
STT	STATE STREET CORP	USA	Financials	34.25	0.10	94	61	61	92	46	25
ADI	ANALOG DEVICES INC	USA	Information Technology	92.97	0.26	99	90	94	61	74	52
FTNT	FORTINET INC	USA	Information Technology	47.73	0.10	88	74	73	62	100	29
MCHP	MICROCHIP TECHNOLOGY INC	USA	Information Technology	46.50	0.13	100	84	97	72	73	21
META	META PLATFORMS INC	USA	Communication Services	469.16	0.98	98	69	91	78	71	18

Areas of Opportunity Contrarian

Good Quality

Weak Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
LYB	LYONDELLBASELL INDUSTRIES NV	USA	Materials	32.60	0.07	70	61	33	73	16	49
J	JACOBS SOLUTIONS INC	USA	Industrials	15.61	0.05	74	85	23	65	73	80
DHI	D R HORTON INC	USA	Consumer Discretionary	34.04	0.09	70	67	18	79	67	35
BBY	BEST BUY CO INC	USA	Consumer Discretionary	19.89	0.05	71	70	37	62	2	21
AAP	ADVANCE AUTO PARTS INC	USA	Consumer Discretionary	9.00	0.03	66	61	11	90	11	34
HAS	HASBRO INC	USA	Consumer Discretionary	8.03	0.02	54	62	13	79	3	54
TSN	TYSON FOODS INC -CL A	USA	Consumer Staples	21.92	0.06	23	63	1	70	11	83
PFE	PFIZER INC	USA	Health Care	245.36	0.73	50	70	4	85	32	84
USB	U S BANCORP	USA	Financials	73.00	0.20	62	63	28	66	51	68
TFC	TRUIST FINANCIAL CORP	USA	Financials	64.75	0.19	39	62	13	67	63	57
DFS	DISCOVER FINANCIAL SVCS	USA	Financials	33.26	0.09	51	74	10	72	78	32
NTRS	NORTHERN TRUST CORP	USA	Financials	20.22	0.06	72	65	17	85	15	57
SYF	SYNCHRONY FINANCIAL	USA	Financials	19.13	0.05	92	71	32	94	18	19
GPN	GLOBAL PAYMENTS INC	USA	Information Technology	31.40	0.09	86	96	25	65	54	53
SWKS	SKYWORKS SOLUTIONS INC	USA	Information Technology	19.37	0.05	34	68	9	60	33	25
FFIV	F5 INC	USA	Information Technology	8.85	0.03	80	76	37	66	60	53
CMCSA	COMCAST CORP	USA	Communication Services	164.84	0.50	83	64	30	86	8	68
FOXA	FOX CORP	USA	Communication Services	19.17	0.04	81	79	19	83	16	69

Areas of Opportunity Restructuring

Poor Quality

Strong Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
XOM	EXXON MOBIL CORP	USA	Energy	479.45	1.40	68	16	67	87	49	55
OXY	OCCIDENTAL PETROLEUM CORP	USA	Energy	61.63	0.14	52	10	64	88	28	11
MPC	MARATHON PETROLEUM CORP	USA	Energy	60.33	0.18	100	18	100	98	60	18
VLO	VALERO ENERGY CORP	USA	Energy	53.85	0.16	100	13	100	98	68	13
PSX	PHILLIPS 66	USA	Energy	51.93	0.14	86	9	89	98	26	29
KMI	KINDER MORGAN INC	USA	Energy	41.16	0.11	68	33	61	74	4	78
HAL	HALLIBURTON CO	USA	Energy	35.14	0.11	89	33	93	72	39	6
TRGP	TARGA RESOURCES CORP	USA	Energy	17.62	0.05	66	27	82	61	49	10
FCX	FREEPORT-MCMORAN INC	USA	Materials	61.68	0.19	72	18	83	77	49	11
ALB	ALBEMARLE CORP	USA	Materials	31.71	0.10	93	22	99	74	77	12
PCAR	PACCAR INC	USA	Industrials	38.13	0.11	97	31	99	79	48	69
DAL	DELTA AIR LINES INC	USA	Industrials	25.07	0.07	27	5	83	73	24	33
UAL	UNITED AIRLINES HOLDINGS INC	USA	Industrials	16.37	0.05	77	5	97	93	57	16
AAL	AMERICAN AIRLINES GROUP INC	USA	Industrials	10.91	0.03	52	4	86	94	26	13
ALK	ALASKA AIR GROUP INC	USA	Industrials	6.42	0.02	53	7	76	93	32	26
BWA	BORGWARNER INC	USA	Consumer Discretionary	11.91	0.03	81	40	67	80	46	42
ADM	ARCHER-DANIELS-MIDLAND CO	USA	Consumer Staples	45.80	0.13	88	34	87	80	40	79
KR	KROGER CO	USA	Consumer Staples	31.24	0.09	81	40	65	82	17	90
AIG	AMERICAN INTERNATIONAL GROUP	USA	Financials	45.97	0.14	52	13	68	79	73	57
HIG	HARTFORD FINANCIAL SERVICES	USA	Financials	25.98	0.07	70	17	70	87	34	83
ACGL	ARCH CAPITAL GROUP LTD	USA	Financials	24.48	0.07	75	23	91	62	72	84
PFG	PRINCIPAL FINANCIAL GRP INC	USA	Financials	24.07	0.06	73	38	62	75	44	53
RE	EVEREST RE GROUP LTD	USA	Financials	14.91	0.04	94	15	97	93	81	83
TMUS	T-MOBILE US INC	USA	Communication Services	184.38	0.26	73	34	83	61	55	94
DUK	DUKE ENERGY CORP	USA	Utilities	76.49	0.23	55	25	60	69	8	99

Areas of Opportunity Restructuring

Poor Quality

Strong Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
SRE	SEMPRA ENERGY	USA	Utilities	49.71	0.15	62	33	71	62	13	89
AEP	AMERICAN ELECTRIC POWER CO	USA	Utilities	45.62	0.14	63	27	68	70	27	96
EXC	EXELON CORP	USA	Utilities	41.77	0.12	61	29	64	69	9	92
XEL	XCEL ENERGY INC	USA	Utilities	36.98	0.11	59	26	63	69	25	98
ED	CONSOLIDATED EDISON INC	USA	Utilities	32.25	0.10	56	25	73	63	23	99
PCG	PG&E CORP	USA	Utilities	30.97	0.08	70	23	84	65	28	33
WEC	WEC ENERGY GROUP INC	USA	Utilities	28.93	0.09	52	28	61	63	11	97
CEG	CONSTELLATION ENERGY CORP	USA	Utilities	28.14	0.08	84	35	85	73	34	83
EIX	EDISON INTERNATIONAL	USA	Utilities	25.79	0.08	71	30	71	75	30	76
AEE	AMEREN CORP	USA	Utilities	21.96	0.07	55	23	64	68	31	97
ETR	ENTERGY CORP	USA	Utilities	21.59	0.06	68	23	62	81	24	88
PPL	PPL CORP	USA	Utilities	21.01	0.06	71	24	68	81	2	91
CNP	CENTERPOINT ENERGY INC	USA	Utilities	18.43	0.06	70	25	73	75	17	82
CMS	CMS ENERGY CORP	USA	Utilities	17.75	0.05	49	26	62	62	26	98
ATO	ATMOS ENERGY CORP	USA	Utilities	16.57	0.05	53	24	69	64	33	94
EVRG	EVERGY INC	USA	Utilities	13.92	0.04	69	25	62	82	9	93
NI	NISOURCE INC	USA	Utilities	10.91	0.03	55	25	63	68	7	97
PNW	PINNACLE WEST CAPITAL CORP	USA	Utilities	8.36	0.02	60	22	71	70	30	94
VICI	VICI PROPERTIES INC	USA	Real Estate	21.50	0.10	84	15	81	93	68	78

Areas of Opportunity Value Trap

Poor Quality

Weak Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
COP	CONOCOPHILLIPS	USA	Energy	141.49	0.45	32	13	20	91	48	28
EOG	EOG RESOURCES INC	USA	Energy	78.02	0.23	49	17	27	93	44	22
DVN	DEVON ENERGY CORP	USA	Energy	41.94	0.12	52	16	19	97	43	7
CTRA	COTERRA ENERGY INC	USA	Energy	20.33	0.06	34	17	11	95	49	55
APA	APA CORP	USA	Energy	14.73	0.04	69	12	38	98	21	3
EQT	EQT CORP	USA	Energy	11.44	0.04	49	14	25	97	39	10
DOW	DOW INC	USA	Materials	42.12	0.12	29	22	23	72	5	47
MOS	MOSAIC CO	USA	Materials	17.01	0.05	69	20	22	99	56	21
IP	INTERNATIONAL PAPER CO	USA	Materials	13.92	0.04	46	20	36	84	2	56
WRK	WESTROCK CO	USA	Materials	8.40	0.03	43	39	10	89	5	36
FDX	FEDEX CORP	USA	Industrials	53.68	0.14	41	33	36	66	42	34
LUV	SOUTHWEST AIRLINES	USA	Industrials	21.09	0.06	25	8	20	96	66	37
F	FORD MOTOR CO	USA	Consumer Discretionary	51.70	0.16	33	12	14	97	18	18
EXPE	EXPEDIA GROUP INC	USA	Consumer Discretionary	17.89	0.05	24	12	34	72	80	16
CCL	CARNIVAL CORPORATION & PLC	USA	Consumer Discretionary	14.96	0.03	3	2	4	79	69	3
WHR	WHIRLPOOL CORP	USA	Consumer Discretionary	8.13	0.02	45	38	30	69	2	31
MHK	MOHAWK INDUSTRIES INC	USA	Consumer Discretionary	7.69	0.02	31	39	17	67	9	28
VTRS	VIATRIS INC	USA	Health Care	14.32	0.04	20	11	22	76	23	50
BIO	BIO-RAD LABORATORIES INC	USA	Health Care	13.79	0.03	26	21	33	61	59	51
BAC	BANK OF AMERICA CORP	USA	Financials	285.83	0.73	24	39	5	81	24	49
C	CITIGROUP INC	USA	Financials	99.96	0.30	48	24	14	96	3	37
HBAN	HUNTINGTON BANCSHARES	USA	Financials	22.14	0.06	55	38	30	80	82	61
CMA	COMERICA INC	USA	Financials	9.93	0.03	31	34	11	82	38	43
SBNY	SIGNATURE BANK/NY	USA	Financials	8.19	0.02	15	35	1	78	82	10
LNC	LINCOLN NATIONAL CORP	USA	Financials	6.15	0.02	21	19	7	88	63	10

Areas of Opportunity Value Trap

Poor Quality

Weak Momentum

Cheap Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
INTC	INTEL CORP	USA	Information Technology	118.48	0.34	8	12	1	77	2	58
DXC	DXC TECHNOLOGY CO	USA	Information Technology	6.64	0.02	26	29	12	79	1	11
VZ	VERIZON COMMUNICATIONS INC	USA	Communication Services	169.38	0.51	56	34	24	87	36	98
DISH	DISH NETWORK CORP	USA	Communication Services	7.44	0.01	41	23	20	87	3	8
D	DOMINION ENERGY INC	USA	Utilities	48.36	0.16	41	28	28	78	27	95
WY	WEYERHAEUSER CO	USA	Real Estate	24.17	0.07	13	17	8	66	9	35
MAA	MID-AMERICA APT CMNTYS INC	USA	Real Estate	19.73	0.06	75	38	36	91	20	83
ESS	ESSEX PROPERTY TRUST	USA	Real Estate	15.46	0.04	70	29	31	93	9	76
UDR	UDR INC	USA	Real Estate	14.57	0.04	33	14	35	82	55	80
CPT	CAMDEN PROPERTY TRUST	USA	Real Estate	13.76	0.04	60	32	29	88	52	79
BXP	BOSTON PROPERTIES INC	USA	Real Estate	11.34	0.03	51	17	29	93	28	46

Areas of Opportunity Quality at any Price

Good Quality

Strong Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
ITW	ILLINOIS TOOL WORKS	USA	Industrials	73.13	0.19	83	91	91	13	41	69
NOC	NORTHROP GRUMMAN CORP	USA	Industrials	71.60	0.19	63	64	75	36	36	82
ETN	EATON CORP PLC	USA	Industrials	68.79	0.19	36	66	73	12	40	67
EMR	EMERSON ELECTRIC CO	USA	Industrials	49.13	0.16	66	91	66	20	5	46
PH	PARKER-HANNIFIN CORP	USA	Industrials	45.24	0.12	81	84	82	32	13	41
CTAS	CINTAS CORP	USA	Industrials	45.02	0.11	71	94	85	6	54	55
JCI	JOHNSON CONTROLS INTL PLC	USA	Industrials	44.90	0.14	61	67	63	40	37	58
TT	TRANE TECHNOLOGIES PLC	USA	Industrials	42.76	0.12	94	92	97	24	44	56
TDG	TRANSDIGM GROUP INC	USA	Industrials	41.08	0.11	50	72	86	6	84	45
ODFL	OLD DOMINION FREIGHT	USA	Industrials	39.80	0.09	65	74	81	21	89	42
RSG	REPUBLIC SERVICES INC	USA	Industrials	39.46	0.08	61	72	65	33	42	95
GWW	GRAINGER (W W) INC	USA	Industrials	33.75	0.08	92	76	98	30	52	44
ROK	ROCKWELL AUTOMATION	USA	Industrials	33.66	0.10	89	96	94	13	48	41
AME	AMETEK INC	USA	Industrials	33.16	0.10	77	97	77	15	63	65
FAST	FASTENAL CO	USA	Industrials	30.10	0.08	62	88	64	21	45	56
FTV	FORTIVE CORP	USA	Industrials	24.42	0.07	59	75	61	32	74	62
WAB	WABTEC CORP	USA	Industrials	19.22	0.06	65	81	72	25	14	47
IEX	IDEX CORP	USA	Industrials	17.17	0.05	83	83	92	19	81	72
AOS	SMITH (A O) CORP	USA	Industrials	10.64	0.03	79	88	82	24	21	36
ALLE	ALLEGION PLC	USA	Industrials	10.53	0.03	74	97	64	22	31	63
SBUX	STARBUCKS CORP	USA	Consumer Discretionary	124.02	0.37	41	71	73	11	45	76
ORLY	O'REILLY AUTOMOTIVE INC	USA	Consumer Discretionary	54.07	0.15	77	90	78	25	59	82
AZO	AUTOZONE INC	USA	Consumer Discretionary	47.86	0.14	89	93	92	24	28	86
HLT	HILTON WORLDWIDE HOLDINGS	USA	Consumer Discretionary	42.25	0.12	49	62	83	17	96	56
YUM	YUM BRANDS INC	USA	Consumer Discretionary	37.81	0.11	79	98	76	17	44	82

Areas of Opportunity Quality at any Price

Good Quality

Strong Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
ULTA	ULTA BEAUTY INC	USA	Consumer Discretionary	26.77	0.08	88	64	99	20	57	46
TSCO	TRACTOR SUPPLY CO	USA	Consumer Discretionary	26.32	0.07	63	71	68	34	43	74
GPC	GENUINE PARTS CO	USA	Consumer Discretionary	24.90	0.07	82	74	84	39	35	83
KO	COCA-COLA CO	USA	Consumer Staples	257.67	0.70	69	86	78	18	29	98
MNST	MONSTER BEVERAGE CORP	USA	Consumer Staples	55.18	0.12	56	76	87	7	71	81
HSY	HERSHEY CO	USA	Consumer Staples	48.99	0.10	90	96	95	15	54	97
KHC	KRAFT HEINZ CO	USA	Consumer Staples	48.81	0.09	92	98	83	37	1	79
GIS	GENERAL MILLS INC	USA	Consumer Staples	44.47	0.14	87	98	84	21	10	96
CAG	CONAGRA BRANDS INC	USA	Consumer Staples	17.31	0.05	95	77	98	38	2	87
SJM	SMUCKER (JM) CO	USA	Consumer Staples	15.65	0.05	88	94	79	37	4	100
TMO	THERMO FISHER SCIENTIFIC INC	USA	Health Care	224.13	0.66	86	98	82	22	73	78
SYK	STRYKER CORP	USA	Health Care	100.16	0.25	57	87	71	13	49	61
CI	CIGNA CORP	USA	Health Care	91.47	0.28	90	96	78	40	3	83
BDX	BECTON DICKINSON & CO	USA	Health Care	69.10	0.21	47	70	71	18	9	94
A	AGILENT TECHNOLOGIES INC	USA	Health Care	45.19	0.13	77	90	90	11	66	60
MTD	METTLER-TOLEDO INTL INC	USA	Health Care	34.22	0.10	80	95	94	2	81	54
GEHC	GE HEALTHCARE TECHNOLOGIES INC	USA	Health Care	33.02	0.07	71	99	72	10	70	63
ZBH	ZIMMER BIOMET HOLDINGS INC	USA	Health Care	26.58	0.08	52	62	79	22	35	77
HOLX	HOLOGIC INC	USA	Health Care	20.50	0.06	83	82	97	9	29	64
CAH	CARDINAL HEALTH INC	USA	Health Care	20.40	0.06	79	62	95	26	11	77
WAT	WATERS CORP	USA	Health Care	20.20	0.06	30	71	61	6	47	60
AXP	AMERICAN EXPRESS CO	USA	Financials	135.22	0.31	49	81	65	16	94	48
BLK	BLACKROCK INC	USA	Financials	110.60	0.33	96	100	92	31	22	58
MMC	MARSH & MCLENNAN COS	USA	Financials	84.09	0.25	87	96	81	28	58	86
AON	AON PLC	USA	Financials	67.11	0.19	76	88	82	22	62	87

Areas of Opportunity Quality at any Price

Good Quality

Strong Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
MSCI	MSCI INC	USA	Financials	45.01	0.12	82	89	96	6	96	47
FDS	FACTSET RESEARCH SYSTEMS INC	USA	Financials	16.35	0.05	69	97	72	8	80	75
MKTX	MARKETAXESS HOLDINGS INC	USA	Financials	13.50	0.04	76	95	89	4	78	41
V	VISA INC	USA	Information Technology	472.31	1.10	89	85	94	29	87	80
ACN	ACCENTURE PLC	USA	Information Technology	179.25	0.52	77	94	60	33	59	51
ADP	AUTOMATIC DATA PROCESSING	USA	Information Technology	93.45	0.27	66	93	72	12	46	78
SNPS	SYNOPSYS INC	USA	Information Technology	57.28	0.16	75	92	90	7	89	49
CDNS	CADENCE DESIGN SYSTEMS INC	USA	Information Technology	54.61	0.15	59	87	81	6	94	55
MSI	MOTOROLA SOLUTIONS INC	USA	Information Technology	45.30	0.13	65	79	73	25	69	79
ROP	ROPER TECHNOLOGIES INC	USA	Information Technology	45.02	0.13	75	78	79	32	30	74
ANET	ARISTA NETWORKS INC	USA	Information Technology	43.22	0.09	48	60	62	35	96	29
PAYX	PAYCHEX INC	USA	Information Technology	41.07	0.11	86	98	79	25	65	71
KEYS	KEYSIGHT TECHNOLOGIES INC	USA	Information Technology	33.07	0.09	67	72	68	38	61	62
MPWR	MONOLITHIC POWER SYSTEMS INC	USA	Information Technology	24.44	0.06	40	67	69	16	99	22
TDY	TELEDYNE TECHNOLOGIES INC	USA	Information Technology	20.69	0.06	66	80	61	35	84	64

Areas of Opportunity Quality Trap

Good Quality

Weak Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
SHW	SHERWIN-WILLIAMS CO	USA	Materials	60.10	0.16	17	93	5	20	31	47
ECL	ECOLAB INC	USA	Materials	45.12	0.11	25	75	40	7	13	68
IFF	INTL FLAVORS & FRAGRANCES	USA	Materials	24.48	0.08	17	74	8	26	58	32
BALL	BALL CORP	USA	Materials	17.87	0.05	25	70	15	37	34	69
LHX	L3HARRIS TECHNOLOGIES INC	USA	Industrials	40.68	0.12	18	73	14	20	6	81
EFX	EQUIFAX INC	USA	Industrials	26.20	0.08	18	91	12	10	75	29
NDSN	NORDSON CORP	USA	Industrials	13.86	0.04	44	97	25	20	50	73
CHRW	C.H. ROBINSON WORLDWIDE INC	USA	Industrials	13.56	0.03	40	100	12	29	36	75
SWK	STANLEY BLACK & DECKER INC	USA	Industrials	13.19	0.04	18	95	1	31	31	32
MAS	MASCO CORP	USA	Industrials	12.48	0.04	21	90	6	30	6	47
HD	HOME DEPOT INC	USA	Consumer Discretionary	324.80	0.97	51	90	33	30	14	75
MAR	MARRIOTT INTL INC	USA	Consumer Discretionary	59.15	0.14	22	87	21	9	85	35
POOL	POOL CORP	USA	Consumer Discretionary	14.66	0.04	26	91	13	23	76	48
CL	COLGATE-PALMOLIVE CO	USA	Consumer Staples	61.12	0.18	53	99	35	15	8	97
KDP	KEURIG DR PEPPER INC	USA	Consumer Staples	50.19	0.09	12	77	11	5	70	82
STZ	CONSTELLATION BRANDS	USA	Consumer Staples	41.63	0.11	22	89	12	21	5	59
BF.B	BROWN FORMAN CORP	USA	Consumer Staples	31.29	0.04	15	71	17	9	63	84
CHD	CHURCH & DWIGHT INC	USA	Consumer Staples	20.08	0.06	27	93	24	8	34	92
MKC	MCCORMICK & CO INC	USA	Consumer Staples	20.08	0.06	10	84	3	10	39	88
DHR	DANAHER CORP	USA	Health Care	186.52	0.51	25	94	15	13	69	73
MDT	MEDTRONIC PLC	USA	Health Care	110.93	0.33	22	77	12	31	5	79
ZTS	ZOETIS INC	USA	Health Care	80.18	0.23	24	77	32	9	52	80
EW	EDWARDS LIFESCIENCES CORP	USA	Health Care	47.44	0.14	38	81	34	26	81	53
IQV	IQVIA HOLDINGS INC	USA	Health Care	42.19	0.12	16	91	12	7	70	44
STE	STERIS PLC	USA	Health Care	19.37	0.06	25	81	16	26	64	54

Areas of Opportunity Quality Trap

Good Quality

Weak Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
PKI	PERKINELMER INC	USA	Health Care	17.41	0.05	7	73	2	6	20	51
CRL	CHARLES RIVER LABS INTL INC	USA	Health Care	12.81	0.04	28	72	35	17	54	30
TECH	BIO-TECHNE CORP	USA	Health Care	12.10	0.04	17	81	15	11	87	38
TFX	TELEFLEX INC	USA	Health Care	11.50	0.03	26	73	36	14	19	57
SPGI	S&P GLOBAL INC	USA	Financials	118.87	0.37	22	87	9	26	91	66
ICE	INTERCONTINENTAL EXCHANGE	USA	Financials	60.60	0.18	21	94	6	25	11	84
MCO	MOODY'S CORP	USA	Financials	56.61	0.15	31	98	29	3	52	48
TROW	PRICE (T. ROWE) GROUP	USA	Financials	27.07	0.08	35	86	18	34	5	37
ADBE	ADOBE INC	USA	Information Technology	174.59	0.50	44	100	34	7	71	43
TXN	TEXAS INSTRUMENTS INC	USA	Information Technology	159.76	0.47	38	97	17	25	26	64
INTU	INTUIT INC	USA	Information Technology	118.71	0.35	34	99	24	7	89	39
NXPI	NXP SEMICONDUCTORS NV	USA	Information Technology	49.42	0.14	40	81	27	30	42	15
ADSK	AUTODESK INC	USA	Information Technology	49.26	0.14	6	68	5	3	98	25
ANSS	ANSYS INC	USA	Information Technology	23.89	0.07	30	82	37	11	91	43
VRSN	VERISIGN INC	USA	Information Technology	22.73	0.06	20	78	13	25	94	78
EPAM	EPAM SYSTEMS INC	USA	Information Technology	20.79	0.06	40	87	26	30	97	10
TER	TERADYNE INC	USA	Information Technology	16.83	0.05	10	75	5	11	51	17
TRMB	TRIMBLE INC	USA	Information Technology	13.71	0.04	21	92	6	28	35	28
TYL	TYLER TECHNOLOGIES INC	USA	Information Technology	13.58	0.04	45	95	30	19	98	52
GEN	GEN DIGITAL INC	USA	Information Technology	13.55	0.04	13	77	8	15	76	43
QRVO	QORVO INC	USA	Information Technology	10.65	0.03	12	73	4	22	21	20

Areas of Opportunity Momentum Trap

Poor Quality

Strong Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
APD	AIR PRODUCTS & CHEMICALS INC	USA	Materials	62.45	0.21	28	27	76	28	38	74
CSGP	COSTAR GROUP INC	USA	Industrials	31.22	0.09	17	33	76	5	75	68
XYL	XYLEM INC	USA	Industrials	19.36	0.05	38	38	88	22	59	53
LVS	LAS VEGAS SANDS CORP	USA	Consumer Discretionary	43.98	0.06	15	7	93	22	18	39
LW	LAMB WESTON HOLDINGS INC	USA	Consumer Staples	14.28	0.04	77	25	100	21	50	76
ENPH	ENPHASE ENERGY INC	USA	Information Technology	28.31	0.09	81	36	99	35	100	5
FSLR	FIRST SOLAR INC	USA	Information Technology	17.59	0.05	64	15	100	23	69	13
CDAY	CERIDIAN HCM HOLDING	USA	Information Technology	11.91	0.03	16	9	98	4	97	15
LYV	LIVE NATION ENTERTAINMENT	USA	Communication Services	18.03	0.03	8	6	69	30	98	34
EQIX	EQUINIX INC	USA	Real Estate	65.97	0.20	27	39	67	24	80	85

Areas of Opportunity Worst in Class

Poor Quality

Weak Momentum

Expensive Valuation

Ticker	Name	Country	Sector	Market Cap (Local B)	Benchmark Weight	Overall Rank	Op. Quality	Momentum	Valuation	Growth	Low Volatility
CTVA	CORTEVA INC	USA	Materials	44.53	0.14	7	10	35	26	20	80
BA	BOEING CO	USA	Industrials	130.54	0.35	1	3	11	16	62	26
GE	GENERAL ELECTRIC CO	USA	Industrials	91.81	0.26	5	11	10	39	12	17
APTV	APTIV PLC	USA	Consumer Discretionary	32.81	0.09	6	22	11	24	35	17
ILMN	ILLUMINA INC	USA	Health Care	33.41	0.10	1	19	0	4	42	28
FRC	FIRST REPUBLIC BANK	USA	Financials	24.77	0.08	11	33	12	38	72	47

HOLT Scorecard Factor Definitions

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Operational Quality

The HOLT Quality factor assesses the relative attractiveness of a company based on the historical level and variability of its cash flow return on investment (CFROI®). The factor incorporates a firm's most recent achieved CFROI level, median CFROI over the past five years, and variability in CFROI over a five-year period (as quantified by the range between the highest and lowest CFROI levels). Companies with high and stable CFROI levels earn higher Quality scores, while those with low and/or volatile CFROI levels receive lower scores.

CFROI® LFY (50% weight in Quality factor)- CFROI (Cash flow return on investment) represents the economic rate of return a firm earns on its total capital base and takes into account both on- and off-balance sheet assets. The CFROI calculation incorporates systematic adjustments to mitigate potential biases related to differences in accounting standards, differences in capital structure, asset age and mix, and non-cash accounting transactions, all of which can distort the economic reality of operational performance. CFROI is not an accounting ratio that assumes a firm's cash flows are earned in perpetuity. Rather, it is calculated as an internal rate of return (IRR) in which HOLT estimates the useful life of a company's assets that generate that cash flow, recognizing that capital has a finite economic life and eventually needs to be replaced.

Financial firms such as Banks and Insurance companies that operate "spread" businesses are evaluated using HOLT's Cash Flow Return on Equity (CFROE®) framework, as opposed to the CFROI framework used for industrial and service firms. CFROE approximates cash earnings as a percent of tangible equity and is better suited for measuring the returns earned by financial institutions that rely on spread-based profit making.

CFROE represents a return earned on adjusted tangible equity, as opposed to CFROI, which measures a return earned on all capital. Consequently, the levered nature of the CFROE measure results in higher observed long-term average levels (7.5%) when compared with CFROI firms (6%). The HOLT framework accounts for this structural difference in its valuation framework by fading CFROE and discount rates for financial firms to 7.5% over time, while CFROI Industrial/Service firms fade to 6%.

To ensure a structural Quality advantage is not given to financial firms using the CFROE metric relative to industrial firms using CFROI, 1.5% is subtracted from all CFROE levels to remove the long-term average difference between these two metrics. For example, a firm with a CFROE of 10% will have an effective value of 8.5% when scored. Such an adjustment is warranted as the 1.5% gap reflects a difference in metrics, rather than an earned difference in operating quality.

For firms on the HOLT Real Estate model, CFROI Revaluations are used. CFROI Revaluations are equivalent to a firm's economic earnings over its revalued asset base; a proxy for the total return on the property portfolio. The metric provides a more holistic understanding of a Real Estate owner's track record of delivering cash flow and capital gains over the real estate cycle.

HOLT Scorecard Factor Definitions

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5-year median CFROI (25% weight in Quality factor)- The 5-year median CFROI level is calculated from a firm's CFROI over its last five reported fiscal years. Observing the 5-year median CFROI helps contextualize a firm's average profitability.

For “spread” financials on the HOLT CFROE model (banks and insurance), the 5-year median is calculated using CFROE. Again, to ensure a structural Quality advantage is not given to Financial firms using the CFROE metric relative to industrial firms using CFROI, 1.5% is subtracted from all CFROE levels to remove the long-term average difference between these two metrics. For firms on the HOLT Real Estate Model, 5-year median is calculated using CFROI Revaluations.

The 5-year median calculation uses all available CFROI data for firms with between three and five years of CFROI history in HOLT. The median is not calculated for firms with fewer than three years of CFROI history. Instead, these firms are assigned neutral scores (i.e., a P-Value of 50).

5-year range in CFROI (25% weight in Quality factor) - The 5-year CFROI range metric is calculated by subtracting a company's lowest observed CFROI over the last 5 years from its highest achieved CFROI over the same period. Firms with stable CFROI profiles exhibit narrow ranges between their achieved peak and trough CFROI levels over the last 5 years and, therefore, receive high scores. Those with volatile CFROI profiles generally exhibit wider ranges in achieved CFROI and receive relatively lower scores.

For “spread” financials on the HOLT CFROE model (banks and insurance), 5-year range is calculated using CFROE. For firms on the HOLT Real Estate Model, 5-year range is calculated using CFROI Revaluations.

The 5-year range calculation uses all available CFROI data for firms with between three and five years of CFROI history in HOLT. Range is not calculated for firms with fewer than three years of CFROI history. Instead, these firms are assigned neutral scores (i.e., a P-Value of 50). The natural logarithm of 5-year CFROI range is used for scoring purposes.

$$CFROI\ Range = \ln(5Y\ Maximum\ CFROI - 5Y\ Minimum\ CFROI)$$

HOLT Scorecard Factor Definitions

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Momentum

The HOLT Momentum factor provides a gauge of market sentiment. Stocks that score highly tend to have increasing CFROI forecasts based on upward revisions to EPS estimates, strong price momentum, and liquid trading.

CFROI Revisions, 13-week cumulative (*60% weight in Momentum factor*) - The CFROI Revisions metric captures the net impact on a firm's forecast CFROI level driven by changes in underlying I/B/E/S consensus EPS estimates. The 13-week cumulative CFROI Revisions metric aggregates week-to-week changes in forecast CFROI over the last 13 weeks (3 months). CFROI Revisions is a more economic measure of earnings sentiment than EPS momentum because it estimates the cash flow impact of EPS revisions as opposed to changes in accounting income.

Price Momentum (*30% weight in Momentum factor*) - Price momentum measures the percentage change in a firm's market value (in local currency) from 52 weeks ago to 4 weeks ago.

Size Relative Average Daily Liquidity (*10% weight in Momentum factor*) - Size Relative Daily Liquidity Average measures the number of shares traded for the last quarter divided by 63 trading days multiplied by the current end-of-week price, divided by market cap.

Valuation

The HOLT Valuation factor evaluates the relative attractiveness of a company's stock. The Valuation factor considers Warranted Upside/Downside, Market Implied Yield, Economic P/E, HOLT P/B, and Dividend yield.

DCF Valuation (*20% weight in Valuation Factor*)

%Upside/Downside (*100% weight in DCF Valuation factor*) - %Upside/Downside is the difference between HOLT's default warranted price (as determined by an objective, systematic DCF framework) and the stock's most recent closing price, expressed as a percentage. HOLT estimates a company's worth by forecasting likely CFROI and real growth rates over an extended period. CFROI and Growth determine enterprise free cash flows (FCFF) which are discounted to present value. All three factors (CFROI, Real Growth, and the Discount Rate) are mean reverting, such that zero economic profits are generated in distant years. In general, companies with high upside are under-valued in the HOLT valuation framework, based on model's assumptions of future CFROI and growth rate patterns.

For the Global and Global Sector facets, Warranted Upside/Downside is calculated using a global discount rate in the DCF. For the Region and Region-Sector facets, a company's country or region-specific discount rate is used in the DCF.

HOLT Scorecard Factor Definitions

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Systematic Value (80% Weight in Valuation Factor)

Economic P/E (20% weight in Systematic Value factor)- The HOLT Economic P/E is similar to EV over cash flow and quantifies the premium that investors have assigned to a company's assets after accounting for the forecasted profitability of those assets. Economic P/E is calculated as HOLT Price/Book divided by Forecast CFROI.

In the HOLT Factor Library and Scorecard, Economic P/E is converted to Economic Yield ($1 / \text{Economic PE}$) prior to scoring and ranking.

$$\text{Econ. P/E} = \frac{\text{HOLT P/B}}{\text{Forecast CFROI}} \cong \frac{\text{EV/IANA}}{(\text{GCF} - \text{Econ. Depreciation})/\text{IANA}} = \frac{\text{Enterprise Value}}{(\text{GCF} - \text{Econ. Depreciation})}$$

Due to the different long-term returns on capital and those specific to equity, companies using the CFROE model, mostly spread financials, have their economic yields reduced by 1.5%, the difference between the CFROI and CFROE models' long-term discount rates.

Note: for this calculation, an unbounded version of forecast CFROI is used.

HOLT Price to Book (30% weight in Systematic Value factor) - The HOLT Price to Book ratio (also interpreted as Value to Cost ratio, VCR) measures a firm's enterprise value relative to the inflation-adjusted net assets of the firm. HOLT Price/Book is analogous to a traditional Price to Book ratio but incorporates a number of adjustments that better reflect firm value by capturing all assets of the firm (rather than just equity), ultimately reducing the volatility and improving the comparability of the metric across firms. The Factor Library uses the natural log of VCR to produce scores and ranks.

$$\text{VCR} = \frac{\text{Enterprise Value}}{\text{Infl. Adj. Net Assets}} = \frac{\text{Market Equity} + \text{Minority Interest} + \text{HOLT Debt}}{\text{Infl. Adj. Gross Investment} - \text{Infl. Adj. Accumulated Depreciation}}$$

HOLT Scorecard Factor Definitions

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Market Implied Yield (30% weight in Systematic Value factor)- The Market Implied Yield (MIY) is the real yield that equates the CFROI framework's systematically forecasted net cash receipt (NCR) stream to the current enterprise value (EV) of a firm.

$$EV = \sum_t \frac{NCR_t}{\prod_{s=1}^t (1 + MIY_s)}$$

MIY benefits from the HOLT DCF modeling approach, which explicitly incorporates long-term mean reversion in profitability (CFROI) and asset growth using empirically derived fade rates. Further, MIYs are comparable across markets and throughout time due to a series of accounting and inflation adjustments that are made when measuring a firm's asset base and cash flows.

MIY can be interpreted as a forward-looking implied cash flow yield on a firm's enterprise value (for non-financials), with higher values representing investors' expectations of higher risk and required return. For spread-earning Financial firms such as Banks the interpretation for risk and returns remains the same; however, the value is better understood as an implied yield on tangible equity.

To ensure cross-sectional comparability within the HOLT Factor Library, spread-earning financial firms like Banks and Insurance companies use an adjusted Market Implied Yield, which is calculated by subtracting the long-term difference between CFROI and CFROE, 1.5%.

Dividend Yield (20% weight in Valuation factor) - Dividend yield based on the annualized last quarterly dividend, if available, or the latest annual dividend using the most recent closing price.

HOLT Scorecard Factor Definitions

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Growth

The HOLT Growth factor gauges the degree to which a company is likely to have higher or lower future cash flow growth relative to its peers. Unlike traditional growth assessments, which emphasize historical growth and valuation characteristics, the HOLT Growth factor focuses on a firm's ability to grow, the likelihood of pursuing growth, and the market's expectations for future capital deployment – an interpretation that allows investors to better distinguish between stocks with high and low cash flow growth characteristics.

Forecast CFROI Change (25% weight in Growth factor) - The difference between the 12-month forward forecast CFROI, based on consensus EPS estimates, and the company's CFROI in the latest reported fiscal year. This metric allows for an understanding of the expected change in forward-looking profitability of a firm (based on the anticipated trend in profitability) as a gauge of a firm's ability to grow.

$$\text{Forecast CFROI Change} = \frac{100 + 12 \text{ month forecast CFROI}}{100 + \max\{-99, \text{CFROI LFY}\}}$$

Change in Historical Cash Flow (25% weight in Growth factor) - The historical growth rate of a firm's inflation-adjusted Gross Cash Flow as measured by the change from the trailing three-year average cash flow to the latest reported fiscal year cash flow. This component provides a check on the likelihood that a company will use future cash generation to grow based on recent trends.

$$\Delta CF = \left(\frac{\text{Inflation Adjusted Gross Cash Flow}_t}{\text{average}_{3y}(\text{Inflation Adjusted Gross Cash Flow})} - 1 \right)$$

The three-year average is calculated from 2 years ago to the last fiscal year and compared to the last reported cash flows to mitigate the impact of M&A activity. If either the 3-year average or LFY are negative, the company will have a neutral score (P-Value of 50).

Normalized Growth Rate (25% weight in Growth factor) - The forecast real rate of asset growth for the next 12 months derived from the HOLT CFROI Framework. The normalized asset growth rate measures likely growth in gross investment based on cash flows available to the firm and management's capital structure decisions. This measure is forward looking as it embeds analyst expectations for future cash flow growth via the 12-month forecast CFROI and incorporates the likelihood that the firm will use cash flow to fund asset growth. Considerations affecting Normalized Asset Growth include management's historical decisions regarding dividend policy, share repurchases, debt repayment, and M&A. Note that the unbounded Normalized Asset Growth Rate is used for scoring purposes.

HOLT Descriptive Factor Definitions

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Market Implied Normalized Growth Rate (*25% weight in Growth factor*)- The real asset growth rate required within the default HOLT valuation model to justify the current market price of a firm. This value summarizes the market's expectation for the company's future asset growth. The market implied growth rate is calculated at t+5 for all companies. Note that the market implied growth rate derived from HOLT's valuation using the global discount rate is used for scores in the Global and Global Sector facets.

Low Volatility

The HOLT Low Volatility factor measures the variability in a firm's stock price and its sensitivity to moves in its regional market index. To measure Low Volatility, the factor assesses long-term monthly Beta, long-term monthly price volatility, and 90-day price volatility. A company with the lowest Volatility and Beta will have a Factor Percentile and Peer Rank close to 100 while a company with the highest will have a Factor Percentile and Peer Rank near 0.

Long Term Beta, 5-year monthly (*33% weight in Low Volatility factor*) - Beta is calculated using the past 5 years of monthly returns relative to a local market index. The index used is the same as the local market index displayed by default in HOLT Lens. This is typically the presumed representative large-cap stock benchmark for companies in a given country. For example, the S&P 500 is used as the local index for all U.S. stocks.

For companies with:

- Less than 1 Year of history - the median long-term beta of the corresponding regional GICS subindustry is used.
- More than 1 Year but less than 3 Years of history - subindustry beta is blended with the company's beta. The blend is the weighted average of the company's own and median subindustry values based on the available number of months.
- More than 3 Years but less than 5 years of history - beta is calculated using all available monthly periods up to 60 months.

Supporting Criteria:

- The unblended Beta from companies with at least 1 year of pricing history, and in the estimation set, is considered for the median calculation for the respective regional subindustry peer set.
- If the number of companies in the respective subindustry cohort is less than 3, the larger GICS industry cohort will be considered for the median calculation.

HOLT Descriptive Factor Definitions

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Long-term volatility, 5-year monthly (33% weight in Low Volatility factor) - Long-term volatility is defined as the natural log of the standard deviation of a firm's monthly price returns over the past 5 years in U.S. Dollar terms.

$$5 \text{ Year Volatility} = \ln \left(\sqrt{\frac{\sum_i (r_{mi} - \bar{r}_{mi})^2}{N - 1}} \right)$$

r_{mi} = monthly price return in USD over the past 5 years

For companies with:

- Less than 1 Year of history - the median long-term volatility of the corresponding regional GICS subindustry is used.
- More than 1 Year but less than 3 Years of history - subindustry volatility is blended with the company's volatility. The blend is the weighted average of the company's own and median subindustry values based on the available number of months.
- More than 3 Years but less than 5 years of history - volatility is calculated using all available monthly periods up to 60 months.

Supporting Criteria:

- The unblended Volatility from companies with at least 1 year of pricing history, and in the estimation set, is considered for the median calculation for the respective regional subindustry peer set.
- If the number of companies in the respective subindustry cohort is less than 3, the larger GICS industry cohort will be considered for the median calculation.

Short-term volatility, 90-day (34% weight in Low Volatility factor)- Factor Library defines short-term volatility as the natural log of standard deviation of a firm's daily price returns over the past 90 days in local currency terms.

$$90 \text{ Day Volatility} = \ln \left(\sqrt{\frac{\sum_i (r_{di} - \bar{r}_{di})^2}{N - 1}} \right)$$

Global Market Commentary Disclaimer

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