Defensively supporting gains

June 2017

Research Signals

Global stocks have outperformed other major asset classes, posting attractive gains in the first half of the year, especially driven by technology stocks. However, investors are not consumed with euphoria as they rotate to a more defensive posturing across many regional markets (Table 1). Some high flyers have given up gains as central bankers take on a more hawkish tone, oil entered a bear market and technology shares lost some momentum.

- US: Industry Relative Leading 4QTRs EPS to Price outperformed while Rational Decay Alpha lagged on a more defensive investor posturing
- Developed Europe: Investors favored positive analyst outlook captured by 2-Year Ahead EPS Growth
- Developed Pacific: As the sole exception among our coverage regions, developed Pacific markets outside Japan highly rewarded price momentum, an indication of risk-on trades
- Emerging markets: High quality stocks continued to outperform, gauged by measures such as Fixed Assets Turnover, Industry Relative TTM Dividend Yield and Real Earnings Surprise

Contacts

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Table 1

Global factor quantile return spread performance snapshot, Jun 2017 US US Developed Japan Large Small Developed Pacific ex Standard **Emerging Europe** Markets **Factor Factor Group** Cap Cap Japan Cap 2.56 Book-to-Market 0.83 1.42 1.26 -0.27 2.30 Forward 12-M EPS-to-Enterprise Value 0.40 0.19 0.30 -6.57 -0.18Deep Value -5.68 -1.74 1.00 1.14 TTM EBITDA-to-Enterprise Value -0.13 0.70 1.26 TTM Free Cash Flow-to-Enterprise Value -1.16 2.05 0.59 0.59 -3.26Industry Relative Leading 4-QTRs EPS to 3.13 1.49 0.36 0.77 1.62 0.23 Price Relative Value Industry Relative TTM Dividend Yield -0.97 -0.80 -0.09 2.34 1.03 0.89 Fixed Assets Turnover Ratio -0.93 -0.14 1.75 2.23 0.58 2.99 Inventory Turnover Ratio Management Quality -5.65 0.86 -0.970.84 -0.520.14 -5.24 -0.91 0.47 Net Operating Asset Turnover -2.721.19 -1.01 2.45 Change in Accruals to Assets -0.42-0.47 -0.58 -0.59 -0.21 Change in TTM COGS vs. Inventory Level -0.26 -4.55 -1.27 0.12 0.40 0.55 **Earnings Quality** Change in TTM Sales vs. Accounts 0.39 3.37 -0.42 -1.05 -0.71 0.50 Receivable Working Capital Accruals 1.59 1.98 1.90 -1.49 0.47 0.17 1-yr Growth in TTM Free Cash Flow -0.84 0.17 -1.98 2.42 -0.740.44 Historical Growth -0.36 -0.64 0.54 -1.53 0.01 Reinvestment Rate -4.01 Average Monthly Trading Volume-to--0.35 0.51 -1.43 0.62 4.20 1.38 Market Cap -1.88 -0.99-1.42 -0.90 1.17 60-Month Beta -3.46Liquidity, Risk & Size Asset Quality Index -0.48 0.10 1.43 -0.95 -1.87 -0.20 0.39 0.04 -0.77 0.99 -0.64 Operating Leverage 0.18 1.79 1.19 0.90 Natural Logarithm of Market Capitalization 3.51 1.45 0.68 2-Year Ahead EPS Growth 1.74 1.91 -0.70 0.40 -0.25 -0.57 0.24 3-M Revision in FY2 EPS Forecasts **Earnings Momentum** -2.19 -4.07 0.79 2.93 -0.83Real Earnings Surprise -0.66 0.36 -0.60 -1.10 -0.99 1.44 24-Month Value at Risk -2.27 -2.17 0.82 1.46 -4.27 -0.20 1.24 2.28 5-day Industry Relative Return 3.66 0.00 -1.56 0.55 Price Momentum Industry-adjusted 12-month Relative Price -3.15 -0.15 -0.70 3.88 0.13 0.75 Strength Rational Decay Alpha -6.25 -7.12 -0.36 1.07 -6.79 -0.06 **Demand Supply Ratio** -2.10 -3.11 0.35 1.04 0.68 -1.81 **Short Sentiment** Implied Loan Rate -2.53 -0.84 -2.02 1.76 -0.25-1.04

United States

US Large Cap

US manufacturing growth weakened again in June, a disappointing end to the second quarter with output, new order and employement growth all slowing since May. The PMI registered 52.0, down from 52.7 during May and a ninemonth low. In equity markets, stocks finished the month in positive territory despite a tech sellof, capping a strong gain for the first half of the year.

Top performing factors in June (Table 2) include a notable presence of dividend based indicators. The top measure of the group is 2-Year Ahead Regular Dividend Growth (4.59%), derived from IHS Markit's proprietary Dividend Forecast dataset (see Dividend forecasting factor introduction, April 2017), which recorded its largest spread over the past year (Figure 1), perhaps a sign of more defensive posturing. Yield Curve Slope Sensitivity (3.82%) was a benefiary of banks' outperformance relative to utilities on speculation of higher interest rates following Fed member commentary.

Other signs of a risk-off stance are captured by the list of bottom performing factors for the month (Table 3), where medium-term Price Momentum measures moved from the top performers in May to the weakest in June. Rational Decay Alpha (-6.25%) topped the list with a 7.7 percentage point drop in performance as investors rotated once again away from the market leaders (Figure 2).

Table 2

US Large Cap top decile return spread factor performance, Jun 2017			
Factor	Decile spread (%)	Factor group	
51- Week Volume Price Trend with 4-week Lag	5.40	Price Momentum	
14 Day Relative Strength Index	5.26	Price Momentum	
Price-to-Total Assets	4.71	Deep Value	
2-Year Ahead Regular Dividend growth	4.59	Dividend Forecast	
1-Year Ahead Regular Dividend growth	4.57	Dividend Forecast	
1-Year Percentage Growth in Regular Dividend	4.51	Dividend Forecast	
5-Year Dividend Growth Rate	4.46	Historical Growth	
4-week Industry Relative Return	4.44	Price Momentum	
2-Year Percentage Growth in Regular Dividend	4.28	Dividend Forecast	
5-yr Relative TTM Sales-to-Price	4.20	Relative Value	
Industry Relative TTM Sales-to-Price	4.18	Relative Value	
Graham Number Fair Value Premium	3.94	Deep Value	
Yield Curve Slope Sensitivity	3.82	Macro	
3-yr MAD of TTM Net Income	3.81	Liquidity, Risk & Size	
5-yr Relative TTM Dividend Yield	3.78	Relative Value	

Figure 1

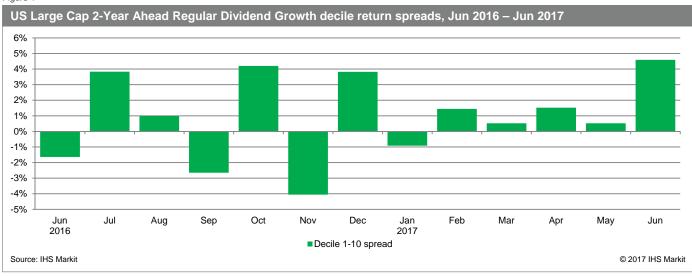
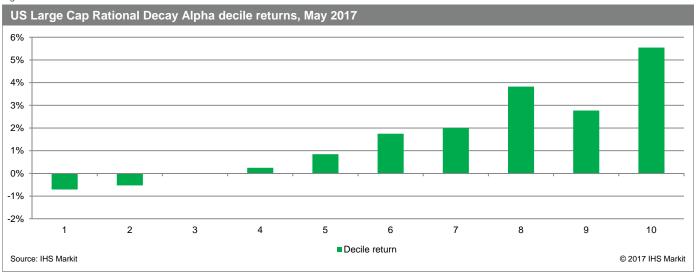


Table 3

US Large Cap bottom sector-neutral decile return spread factor performance, Jun 2017		
Factor	Decile spread (%)	Factor group
Rational Decay Alpha	-6.25	Price Momentum
Operating Cash Flow Ratio	-4.76	Liquidity, Risk & Size
18-Month Active Return with 1-Month Lag	-4.53	Price Momentum
Asia-Pacific Sales Exposure	-4.17	Macro
52-Week High	-4.12	Price Momentum
Operating Cash Flow to Assets	-4.01	Management Quality
Cash Flow Leverage	-3.88	Liquidity, Risk & Size
Slope of 66 Week Price Trend Line	-3.83	Price Momentum
Assets Turnover Ratio	-3.80	Management Quality
12-Month Active Return with 1-month Lag	-3.69	Price Momentum

Figure 2

Source: IHS Markit



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US Small Cap

After tracking relatively closely for the prior two months, small cap factor performance at the top and bottom extremes diverged from that of large caps in June. However, exposure to Healthcare, which posted strong returns for the month, was a key driver of factor performance, elevating measures such as Advertising Intensity (6.78%), Ohlson Bankruptcy Score (5.88%) and Working Capital-to-Total Assets (-9.89%) to the top of the leader and laggard boards, thus, we present sector-neutral results (Tables 4 and 5, respectively). In this case, Dividends-to-Cash Flow (4.72%) took over the lead. Short-term price reversal metrics also outperformed, as demonstrated by June performance (Figure 3) which almost perfectly reversed that of May, as investors favored recent underperformers, breaking a four-month string in favor of outperformers. Factors which lagged for the month on a sector-neutral basis did include two measures common to large caps, namely Rational Decay Alpha (-5.95%) and 52-Week High (-4.64%), suggesting a similar defensive stance.

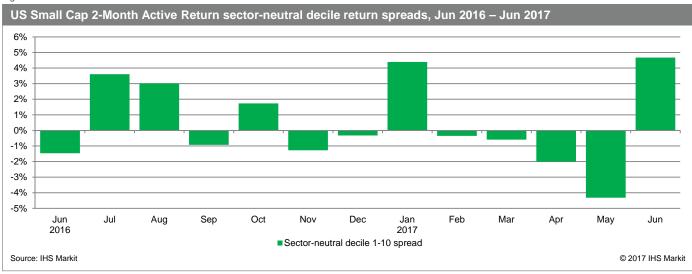
Table 4

Factor	Decile spread (%)	Factor group
Dividends- to-Cash Flow	4.72	Management Quality
2-Month Active Return	4.68	Price Momentum
1-Month Active Return	4.66	Price Momentum
5-yr Relative Leading 12-Month Earnings Yield	4.17	Relative Value
Long-term Debt-to-Cash Flow	4.02	Liquidity, Risk & Size
Natural Logarithm of Closing Price	4.01	Liquidity, Risk & Size
14 Day Relative Strength Index	3.91	Price Momentum
4-week Industry Relative Return	3.87	Price Momentum
3-Month Active Return	3.86	Price Momentum
5-day Industry Relative Return	3.79	Price Momentum
mplied Volatility	3.53	Liquidity, Risk & Size
Book-to-Market	3.43	Deep Value
Time Weighted Book Yield	3.31	Deep Value
Ohlson Bankruptcy Score	3.24	Liquidity, Risk & Size
Capital Expenditure-to-Total Assets	3.11	Management Quality

Table 5

US Small Cap bottom sector-neutral decile return spread factor performance, Jun 2017		
Factor	Decile spread (%)	Factor group
Rational Decay Alpha	-5.95	Price Momentum
Distress Measure	-5.11	Liquidity, Risk & Size
Stock Return Volatility	-4.80	Liquidity, Risk & Size
Short Loan Concentration	-4.65	Short Sentiment
Std Dev of FY2 EPS Estimates-to-Price	-4.65	Earnings Momentum
52-Week High	-4.64	Price Momentum
Regression Error of 60-Month CAPM	-4.52	Liquidity, Risk & Size
At the Money Put Option Implied Volatility	-4.41	Liquidity, Risk & Size
Operating Cash Flow Ratio	-4.03	Liquidity, Risk & Size
Predicted Dividend Yield	-4.02	Deep Value

Figure 3



Europe

The eurozone manufacturing upturn gained further momentum in June, accelerating to its fastest rate in over six years. The PMI rose to 57.4, up from 57.0 in May on improved performances across Germany, France, Italy, the Netherlands, Ireland, Austria and notably Greece which returned to expansion. However, European stocks struggled on hawkish comments from central bankers, though shares remain in positive territory for the year.

Decile return spreads of top (Table 6) and bottom (Table 7) performing factors in the Developed Europe universe in June were relatively subdued in magnitude, suggesting little evidence in the way of high conviction trades. Measures which topped both lists include Acquisition Multiple (3.80%) and Operating Cash Flow Ratio (-3.69%), respectively. Another factor of interest is Short Interest (1.99%), derived from IHS Markit Securities Finance's comprehensive dataset sourced directly from leading industry participants on a daily frequency, with a 3-month cumulative spread of 6.7% (Figure 4).

Table 6 Developed Europe top decile return spread factor performance, Jun 2017 Decile spread (%) Factor group Acquisition Multiple 3.80 Deep Value Inventory-to-Total Assets 2.62 Management Quality Net Fixed Assets to Long-term Debt 2.18 Liquidity, Risk & Size Ohlson Bankruptcy Score 2.18 Liquidity, Risk & Size Capital Expenditure-to-Total Assets 2.09 Management Quality 1.99 **Short Sentiment** Short Interest 60-Month Active Return with 12-Month Lag 1.96 Price Momentum Time Weighted Earnings Yield Deep Value 1.94 2-Year Projected EPS Growth 1.91 **Earnings Momentum** 2-Year Ahead EPS Growth 1.91 **Earnings Momentum** Stock Illiquidity 1.88 Liquidity, Risk & Size 20-Day Volume Volatility to Price Volatility 1.86 Liquidity, Risk & Size Price-to-Total Assets 1.83 Deep Value Yearly TTM Total Sales Growth Rate 1.83 Historical Growth Net Debt Ratio 1.71 Management Quality

Source: IHS Markit

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Table 7

Decile spread (%)	Factor group
-3.69	Liquidity, Risk & Size
-3.58	Liquidity, Risk & Size
-3.00	Management Quality
-2.89	Liquidity, Risk & Size
-2.75	Deep Value
-2.69	Management Quality
-2.65	Management Quality
-2.61	Earnings Momentum
-2.47	Short Sentiment
-2.45	Deep Value
	-3.69 -3.58 -3.00 -2.89 -2.75 -2.69 -2.65 -2.61 -2.47

Figure 4

Developed Europe Short Interest decile return spreads, Jun 2016 - Jun 2017 4% 3% 2% 1% 0% -1% -2% -3% -4% Oct Nov Dec Jan Feb Jun Jul Aug Sep Mar Apr May Jun ■Decile 1-10 spread ²⁰¹⁷ 2016 Source: IHS Markit © 2017 IHS Markit

Asia-Pacific

The Chinese manufacturing sector moved back above the 50 no-change mark in June, as operating conditions in the two largest Asian economies both reside again in positive territory. The headline PMI came in at 50.4, up from 49.6 in May, supported by marginal increases in production and new orders. Japan, on the other hand, extended its string of expansion to ten months, with the PMI at 52.4, though down from 53.1 in May. Asia-Pacific stocks gave back some gains, but remained dominant among global shares for the year.

In a sign of optimism, Price Momentum measures took over nearly the totality of top performing factors in Developed Pacific exJapan in June (Table 8). After cycling around a mostly neutral spread over the past year, 12-Month Active Return with 1-month Lag (6.59%) shot to the top of the leaderboard, posting its highest spread since January 2016 (Figure 5). On the other hand, several Macro indicators made their way to laggard board, including Oil Prices Sensitivity (-4.63%) and US Dollar Value Sensitivity (-2.83%) as firms with the highest exposures to the underlying assets underperformed.

Japanese investors departed from the broader regional developed markets with Deep Value measures traversing the full scale of factor performance. In fact, nine factors from the list of June top performers (Table 10) appeared on the list of bottom performers the prior month. At the same time, four risk-on factors experienced the opposite fate, moving from the strongest to the weakest performers (Table 11). Price-to-Total Assets (4.75%) and Rational Decay Alpha (-6.79%) demonstrate this diametrically opposed behavior over the past year (Figure 6), capped with the former posting a 15.2 percentage point improvement in June spread perfromance while the latter dropped by 14.1 percentage points.

Table 8

Developed Pacific exJapan top decile return spread factor performance, Jun 2017		
Factor	Decile spread (%)	Factor group
12-Month Active Return with 1-month Lag	6.59	Price Momentum
30-75 Week Stock Price Ratio	6.16	Price Momentum
Fama-French Momentum	6.13	Price Momentum
Slope of 66 Week Price Trend Line	5.80	Price Momentum
Slope of 52 Week Price Trend Line	5.70	Price Momentum
15/36 Week Stock Price Ratio	5.43	Price Momentum
6-Month Active Return with 1-Month Lag	5.33	Price Momentum
39-Week Return with 4-week Lag	5.22	Price Momentum
Latin America Sales Exposure	5.20	Macro
50-200 Day Stock Price Ratio	4.96	Price Momentum
18-Month Active Return with 1-Month Lag	4.95	Price Momentum
9-Month Active Return with 1-Month Lag	4.86	Price Momentum
1-Year Price Momentum Indicator	4.70	Price Momentum
Averaged Last 6-M EPS Revisions for FY2	4.63	Earnings Momentum
24-Month Active Return with 1-Month Lag	4.54	Price Momentum

Figure 5

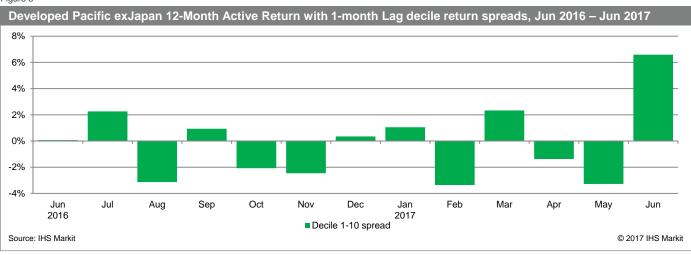


Table 9

ctor	Decile spread (%)	Factor group
ce Above Last 260-day Lowest Trading Price	-5.43	Price Momentum
Prices Sensitivity	-4.63	Macro
dit Risk Premium Sensitivity	-3.31	Macro
ling Turnover Ratio	-2.94	Liquidity, Risk & Size
on Bankruptcy Score	-2.93	Liquidity, Risk & Size
Change in Net Profit Margin	-2.93	Historical Growth
pected Change in Depreciation	-2.86	Earnings Quality
ollar Value Sensitivity	-2.83	Macro
elative TTM Sales-to-Price	-2.80	Relative Value
holder Payout to Gross Profit	-2.78	Management Quality

Source: IHS Markit © 2017 IHS Markit

Table 10

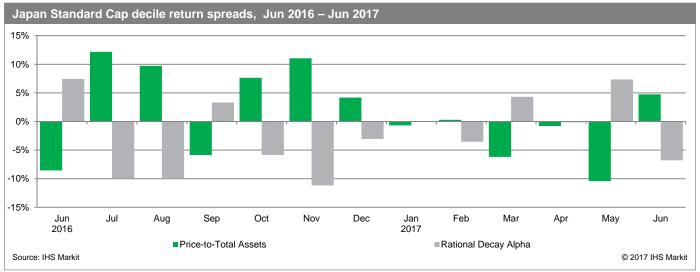
actor	Decile spread (%)	Factor group
latural Logarithm of Closing Price	4.90	Liquidity, Risk & Size
Price-to-Total Assets	4.75	Deep Value
obin q	4.68	Liquidity, Risk & Size
0-Month Alpha	4.67	Price Momentum
ield Curve Slope Sensitivity	4.66	Macro
ime Weighted Book Yield	4.61	Deep Value
let Asset Value to Price	4.58	Deep Value
eading 12 Month Book Yield	4.58	Deep Value
-Month Active Return	4.35	Price Momentum
verage Monthly Trading Volume-to-Market Cap	4.20	Liquidity, Risk & Size
Price-to-Book Return-on-Equity Combination (PB-ROE)	4.20	Deep Value
Book-to-Market	4.13	Deep Value
Slope of 5-yr TTM EPS Trend Line	4.12	Historical Growth
Graham Number Fair Value Premium	4.05	Deep Value
6-Month Active Return with 1-Month Lag	4.05	Price Momentum

Table 11

ctor	Decile spread (%)	Factor group
ational Decay Alpha	-6.79	Price Momentum
onth Value at Risk	-4.27	Price Momentum
Dev of FY1 EPS Estimates-to-Price	-4.17	Earnings Momentum
ating Cash Flow to Assets	-3.95	Management Quality
Dev of FY2 EPS Estimates-to-Price	-3.89	Earnings Momentum
ss Measure	-3.69	Liquidity, Risk & Size
n on Assets	-3.67	Management Quality
onth Active Return with 1-Month Lag	-3.65	Price Momentum
ge Collection Period	-3.55	Management Quality
onth Beta	-3.46	Liquidity, Risk & Size

Source: IHS Markit © 2017 IHS Markit

Figure 6



Emerging Markets

Lastly, we review top (Table 12) and bottom (Table 13) performing factors in the Emerging Markets universe in June. High quality and solid fundamentals remained positive themes for stocks, represented by measures such as 5-Year Dividend Growth Rate (1.84%) and Return on Assets (1.20%). However, North America Sales Exposure (2.42%) took top honors, as firms with the greatest proportion of sales to the region outperformed over the past two months, reversing the trend over the prior two months and surpassing results in November 2016 at the time of the US election (Figure 6). At the opposite extreme, measures of long-term underperformers, gauged by 60-Month Active Return with 1-Month Lag (-1.35%) and 5-yr Relative Book-to-Market (-1.26%), were among the list of weakest factor performance.

Table 12

Factor	Decile spread (%)	Factor group	
North America Sales Exposure	2.42	Macro	
5-Year Dividend Growth Rate	1.84	Historical Growth	
Averaged Last 6-M EPS Revisions for FY2	1.60	Earnings Momentum	
Cash to Enterprise Value	1.50	Deep Value	
Real Earnings Surprise	1.44	Earnings Momentum	
Cash-to-Price	1.41	Deep Value	
Average Monthly Trading Volume-to-Market Cap	1.38	Liquidity, Risk & Size	
15/36 Week Stock Price Ratio	1.36	Price Momentum	
Return on Assets	1.20	Management Quality	
Free Cash Flow Return on Invested Capital	1.18	Management Quality	
60-Month Beta	1.17	Liquidity, Risk & Size	
5-yr Relative Leading 12-Month Earnings Yield	1.10	Relative Value	
SG&A Expenses-to-Sales	1.07	Management Quality	
Net # of Revisions for Fiscal Year 2	1.07	Earnings Momentum	
Unexpected Profitability	1.06	Management Quality	

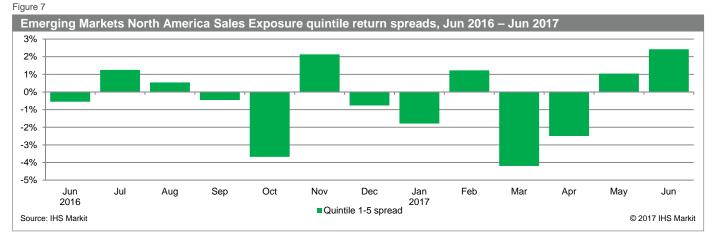
Table 13

Emerging Markets bottom quintile return spread factor performance, Jun 2017

Factor	Decile spread (%)	Factor group
Average Trading Volume in Preceding 6-month	-2.11	Price Momentum
Trading Turnover Ratio	-1.86	Liquidity, Risk & Size
Net Current Assets-to-Price	-1.65	Deep Value
Asset Composition	-1.40	Liquidity, Risk & Size
60-Month Active Return with 1-Month Lag	-1.35	Price Momentum
Cash & Equivalents-to-Current Liabilities	-1.33	Liquidity, Risk & Size
Market Cap per Analyst	-1.26	Liquidity, Risk & Size
5-yr Relative Book-to-Market	-1.26	Relative Value
Working Capital-to-Total Assets	-1.24	Management Quality
5-yr Relative TTM Oper Cash Flow-to-Price	-1.19	Relative Value

Source: IHS Markit

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