

Value trade protectionism

April 2018

Research Signals

After tumbling from the January high in the first quarter, global stocks were relatively more range bound to start off the second quarter. Global economic growth did see a mild improvement in April according to the J.P. Morgan Global Manufacturing PMI™, yet developed market investors shied away from momentum toward value, as inflation fears and concerns of escalating trade tensions and higher interest rates remained (Table 1).

- US: Rational Decay Alpha was a particularly weak performing factor among large and small caps
- Developed Europe: Valuation was a positively rewarded theme, as demonstrated by Forward 12-M EPS-to-Enterprise Value and Industry Relative Leading 4-QTRs EPS to Price
- Developed Pacific: Markets followed suit with other developed regions, favoring value over momentum, while also taking direction from the securities lending market, as gauged by Implied Loan Rate
- Emerging markets: Industry-adjusted 12-month Relative Price Strength captured positive investor outlook, though optimism was kept in check by short selling demand signals (e.g., Demand Supply Ratio)

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Table 1

Global factor quantile return spread performance snapshot, Apr 2018

Factor	Factor Group	US Large Cap	US Small Cap	Developed Europe	Developed Pacific ex Japan	Japan Standard Cap	Emerging Markets
Book-to-Market		3.69	3.56	0.93	4.09	7.82	-1.43
Forward 12-M EPS-to-Enterprise Value	Deep Value	-3.82	-0.67	3.18	0.80	1.88	-2.61
TTM EBITDA-to-Enterprise Value		1.71	0.10	0.45	1.69	3.25	-2.19
TTM Free Cash Flow-to-Enterprise Value		-4.06	-0.88	1.37	0.18	-0.50	-0.93
Industry Relative Leading 4-QTRs EPS to Price	Relative Value	-0.26	0.97	3.84	0.49	1.85	-2.63
Industry Relative TTM Dividend Yield		0.13	1.56	1.54	-2.44	0.46	-0.55
Fixed Assets Turnover Ratio	Management Quality	-4.00	-2.56	0.57	-0.29	-4.85	0.28
Inventory Turnover Ratio		1.86	3.04	2.69	1.93	0.81	0.54
Net Operating Asset Turnover		0.96	3.28	0.73	-0.97	-0.16	-0.61
Change in Accruals to Assets	Earnings Quality	-1.73	-0.11	-0.27	-1.67	-0.23	1.43
Change in TTM COGS vs. Inventory Level		-2.38	-2.20	-1.73	2.29	0.55	1.23
Change in TTM Sales vs. Accounts Receivable		-1.71	-0.15	0.96	2.27	1.13	-0.39
Working Capital Accruals		2.13	0.09	-1.98	0.46	-1.47	-0.12
1-yr Growth in TTM Free Cash Flow	Historical Growth	-2.59	-2.58	1.08	1.65	-0.75	-0.43
Reinvestment Rate		-1.60	-2.36	-1.50	0.01	-3.39	1.55
Average Monthly Trading Volume-to-Market Cap		3.12	1.49	4.33	-1.00	-0.08	-4.39
60-Month Beta	Liquidity, Risk & Size	0.02	-1.86	-1.78	1.59	-0.54	-1.06
Asset Quality Index		-0.57	-0.30	1.35	-2.57	-1.30	-1.02
Operating Leverage		-0.01	-1.32	-0.36	2.17	-1.84	0.31
Natural Logarithm of Market Capitalization		2.69	1.54	-0.08	-1.24	-0.17	-4.32
2-Year Ahead EPS Growth	Earnings Momentum	1.95	0.74	0.02	-3.10	-1.66	0.28
3-M Revision in FY2 EPS Forecasts		-0.53	-1.43	-0.65	1.04	-0.85	0.65
Real Earnings Surprise		-1.89	-4.25	0.15	-0.75	-1.41	0.46
24-Month Value at Risk		-2.94	-0.22	-4.42	0.39	-0.94	0.93
5-day Industry Relative Return	Price Momentum	0.65	1.53	1.29	-3.98	0.84	0.77
Industry-adjusted 12-month Relative Price Strength		-1.82	-0.77	-1.56	-2.82	-3.22	2.22
Rational Decay Alpha		-6.62	-7.37	-0.76	-2.99	-5.67	1.24
Demand Supply Ratio	Short Sentiment	-2.10	-3.57	-0.22	0.52	2.13	5.00
Implied Loan Rate		-3.58	-1.51	0.03	2.26	3.58	5.85

Source: IHS Markit

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United States

US Large Cap

Operating conditions in the US manufacturing sector improved at the fastest rate since September 2014, with April PMI survey data registering at 56.5, up from 55.6 in March, supported by stronger expansions in output and new orders. In equity markets, volatility settled down somewhat and stocks finished the month slightly higher as investors turned their focus to interest rates and earnings reports.

Valuation's outperformance was reflected through long-term price reversal measures in the list of top performing factors in the US Large Cap universe in April (Table 2). 60-Month Active Return with 12-Month Lag (7.89%) took the lead with a 6.1 percentage point month-on-month increase in spread (Figure 1), marking the highest level since April 2016. Long-term growth in both top and bottom line income was also a desired feature by investors, as captured by Slope of 3-yr TTM Sales Trend Line (5.52%) and Slope of 5-yr TTM EPS Trend Line (5.59%), respectively.

Investors were also cognizant of macro developments, with appearances from indicators including Oil Prices Sensitivity (6.65%) in addition to Asia-Pacific Sales Exposure (-7.41%) on the laggard board (Table 3), as oil prices and the US dollar strengthened for the month. Momentum was also a negative theme, with negative spreads associated with Second Preceding 6-month Return (-6.73%) and Rational Decay Alpha (-6.62%).

Table 2

US Large Cap top decile return spread factor performance, Apr 2018

Factor	Decile spread (%)	Factor group
60-Month Active Return with 12-Month Lag	7.89	Price Momentum
60-Month Active Return with 1-Month Lag	7.78	Price Momentum
Oil Prices Sensitivity	6.65	Macro
60-Month Alpha	6.32	Price Momentum
Altman Z Score	5.96	Liquidity, Risk & Size
Slope of 5-yr TTM EPS Trend Line	5.59	Historical Growth
Net Current Assets-to-Price	5.53	Deep Value
Slope of 3-yr TTM Sales Trend Line	5.52	Historical Growth
Time Weighted Cash Yield	5.50	Deep Value
Cash Cycle	5.35	Management Quality
36-Month Active Return with 1-Month Lag	5.33	Price Momentum
Cash & Equivalents-to-Current Liabilities	5.13	Liquidity, Risk & Size
6-Month Nominal Change in 36-Month Alpha	4.76	Price Momentum
Current Ratio	4.72	Liquidity, Risk & Size
Slope of 3-yr TTM Oper Cash Flow Trend Line	4.71	Historical Growth

Source: IHS Markit

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Figure 1

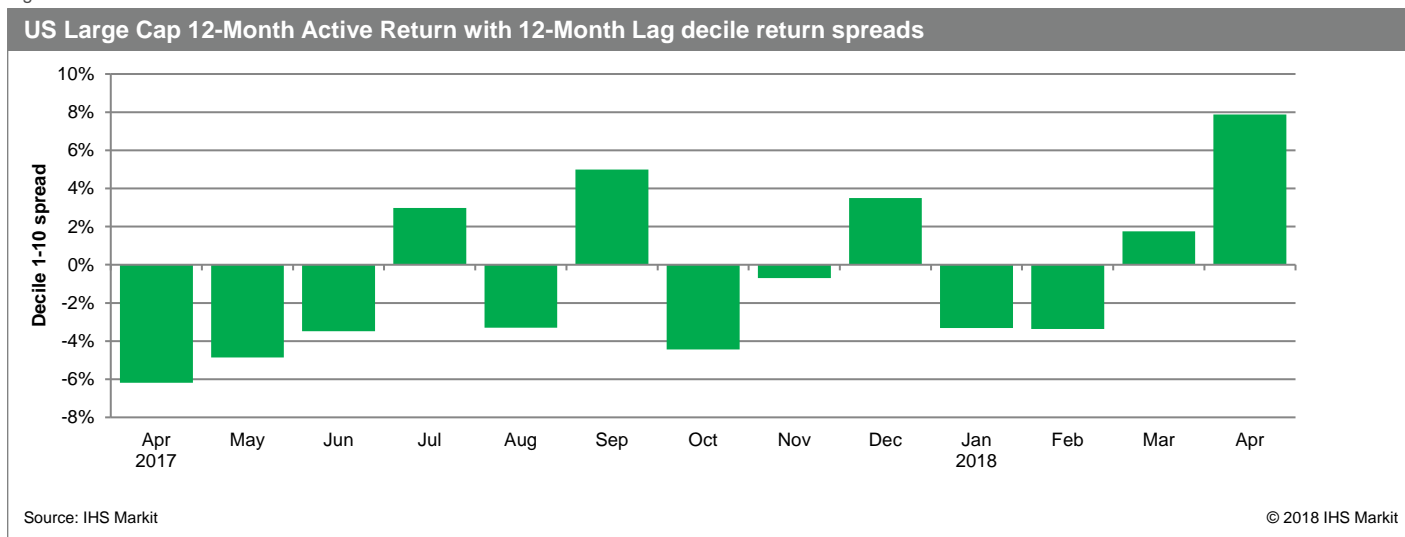


Table 3

Factor	Decile spread (%)	Factor group
Asia-Pacific Sales Exposure	-7.41	Macro
3-yr Chg in Price-adj TTM Oper Cash Flow	-7.03	Historical Growth
Std Dev of FY1 EPS Estimates-to-Price	-6.97	Earnings Momentum
Std Dev of FY2 EPS Estimates-to-Price	-6.92	Earnings Momentum
Second Preceding 6-month Return	-6.73	Price Momentum
Rational Decay Alpha	-6.62	Price Momentum
1-Year Percentage Growth in Regular Dividend	-6.34	Dividend Forecast
3-yr Change in Assets-adj TTM Oper Cash Flow	-6.02	Historical Growth
3-yr Compound Annual Sales Growth	-5.98	Historical Growth
TTM Capital Expenditures-to-Price	-5.71	Deep Value

Source: IHS Markit © 2018 IHS Markit

US Small Cap

Top (Table 4) and bottom (Table 5) performing factors among small caps similarly tracked that of large caps. Long-term price reversal was positively rewarded, as gauged by 60-Month Alpha (4.66%); however, short-term price reversal measures topped the leaderboard, led by 3-Month Active Return (6.24%). Oil Prices Sensitivity (5.48%) and Slope of 5-yr TTM EPS Trend Line (5.03%) were also positive themes. Bottom performing signals included several Price Momentum measures, with Rational Decay Alpha (-7.37%) the weakest of the bunch, extending its negative trend for the year with a -19.7% cumulative spread (Figure 2).

Table 4

US Small Cap top decile return spread factor performance, Apr 2018		
Factor	Decile spread (%)	Factor group
3-Month Active Return	6.24	Price Momentum
2-Month Active Return	6.18	Price Momentum
Working Capital-to-Trailing 12-Month Sales	6.08	Management Quality
Oil Prices Sensitivity	5.48	Macro
Asset Composition	5.41	Liquidity, Risk & Size
2-Year Projected EPS Growth	5.34	Earnings Momentum
Slope of 3-yr TTM Oper Cash Flow Trend Line	5.03	Historical Growth
Slope of 5-yr TTM EPS Trend Line	4.95	Historical Growth
Time Weighted EBITDA/ EV	4.68	Deep Value
60-Month Alpha	4.66	Price Momentum
51- Week Volume Price Trend with 4-week Lag	4.65	Price Momentum
60-Month Active Return with 1-Month Lag	4.54	Price Momentum
5-yr Sales Growth	4.52	Historical Growth
1-Year Ahead EPS Growth	4.41	Earnings Momentum
Working Capital-to-Total Assets	4.33	Management Quality

Source: IHS Markit

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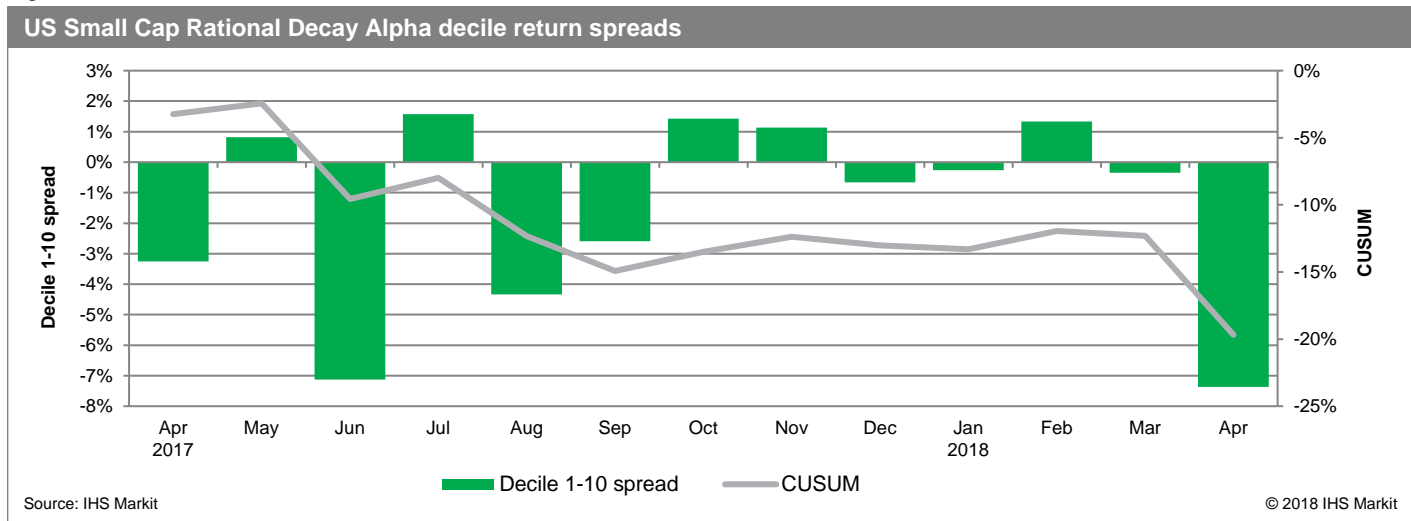
Table 5

US Small Cap bottom decile return spread factor performance, Apr 2018		
Factor	Decile spread (%)	Factor group
Rational Decay Alpha	-7.37	Price Momentum
3-yr Chg in Price-adj TTM Oper Cash Flow	-6.30	Historical Growth
Second Preceding 6-month Return	-6.06	Price Momentum
6-Month Nominal Change in 18-Month Alpha	-5.25	Price Momentum
FY2 EPS Forecast Dispersion	-4.59	Earnings Momentum
TTM Capital Expenditures-to-Sales	-4.53	Management Quality
TTM Capital Expenditures-to-Price	-4.44	Deep Value
Attention Span Ratio	-4.34	Management Quality
Real Earnings Surprise	-4.25	Earnings Momentum
52-Week High	-4.11	Price Momentum

Source: IHS Markit

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Figure 2



Source: IHS Markit

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Europe

The start of the second quarter saw a further slowing in the rate of growth in the eurozone manufacturing sector from the surge in the pace of growth last year, with the April PMI easing to 56.2, down from 56.6 in March and the lowest level in thirteen months. Five out of the eight nations covered (the Netherlands, Germany, Italy, Spain and Greece) registered slower rates of growth than in the prior month. However, European stocks posted their best monthly return since December 2016, easing some of their year-to-date losses.

As with US markets, valuation was also a key theme among top performing factors in the Developed Europe universe in April (Table 6). However, in this case, Relative and Deep Value measures joined long-term price reversal metrics posting the strongest spreads for the month, as represented by Industry Relative Leading 4-QTRs EPS to Price (3.84%) and Time Weighted Earnings Yield (3.43%).

At the opposite extreme, the weakest performing factors (Table 7) indicate that investors took on more risk as markets recovered some losses. 24-Month Value at Risk (-4.42%) captured this theme, with the month-on-month drop of 7.8 percentage points in spread demonstrating higher risk taking (Figure 3), an indication of investor confidence in the rally.

Table 6

Developed Europe top decile return spread factor performance, Apr 2018

Factor	Decile spread (%)	Factor group
60-Month Alpha	5.00	Price Momentum
Average Monthly Trading Volume-to-Market Cap	4.33	Liquidity, Risk & Size
60-Month Active Return with 1-Month Lag	4.08	Price Momentum
60-Month Active Return with 12-Month Lag	3.90	Price Momentum
Industry Relative Leading 4-QTRs EPS to Price	3.84	Relative Value
Oil Prices Sensitivity	3.72	Macro
Time Weighted Earnings Yield	3.43	Deep Value
Leading 12-Month Median Earnings Yield	3.42	Deep Value
5-yr Relative TTM Sales-to-Price	3.36	Relative Value
Leading 12-Month Mean Earnings Yield	3.23	Deep Value
Net Current Assets-to-Price	3.19	Deep Value
Forward 12-M EPS-to-Enterprise Value	3.18	Deep Value
5-yr Relative TTM Oper Cash Flow-to-Price	3.16	Relative Value
5-yr Relative TTM Free Cash Flow-to-Price	3.10	Relative Value
Lending Supply	3.06	Short Sentiment

Source: IHS Markit

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Table 7

Developed Europe bottom decile return spread factor performance, Apr 2018

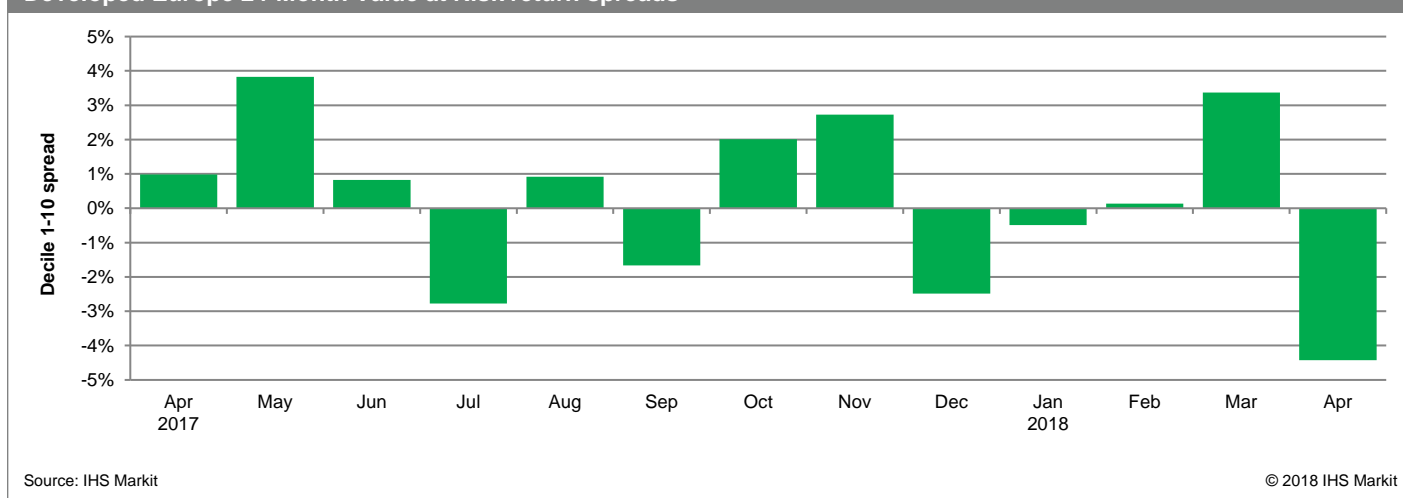
Factor	Decile spread (%)	Factor group
Market Cap per Analyst	-4.52	Liquidity, Risk & Size
24-Month Value at Risk	-4.42	Price Momentum
FY2 EPS Forecast Dispersion	-4.23	Earnings Momentum
24-Month Residual Return Variance	-4.22	Price Momentum
60-Month Trading Volume Trend	-4.14	Liquidity, Risk & Size
CV of Prior 90-Day Closing Prices	-4.10	Price Momentum
52-Week High	-4.03	Price Momentum
1-Month Stock Return Interquartile Range	-4.00	Liquidity, Risk & Size
Std Dev of FY1 EPS Estimates-to-Price	-3.91	Earnings Momentum
4-Year Change in the Average Trading Volume	-3.50	Price Momentum

Source: IHS Markit

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Figure 3

Developed Europe 24-Month Value at Risk return spreads



Source: IHS Markit

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Asia-Pacific

Manufacturing operating conditions in the two largest Asian economies improved in April. Japan, the stronger of the two, saw the PMI rise to 53.8 from 53.1 in March, with solid improvement in output and new orders contributing to the twenty-first consecutive month of rising production. In China, the manufacturing PMI edged only fractionally higher to 51.1, from 51.0 in March, though extending the string of positive operating conditions to 11 months. Asia-pacific equity markets also saw opposing results from Japanese and Chinese stocks, with the former outpacing the latter for the month.

Cash-generating firms were highly rewarded in the Developed Pacific exJapan universe in April (Table 8). The top spread was recorded by Cash Cycle (5.50%), a quality measure of a firm's improving financial health. (Table 9). Also, in an about-face, Price Momentum signals, which dominated the leaderboard in March, now run nearly the entirety of the laggard board for April (Table 9). Slope of 52 Week Price Trend Line (-5.72%) was the weakest performer, with an 8.5 percentage point month-on-month drop in spread (Figure 4).

As with other developed markets, valuation was a key driver of top factor performance in Japanese markets in April (Table 10). Time Weighted Book Yield (9.18%) traversed from the weakest Deep Value measure in March to the lead position among all factors in April, a 14.5 percentage point move (Figure 5), marking its highest spread since November 2016. Likewise, Price Momentum factors struggled last month (Table 11), with 50-200 Day Stock Price Ratio (-7.21%) and 12-Month Active Return with 1-month Lag (-6.63%) the weakest two measures in April.

Table 8

Developed Pacific exJapan top decile return spread factor performance, Apr 2018		
Factor	Decile spread (%)	Factor group
Cash Cycle	5.50	Management Quality
Time Weighted Cash Yield	5.37	Deep Value
Leading 12 Month Cash Yield	4.63	Deep Value
Asset Composition	4.46	Liquidity, Risk & Size
Long-term Debt-to-Equity	4.42	Liquidity, Risk & Size
Cash Burn Rate	4.18	Management Quality
Lending Supply	4.13	Short Sentiment
60-Month Active Return with 1-Month Lag	4.13	Price Momentum
Book-to-Market	4.09	Deep Value
The Visibility Ratio	4.04	Price Momentum
Change in TTM Depreciation vs. CapEx	4.00	Earnings Quality
TTM Sales-to-Price	3.92	Deep Value
Latin America Sales Exposure	3.87	Macro
Utilization	3.69	Short Sentiment
Altman Z Score	3.64	Liquidity, Risk & Size

Source: IHS Markit

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Table 9

Developed Pacific exJapan bottom decile return spread factor performance, Apr 2018		
Factor	Decile spread (%)	Factor group
Slope of 52 Week Price Trend Line	-5.72	Price Momentum
Second Preceding 6-month Return	-5.48	Price Momentum
EMEA Sales Exposure	-5.07	Macro
14 Day Relative Strength Index	-4.82	Price Momentum
Std Dev of FY1 EPS Estimates-to-Price	-4.74	Earnings Momentum
Fama-French Momentum	-4.68	Price Momentum
Slope of 66 Week Price Trend Line	-4.57	Price Momentum
30-75 Week Stock Price Ratio	-4.43	Price Momentum
12-Month Active Return with 1-month Lag	-4.27	Price Momentum
9-Month Active Return with 1-Month Lag	-4.00	Price Momentum

Source: IHS Markit

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Figure 4

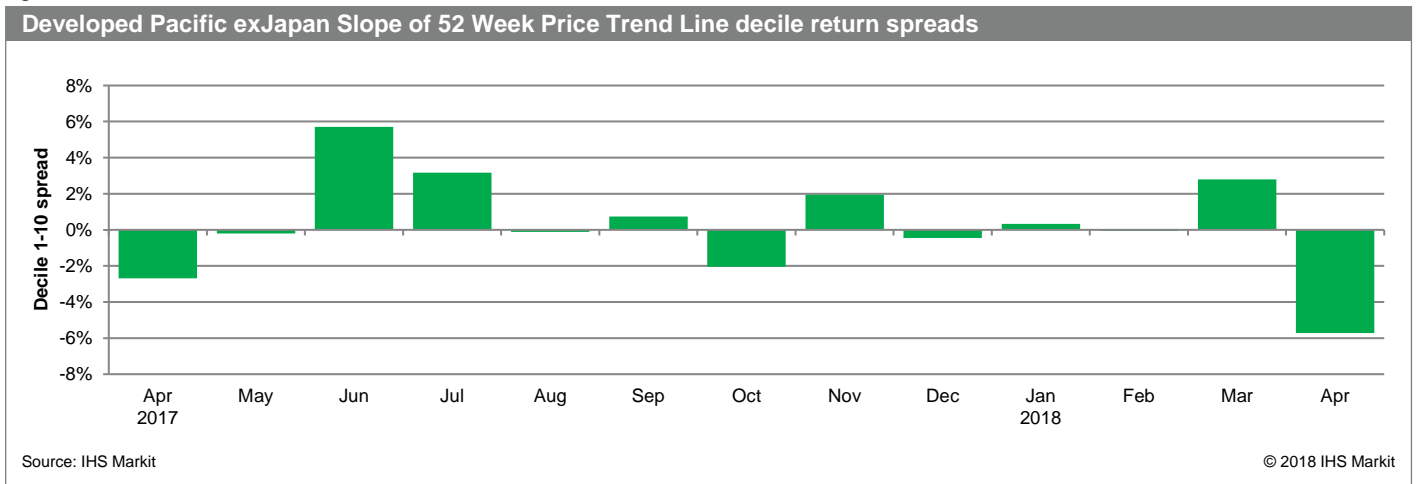


Table 10

Factor	Decile spread (%)	Factor group
Time Weighted Book Yield	9.18	Deep Value
Leading 12 Month Book Yield	8.94	Deep Value
Altman Z Score	8.06	Liquidity, Risk & Size
Book-to-Market	7.82	Deep Value
Price-to-Total Assets	7.07	Deep Value
36-Month Active Return with 1-Month Lag	7.07	Price Momentum
60-Month Alpha	6.89	Price Momentum
60-Day Residual Risk	6.79	Liquidity, Risk & Size
Natural Logarithm of Total Assets	6.72	Liquidity, Risk & Size
Price-to-Book Return-on-Equity Combination (PB-ROE)	6.67	Deep Value
Tobin q	6.52	Liquidity, Risk & Size
Graham Number Fair Value Premium	6.48	Deep Value
Price Above Last 260-day Lowest Trading Price	6.46	Price Momentum
Net Asset Value to Price	6.44	Deep Value
Current Liabilities-to-Price	6.16	Liquidity, Risk & Size

Source: IHS Markit © 2018 IHS Markit

Figure 5

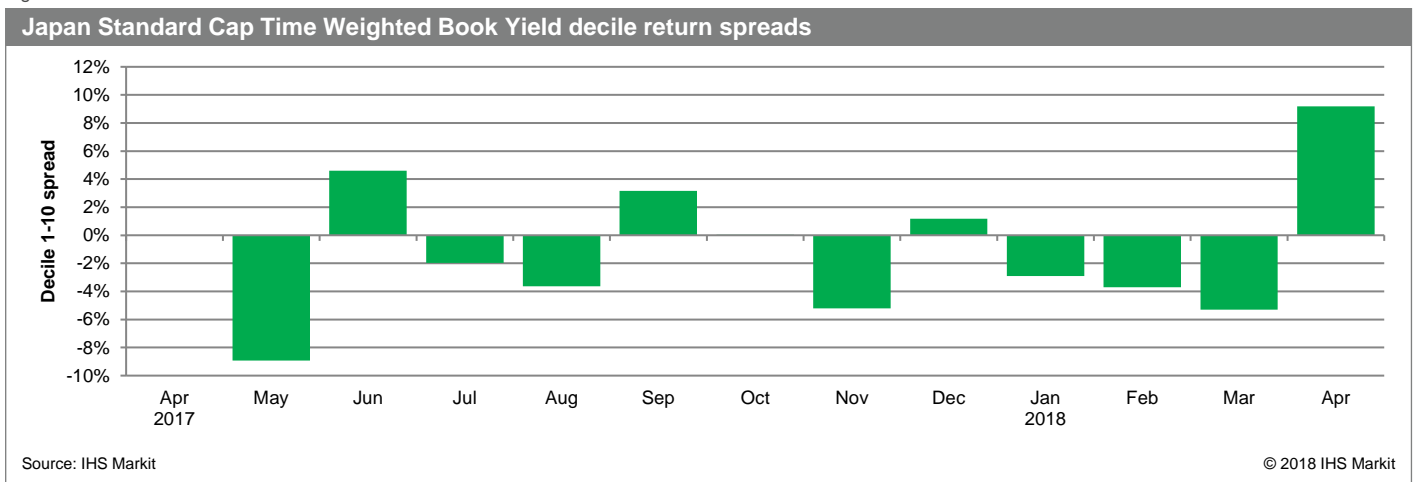


Table 11

Japan Standard Cap bottom decile return spread factor performance, Apr 2018		
Factor	Decile spread (%)	Factor group
50-200 Day Stock Price Ratio	-7.21	Price Momentum
12-Month Active Return with 1-month Lag	-6.63	Price Momentum
39-Week Return with 4-week Lag	-6.48	Price Momentum
9-Month Active Return with 1-Month Lag	-6.32	Price Momentum
Forward Return on Equity	-6.22	Management Quality
15/36 Week Stock Price Ratio	-6.09	Price Momentum
24-Month Active Return with 1-Month Lag	-5.78	Price Momentum
3-yr Compound Annual Sales Growth	-5.78	Historical Growth
Rational Decay Alpha	-5.67	Price Momentum
Return on Assets	-5.65	Management Quality

Source: IHS Markit

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Emerging Markets

In rounding out our review, we find that emerging markets were the exception to our other coverage universes, with positive spreads awarded to Price Momentum factors in April (Table 12). Slope of 66 Week Price Trend Line (5.25%) posted the strongest spread. At the same time, Deep Value also followed a different trend as an underperforming signal (Table 13), with Cash to Enterprise Value (-3.95%), the weakest valuation signal for the month. Performance of both measures was concentrated at the tails (Figure 6).

Table 12

Emerging Markets top quintile return spread factor performance, Apr 2018		
Factor	Decile spread (%)	Factor group
Slope of 66 Week Price Trend Line	5.25	Price Momentum
Dividend Coverage Ratio	5.12	Liquidity, Risk & Size
Slope of 52 Week Price Trend Line	4.96	Price Momentum
Cash Earnings Return On Equity	4.01	Management Quality
Natural Logarithm of Total Assets	3.79	Liquidity, Risk & Size
Net Cash to Equity	3.50	Liquidity, Risk & Size
Natural Logarithm of TTM Sales	3.38	Liquidity, Risk & Size
Market Cap per Analyst	3.16	Liquidity, Risk & Size
Net Current Assets-to-Price	3.15	Deep Value
Net Debt Ratio	2.98	Management Quality
Std Dev of FY1 EPS Estimates-to-Price	2.94	Earnings Momentum
3-M Revision in FY1 EPS Forecasts: Dispersion Relative	2.89	Earnings Momentum
Fama-French Momentum	2.88	Price Momentum
15/36 Week Stock Price Ratio	2.84	Price Momentum
30-75 Week Stock Price Ratio	2.79	Price Momentum

Source: IHS Markit

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Table 13

Emerging Markets bottom quintile return spread factor performance, Apr 2018

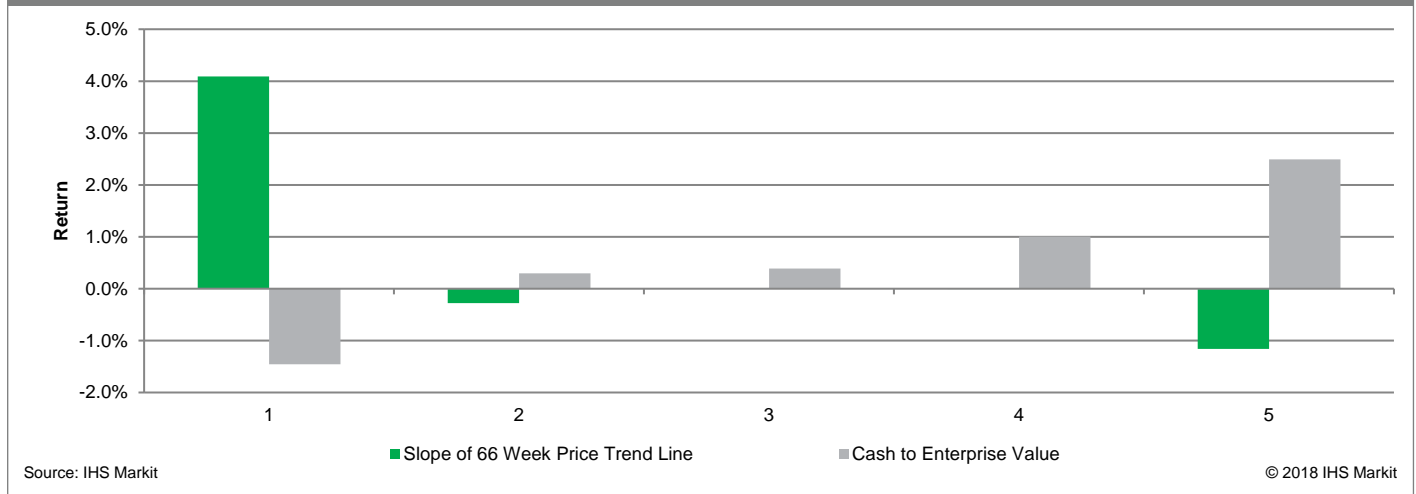
Factor	Decile spread (%)	Factor group
Average Monthly Trading Volume-to-Market Cap	-4.39	Liquidity, Risk & Size
Natural Logarithm of Market Capitalization	-4.32	Liquidity, Risk & Size
Natural Logarithm of Closing Price	-4.32	Liquidity, Risk & Size
Cash to Enterprise Value	-3.95	Deep Value
Cash-to-Price	-3.56	Deep Value
Net Debt to EBITDA	-3.48	Management Quality
Leading 12 Month EBITDA/ EV	-3.31	Deep Value
Time Weighted EBITDA/ EV	-3.11	Deep Value
Attention Span Ratio	-2.84	Management Quality
TTM Growth Flow-to-Price	-2.82	Deep Value

Source: IHS Markit

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Figure 6

Emerging Markets quintile returns, Apr 2018



Source: IHS Markit

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