Risk factors shrug off virus concerns

August 2020

Research Signals

While concerns of a COVID-19 resurgence and the potential for another round of shutdowns cast shadows on the global economic recovery, investors remained optimistic for equities, contributing to outperformance of higher risk names captured by 60-Month Beta and 24-Month Value at Risk across each of our coverage universes (Table 1). Investors put their hopes on vaccine developments and a continuation of the US Federal Reserve's low rate policy as it shifts to average inflation targeting. The recovery of the global manufacturing sector also gathered pace in August for a second month, following five consecutive declines, with the J.P.Morgan Global Manufacturing PMI rising to a 21-month high.

- US: While positive earnings revisions was a negative signal, outperformance to 2-Year Ahead EPS Growth was particularly pronounced for small caps, posting its highest spread for this cohort since May 2003
- Developed Europe: 60-Month Beta struggled last month as investors sought higher risk names, a trend that has been in place in general since April
- Developed Pacific: Implied Loan Rate, a Short Sentiment indicator measuring the cost of borrowing a stock, was a highly rewarded indicator in markets outside Japan
- Emerging markets: A broad set of styles were represented among the weakest performing factors, including Demand Supply Ratio, 24-Month Value at Risk and Real Earnings Surprise



Global factor quantile return spread performance snapshot, Aug 2020

Factor	Factor Group	US Large Cap	US Small Cap	Developed Europe	Developed Pacific ex Japan	Japan Standard Cap	Emergin Market
Book-to-Market		-0.69	1.94	2.70	-3.58	3.70	0.7
Forward 12-M EPS-to-Enterprise Value	— — Deep Value	-2.83	-3.58	-1.13	-6.42	-8.14	-1.8
TTM EBITDA-to-Enterprise Value		1.31	-1.56	1.97	-0.26	-0.25	-0.7
TTM Free Cash Flow-to-Enterprise Value		1.48	0.20	1.96	-0.20	-2.71	-1.1
Industry Relative Leading 4-QTRs EPS to Price	_ Relative Value	-0.30	-5.53	0.65	-3.07	-4.20	-0.8
Industry Relative TTM Dividend Yield		-0.97	-2.29	-0.58	-0.51	4.86	-3.2
Fixed Assets Turnover Ratio		4.78	0.31	2.91	1.25	-2.27	-0.1
Inventory Turnover Ratio	Management Quality	7.65	7.94	2.82	1.62	0.41	-1.3
Net Operating Asset Turnover		4.32	1.97	1.89	1.17	-0.24	1.3
Change in Accruals to Assets		-0.83	-1.71	-1.56	2.06	0.66	1.2
Change in TTM COGS vs. Inventory Level	— Earnings Quality —	4.03	2.38	0.84	2.21	-2.85	1.2
Change in TTM Sales vs. Accounts Receivable		1.48	-0.21	-0.84	-0.25	2.76	2.0
Working Capital Accruals		1.61	4.18	-1.79	0.78	0.34	-0.2
1-yr Growth in TTM Free Cash Flow	 Historical Growth 	0.36	-1.89	0.31	3.15	-2.63	0.4
Reinvestment Rate	Thistorical Growth	2.83	4.93	1.45	-3.99	-6.13	-0.1
Average Monthly Trading Volume-to- Market Cap	_	1.39	-1.56	0.19	0.87	7.91	-0.4
60-Month Beta		-5.20	-4.51	-5.25	-5.49	-4.41	-0.3
Asset Quality Index	 Liquidity, Risk & Size 	2.43	1.90	1.74	0.62	-0.48	0.4
Operating Leverage		0.94	-0.44	0.48	-1.05	-1.49	1.3
Natural Logarithm of Market Capitalization		-1.45	-1.37	2.43	-0.67	0.49	0.6
2-Year Ahead EPS Growth		4.30	11.29	2.01	0.26	11.59	1.4
3-M Revision in FY2 EPS Forecasts	Earnings — Momentum	-7.26	-5.33	-2.39	-0.43	-12.19	-1.4
Real Earnings Surprise		-1.32	-0.86	1.69	2.27	-6.74	-3.4
24-Month Value at Risk		-3.65	-3.66	-4.77	-7.16	-11.48	-3.6
5-day Industry Relative Return		2.57	3.87	3.04	-1.11	13.96	-0.9
Industry-adjusted 12-month Relative Price Strength	Price Momentum	-1.69	-3.36	0.29	-2.17	-6.43	-0.9
Rational Decay Alpha		-3.40	-1.41	-0.29	0.99	-7.89	-1.2
Demand Supply Ratio	Short Sontimont	-1.54	0.45	1.21	1.39	-0.76	-4.5
Implied Loan Rate	 Short Sentiment 	-1.22	5.87	1.54	4.99	0.66	-1.1

Source: IHS Markit

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United States

US Large Cap

US manufacturing operating conditions gained further ground, accelerating to the strongest since early 2019. The PMI posted 53.1 in August, up from 50.9 in July, reflecting faster increases in output and new orders and the highest degree of confidence in the outlook for output over the coming year since April 2019. With the data indicating that the third quarter could see a strong rebound in production from the steep second quarter decline, coupled with investors' hopes for COVID-19 vaccines and treatments, equity markets posted their strongest August in decades.

Investors turned once again to corporate fundamentals for guidance, as confirmed by the top performing factors for US large caps in August (Table 2). Quality and value measures which captured this theme include Inventory Turnover Ratio (7.65%) and Cash-to-Price (5.18%). On the other hand, earnings revision metrics were among the weakest performing factors for the month (Table 3). 3-M Revision in FY2 EPS Forecasts (-7.26%), whose performance has been cyclical in nature over the past six months, trailed by the widest margin, though to a much lesser extent than in the early stages of the coronavirus pandemic in April (Figure 1).

Table 2

US Large Cap top decile return spread factor performance, Aug 2020

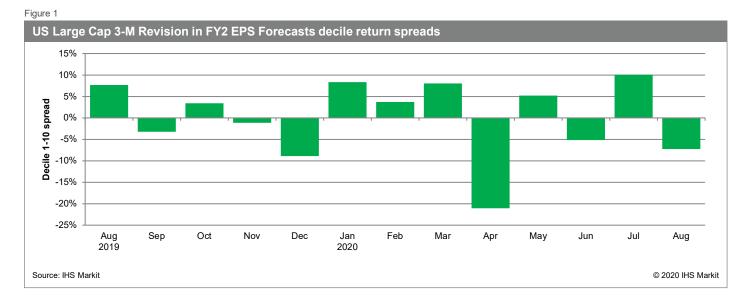
	Decile spread	
Factor	(%)	Factor group
Inventory Turnover Ratio	7.65	Management Quality
Natural Logarithm of TTM Sales (USD)	5.28	Liquidity, Risk & Size
Cash-to-Price	5.18	Deep Value
Trailing 12-Month Sales to Invested Capital	5.07	Management Quality
Current Liabilities-to-Price	5.03	Liquidity, Risk & Size
Fixed Assets Turnover Ratio	4.78	Management Quality
Cyclically Adjusted Earnings-to-Price	4.71	Deep Value
Working Capital-to-Total Assets	4.70	Management Quality
Cyclically and Inflation Adjusted Earnings-to-Price	4.66	Deep Value
Normalized Earnings Yield	4.66	Deep Value
Net Current Assets-to-Price	4.62	Deep Value
Liquidity Coefficient	4.37	Liquidity, Risk & Size
Cash to Enterprise Value	4.35	Deep Value
Net Operating Asset Turnover	4.32	Management Quality
2-Year Ahead EPS Growth	4.30	Earnings Momentum

Source: IHS Markit

ctor	Decile spread (%)	Factor group
Revision in FY2 EPS Forecasts	-7.26	Earnings Momentum
et Revision Confidence	-6.56	Earnings Momentum
ne Weighted Earnings Revision	-6.42	Earnings Momentum
raged Last 6-M EPS Revisions for FY1	-6.19	Earnings Momentum
atility-adj 3-yr Projected EPS Growth	-6.00	Earnings Momentum
Revision in FY1 EPS Forecasts	-5.96	Earnings Momentum
Relative Leading 12-Month Earnings Yield	-5.61	Relative Value
terly Change in Gross Profit to Assets	-5.47	Management Quality
Weighted Earnings Revision Dispersion	-5.47	Earnings Momentum
age Payable Period	-5.34	Management Quality

Source: IHS Markit

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US Small Cap

Small cap factor performance moved more in line with large caps in August on the lists of top (Table 4) and bottom (Table 5) performing factors, with corporate fundamental and earnings revisions measures at the extremes, represented by factors such as Average Collection Period (8.68%) and Street Revision Confidence (-10.23%), respectively. Ironically, another earnings momentum factor, 2-Year Ahead EPS Growth, was the most highly rewarded indicator with a double-digit spread of 11.29% (Figure 2), a level not reached since May 2003.

US Small Cap top decile return spread factor performance, Aug 2020

	Decile spread		
Factor	(%)	Factor group	
2-Year Ahead EPS Growth	11.29	Earnings Momentum	
Average Collection Period	8.68	Management Quality	
2-Year Ahead EPS Growth Percentage Change	8.31	Earnings Momentum	
TTM Sales-to-Enterprise Value	7.38	Deep Value	
TTM Sales-to-Price	7.36	Deep Value	
Cyclically and Inflation Adjusted Earnings-to-Price	6.78	Deep Value	
Cyclically Adjusted Earnings-to-Price	6.71	Deep Value	
3-yr Compound Annual Operating Profit Margin	6.43	Historical Growth	
Time Weighted Sales Yield	6.27	Deep Value	
51- Week Volume Price Trend with 4-week Lag	6.22	Price Momentum	
Percent Change in Shares Outstanding	6.03	Earnings Quality	
Leading 12 Month Sales Yield	5.91	Deep Value	
Implied Loan Rate	5.87	Short Sentiment	
Basic Defensive Interval	5.86	Liquidity, Risk & Size	
Current Liabilities-to-Price	5.85	Liquidity, Risk & Size	
Source: IHS Markit			© 2020 IHS Mark

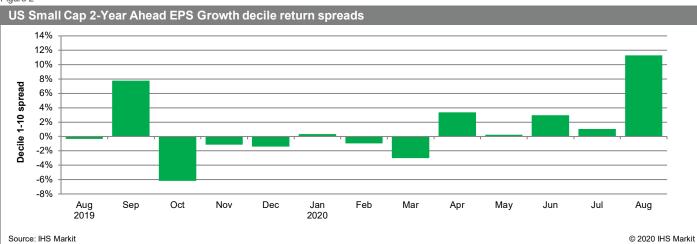
Table 5

US Small Cap bottom decile return spread factor performance, Aug 2020

	Decile enreed	
Factor	Decile spread (%)	Factor group
Earnings Torpedo	-12.33	Earnings Momentum
Street Revision Confidence	-10.23	Earnings Momentum
6-Month Nominal Change in 18-Month Alpha	-9.92	Price Momentum
Volatility-adj 3-yr Projected EPS Growth	-9.73	Earnings Momentum
1 Year Change in Gross Profit to Assets	-9.45	Management Quality
Averaged Last 6-M EPS Revisions for FY1	-9.44	Earnings Momentum
6-Month Nominal Change in 12-Month Alpha	-9.37	Price Momentum
Standardized Unexpected Earnings	-9.30	Earnings Momentum
Prior Fiscal Quarter Forecast Error	-8.75	Earnings Momentum
Unexpected Profitability	-8.58	Management Quality

Source: IHS Markit

Figure 2



Europe

Modest growth in the eurozone manufacturing economy was sustained in August, following its first growth in 18 months during July. The PMI registered at 51.7 in August, little moved from 51.8 in July, continuing the recovery from the severe COVID-19-related constraints on economic activity. Country level data indicated divergent trends, with Italy, Ireland, the Netherlands, Germany and Austria above the 50.0 no-change mark, while manufacturing performance stagnated in Spain, France and Greece. While business confidence continued to recover, stock market optimism was once again more subdued, on headwinds from a strong euro, trading at levels versus the US dollar not seen since May 2018, making European products less competitive abroad, alongside fears of more COVID-19-related restrictions.

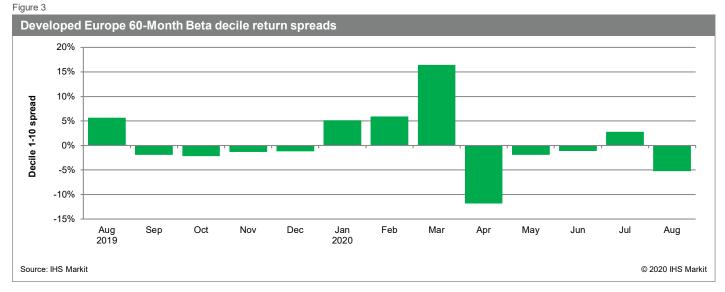
As with US markets, quality and value measures were prevalent among the top performing factors in Developed Europe in August (Table 6), led by TTM Gross Profit to Assets (5.66%) and 5-yr Relative Book-to-Market (3.91%), respectively. At the opposite extreme, 60-Month Beta (-5.25%) was one of the weakest performing factors for the month (Table 7), as investors have sought higher risk shares in general following the initial shock of the COVID-19-induced volatility (Figure 3). Other bottom performing factors include Leading 12 Month Regular Dividend Yield (-4.79%), perhaps an indication of concerns for corporations to reach their current dividend expectations.

Table 6

Factor	Decile spread (%)	Factor group
TTM Gross Profit to Assets	5.66	Management Quality
14 Day Relative Strength Index	4.74	Price Momentum
Natural Logarithm of Market Capitalization (USD)	4.44	Liquidity, Risk & Size
1-Month Active Return	4.02	Price Momentum
5-yr Relative Book-to-Market	3.91	Relative Value
5-yr Relative TTM EBITDA-to-Price	3.80	Relative Value
TTM Cash Flow-to-Price	3.65	Deep Value
inancial Leverage	3.56	Liquidity, Risk & Size
TTM EBITDA-to-Price	3.54	Deep Value
3-yr Compound Annual Sales Growth	3.53	Historical Growth
Market Leverage	3.46	Liquidity, Risk & Size
3-yr Growth in TTM Cash Flow	3.41	Historical Growth
2-Month Active Return	3.40	Price Momentum
5-yr Relative TTM Cash Flow-to-Price	3.30	Relative Value
5-yr Relative TTM Sales-to-Price	3.27	Relative Value

Source: IHS Markit

Factor	Decile spread (%)	Factor group	
5-yr Relative Leading 12-Month Earnings Yield	-5.37	Relative Value	
60-Month Beta	-5.25	Liquidity, Risk & Size	
CV of Prior 90-Day Closing Prices	-5.19	Price Momentum	
Product of Beta and Sigma	-5.05	Liquidity, Risk & Size	
Leading 12 Month Regular Dividend Yield	-4.79	Dividend Forecast	
24-Month Value at Risk	-4.77	Price Momentum	
Leading 12 Month Total Dividend Yield	-4.66	Dividend Forecast	
1-yr Change in Total Assets	-4.57	Historical Growth	
Leading 1-Year Regular Dividend Payout	-4.47	Dividend Forecast	
Stock Return Volatility	-4.36	Liquidity, Risk & Size	



Asia-Pacific

Improvements in manufacturing operating conditions in the two largest Asian economies of China and Japan were seen in August. In China, the headline PMI rose to 53.1 in August, from 52.8 in July, lifted by strong expansions in production and new orders and the first increase in export sales in 2020 to date. In Japan, the manufacturing downturn continued to ease, with the PMI picking up to 47.2 in August, from 45.2 in July, the highest reading since February, supported by softer declines in production and new business. However, stocks fared better in Japan compared with China despite a late month dip on Prime Minister Abe's announcement that he was resigning.

Momentum metrics were displaced by corporate fundamentals for the top spots of factor performance in developed Pacific markets outside Japan in August (Table 8), including factors such as Net Current Assets-to-Price (5.23%) and Cash Earnings Return On Equity (3.46%). We also highlight Implied Loan Rate (4.99%), a Short Sentiment indicator favoring stocks with low cost to borrow, for which investors rewarded with a 15-percentage point month-on-month swing in performance (Figure 4). Conversely, factors which lagged for the month (Table 9) once again include several risk measures including 24-Month Value at Risk (-7.16%), as investors sought higher risk stocks.

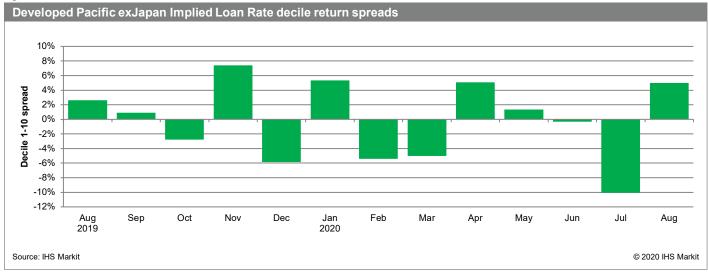
In Japan, price reversal metrics dominated the list of top performing factors (Table 10) in August. 2-Month Active Return (16.85%) led the way, with a spike in spread (Figure 5) to a level not seen since January 2000, indicating that investors shifted to recent underperformers in droves. At the opposite end of the spectrum, 52-Week High (-17.68%) traversed from the top performer in July to the weakest performer in August, joining other Price Momentum measures on the laggard board (Table 11).

Table 8

Factor	Decile spread (%)	Factor group
Net Current Assets-to-Price	5.23	Deep Value
Implied Loan Rate	4.99	Short Sentiment
60-Month Active Return with 1-Month Lag	4.71	Price Momentum
5-yr Relative TTM Oper Cash Flow-to-Price	4.64	Relative Value
Ohlson Bankruptcy Score	3.61	Liquidity, Risk & Size
Net Cash to Equity	3.56	Liquidity, Risk & Size
Cash Earnings Return On Equity	3.46	Management Quality
Net Debt Ratio	3.17	Management Quality
TTM Gross Profit to Assets	3.16	Management Quality
1-yr Growth in TTM Free Cash Flow	3.15	Historical Growth
Yearly TTM Total Sales Growth Rate	3.05	Historical Growth
Cash Cycle	3.05	Management Quality
Assets Turnover Ratio	2.91	Management Quality
TTM Gross Profit Margin	2.88	Management Quality
Comprehensive Debt to Total Assets	2.83	Liquidity, Risk & Size

Source: IHS Markit

Figure 4

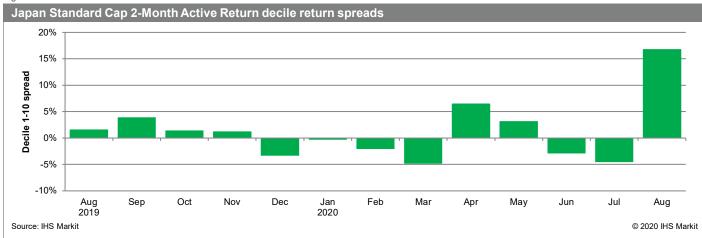


actor	Decile spread	Factor group	
	(%)	¥_i	
24-Month Value at Risk	-7.16	Price Momentum	
CV of Prior 90-Day Closing Prices	-6.82	Price Momentum	
Forward 12-M EPS-to-Enterprise Value	-6.42	Deep Value	
Predicted Dividend Yield	-6.34	Deep Value	
Earnings Torpedo	-6.29	Earnings Momentum	
ime Weighted Earnings Yield	-5.83	Deep Value	
Forward Return on Equity	-5.60	Management Quality	
eading 12-Month Mean Earnings Yield	-5.58	Deep Value	
0-Month Beta	-5.49	Liquidity, Risk & Size	
0-Day Residual Risk	-5.38	Liquidity, Risk & Size	

Table 10

	Decile spread		
Factor	(%)	Factor group	
2-Month Active Return	16.85	Price Momentum	
1-Month Active Return	15.53	Price Momentum	
5-yr Relative TTM Sales-to-Price	15.31	Relative Value	
4-week Industry Relative Return	14.57	Price Momentum	
5-yr Relative TTM Dividend Yield	14.16	Relative Value	
5-yr Relative Book-to-Market	14.05	Relative Value	
5-day Industry Relative Return	13.96	Price Momentum	
14 Day Relative Strength Index	12.62	Price Momentum	
Price Above Last 260-day Lowest Trading Price	12.44	Price Momentum	
3-Month Active Return	12.01	Price Momentum	
2-Year Ahead EPS Growth	11.59	Earnings Momentum	
TTM Sales-to-Price	10.37	Deep Value	
US Dollar Value Sensitivity	10.00	Macro	
Oil Prices Sensitivity	9.86	Macro	
60-Month Alpha	9.86	Price Momentum	
Source: IHS Markit			© 2020 IHS Mar

Figure 5



	Decile spread	
tor	(%)	Factor group
Veek High	-17.68	Price Momentum
Veek Relative Price Strength	-16.93	Price Momentum
Veek Return with 4-week Lag	-15.97	Price Momentum
5 Week Stock Price Ratio	-15.90	Price Momentum
t Revision Confidence	-14.92	Earnings Momentum
ged Last 6-M EPS Revisions for FY1	-14.80	Earnings Momentum
Revision in FY1 EPS Forecasts	-14.74	Earnings Momentum
6 Week Stock Price Ratio	-14.72	Price Momentum
nth Active Return with 1-Month Lag	-14.66	Price Momentum
nth Active Return with 1-Month Lag	-14.66	Price Momentum

Source: IHS Markit

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Emerging Markets

We round out the report with a review of top (Table 12) and bottom (Table 13) performing factors in emerging markets in August. Valuation measures returned to the leaderboard, accompanied by several quality measures, as captured by Dividends-to-Cash Flow (4.85%) and Leading 12 Month Sales Yield (2.88%), among others. We also draw attention to outperformance for Natural Logarithm of Market Capitalization (USD) (3.42%), as investors favored smaller cap names in four of the last five months (Figure 6). Lastly, factors which lagged for the month represent a broad set of styles including Lending Supply (-6.14%), TTM Gross Profit Margin (-4.32%), 3-M Revision in FY1 EPS Forecasts: Dispersion Relative (-3.84%) and 24-Month Value at Risk (-3.63%).

Table 12

Factor	Decile spread (%)	Factor group
Dividends-to-Cash Flow	4.85	Management Quality
Jnexpected Change in Accounts Receivable	3.47	Earnings Quality
Natural Logarithm of Market Capitalization (USD)	3.42	Liquidity, Risk & Size
Street Consensus Rating	3.30	Earnings Momentum
Cash Earnings Return On Equity	3.19	Management Quality
Change in QTR Sales vs. Gross Margin	2.93	Earnings Quality
eading 12 Month Sales Yield	2.88	Deep Value
JS Dollar Value Sensitivity	2.82	Macro
Cash & Equivalents-to-Current Liabilities	2.82	Liquidity, Risk & Size
I-yr Chg in Acct Receivable as % of Sales	2.72	Historical Growth
Dividend Coverage Ratio	2.72	Liquidity, Risk & Size
TTM Sales-to-Price	2.47	Deep Value
Fime Weighted Sales Yield	2.32	Deep Value
I-yr Change in Total Assets	2.19	Historical Growth
Skewness of 90-Day Stock Daily Returns	2.17	Price Momentum

Source: IHS Markit

actor	Decile spread (%)	Factor group
ending Supply	-6.14	Short Sentiment
nventory Value Concentration	-5.93	Short Sentiment
ield Curve Slope Sensitivity	-4.46	Macro
TM Gross Profit Margin	-4.32	Management Quality
let Income per Employee	-3.94	Management Quality
M Revision in FY1 EPS Forecasts: Dispersion Relative	-3.84	Earnings Momentum
4-Month Value at Risk	-3.63	Price Momentum
lope of 66 Week Price Trend Line	-3.55	Price Momentum
eal Earnings Surprise	-3.48	Earnings Momentum
ability of 5-yr TTM Earnings per Share	-3.39	Historical Growth

Source: IHS Markit





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