

Global Quantitative Investment Strategies
Conference 2008

The outlook for alpha – global comparisons

- Among developed markets

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Nomura Securities International, Inc.

17 June 2008

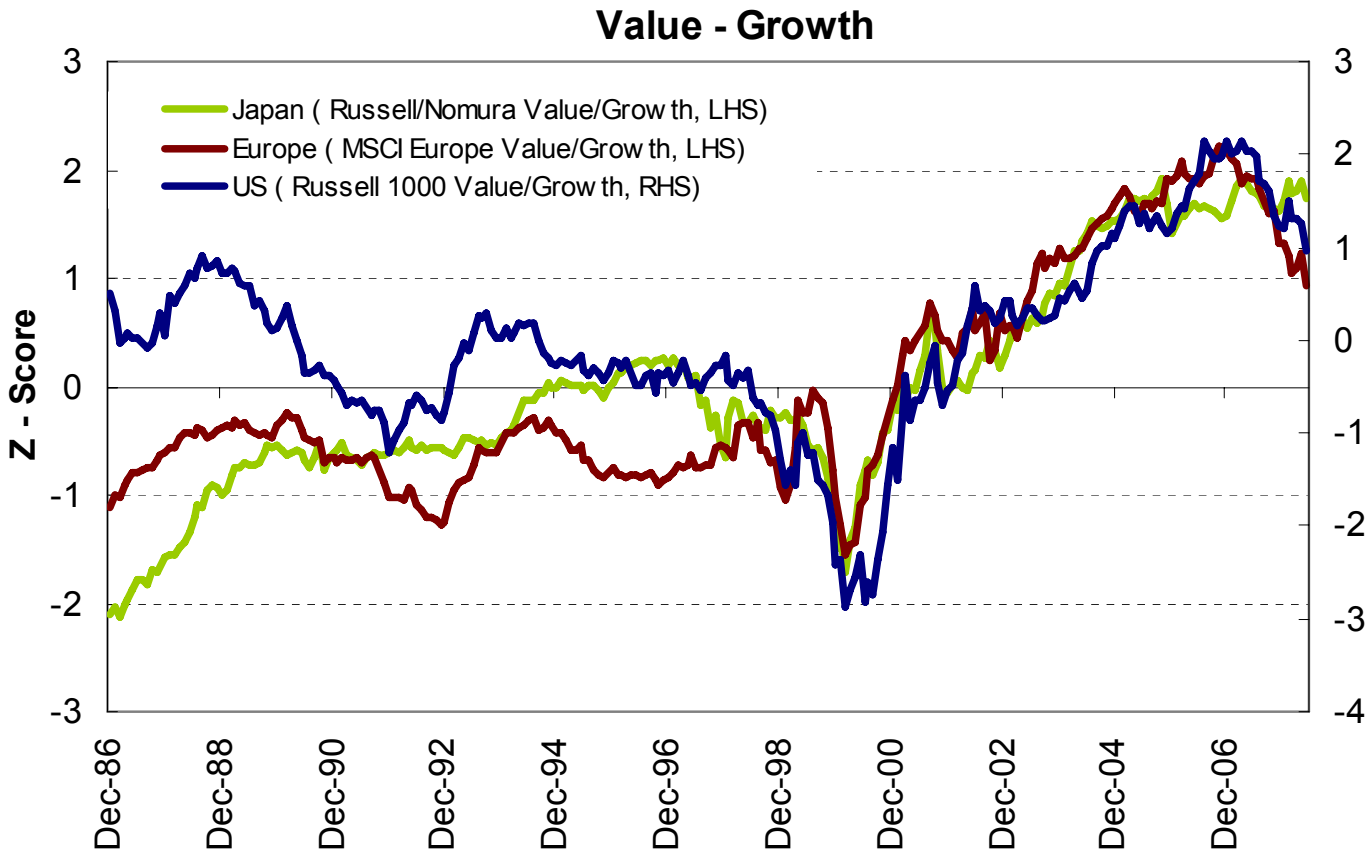
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Outlook for alpha

- Was there a refuge from the Summer 2007 quant meltdown?
- Is there alpha available anywhere?
- Are there differences across regions that can be exploited?

Style synchronization around the world

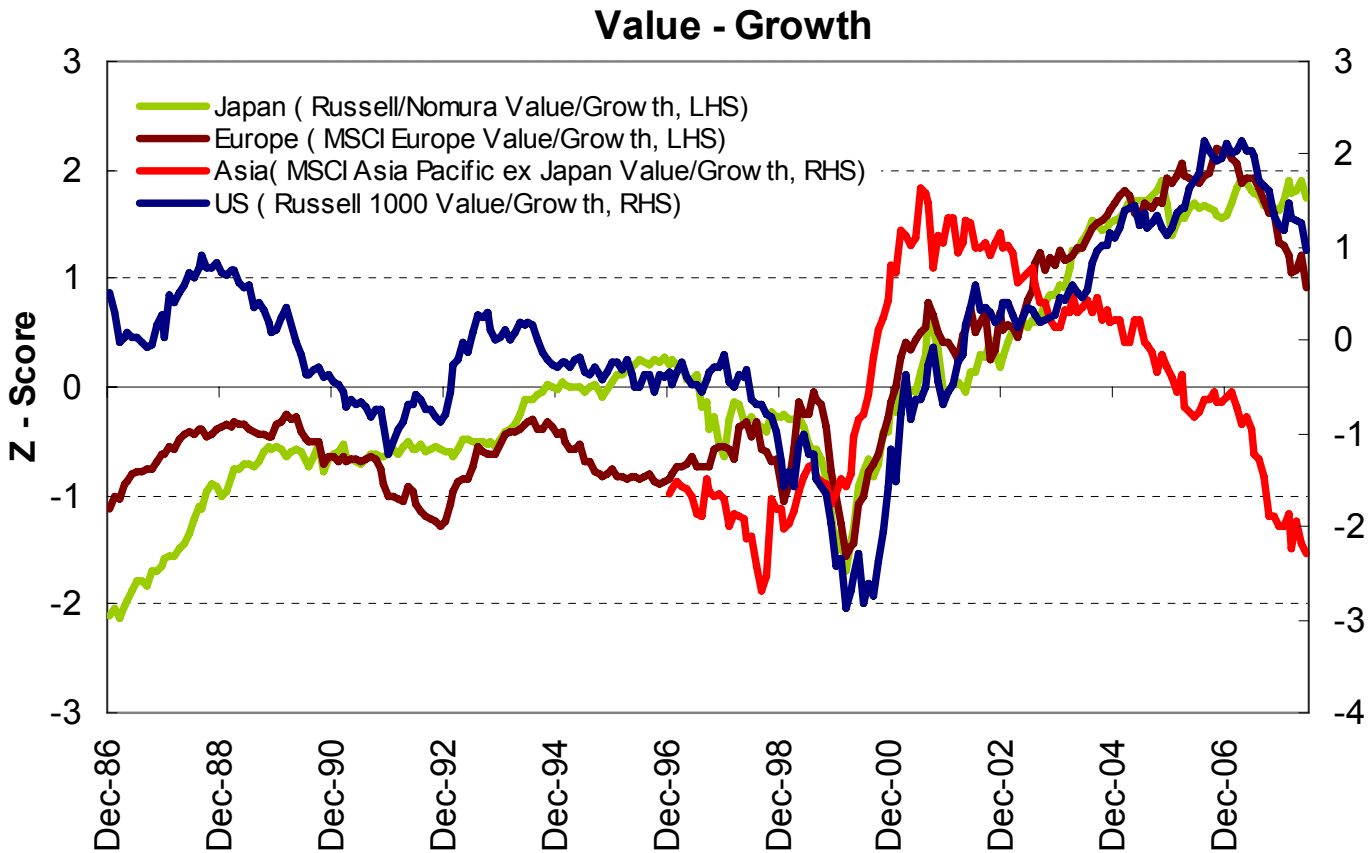
Value vs. growth coupled for the last decade



Note: Last data as of 5/30/08. In this presentation, factor returns do not include transaction costs. See *Style transition begins*, Nomura US quant monthly, 4 May 2007.

Source: Nomura Securities International Inc., Compustat, Russell, IDC, Worldscope, I/B/E/S, MSCI, and ExShare.

... except for Asia?

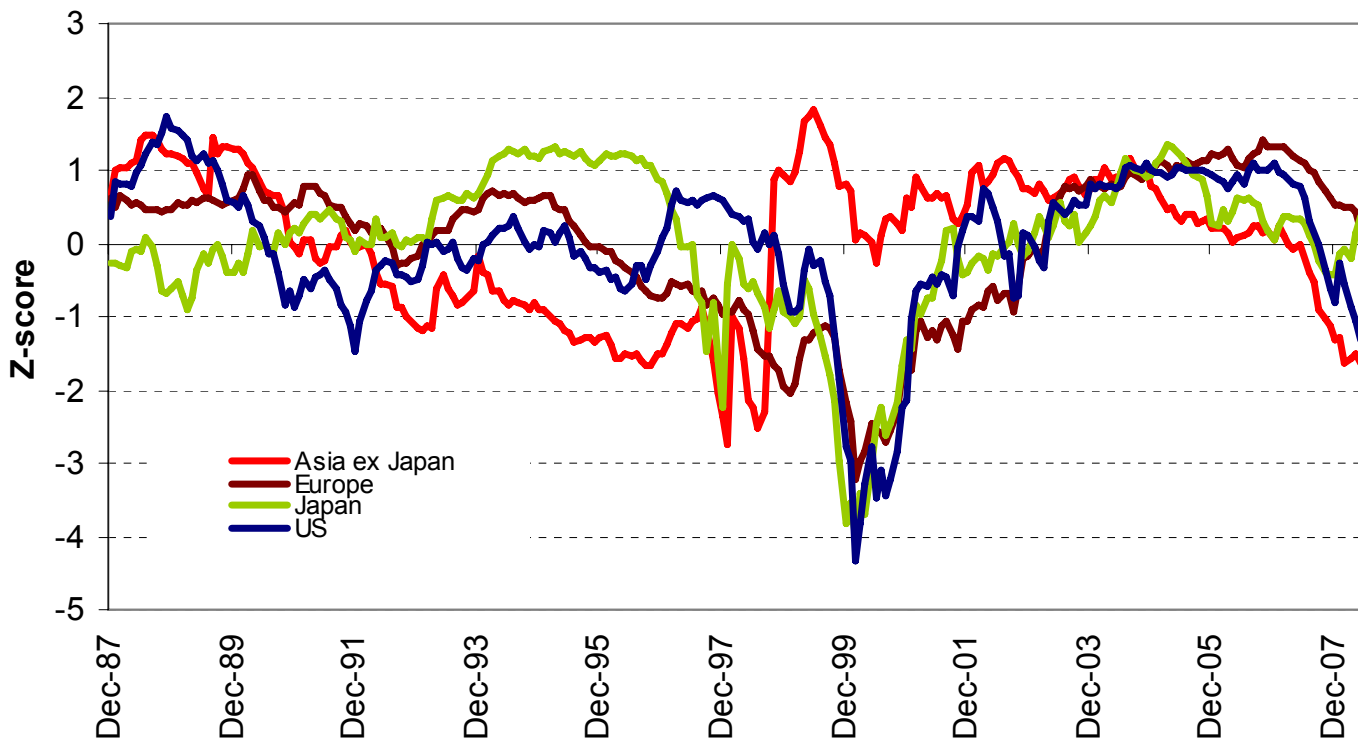


Note: Last data as of 5/30/08.

Source: Nomura Securities International Inc., Compustat, Russell, IDC, Worldscope, I/B/E/S, MSCI, and ExShare.

Asia marches at its own beat

B/P Factor Return - detrended

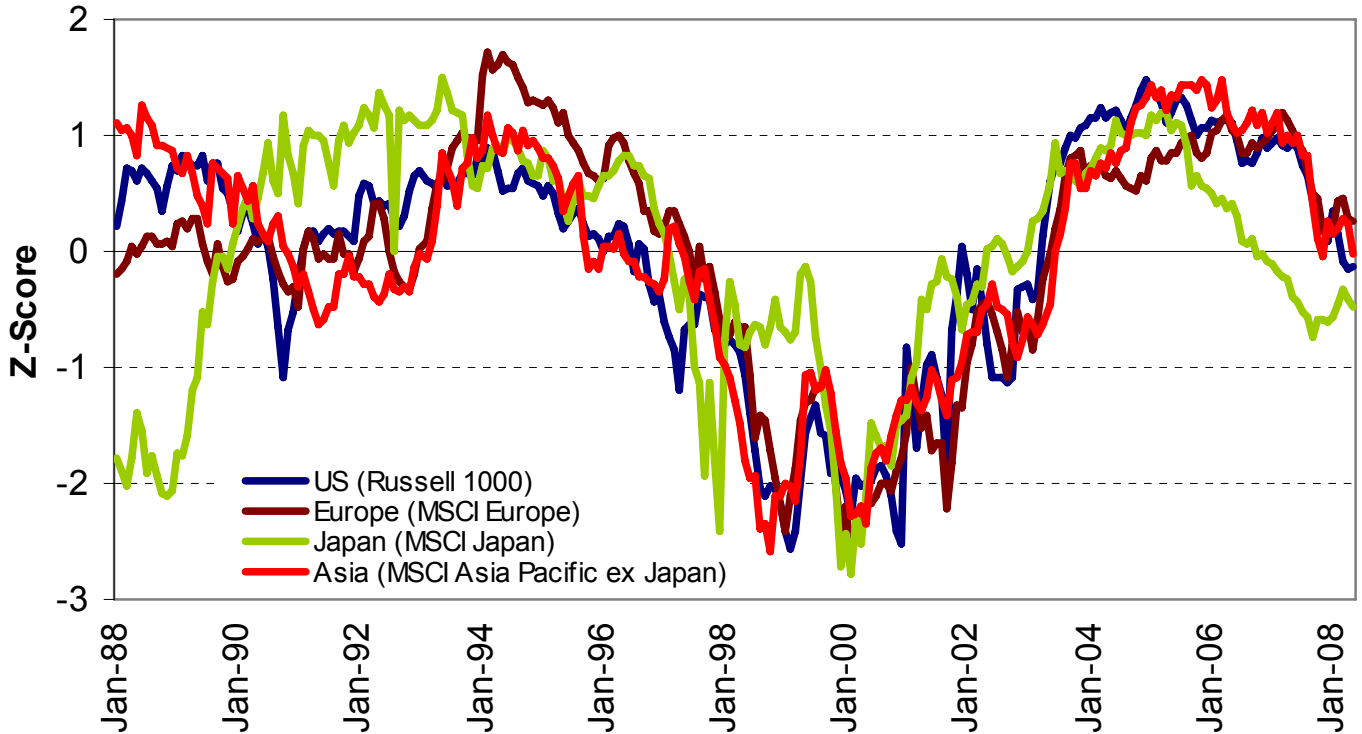


Note: Factor returns based on decile spreads in Russell 1000 for the US, quintile spreads in MSCI Europe for Europe, quintile spreads in MSCI Japan for Japan, and quintile spread in MSCI Asia Pacific ex Japan for Asia. Last data as of 5/30/08.

Source: Nomura Securities International, Inc, Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

... but it's not a cap effect

Market Cap Factor Return (de-trended)

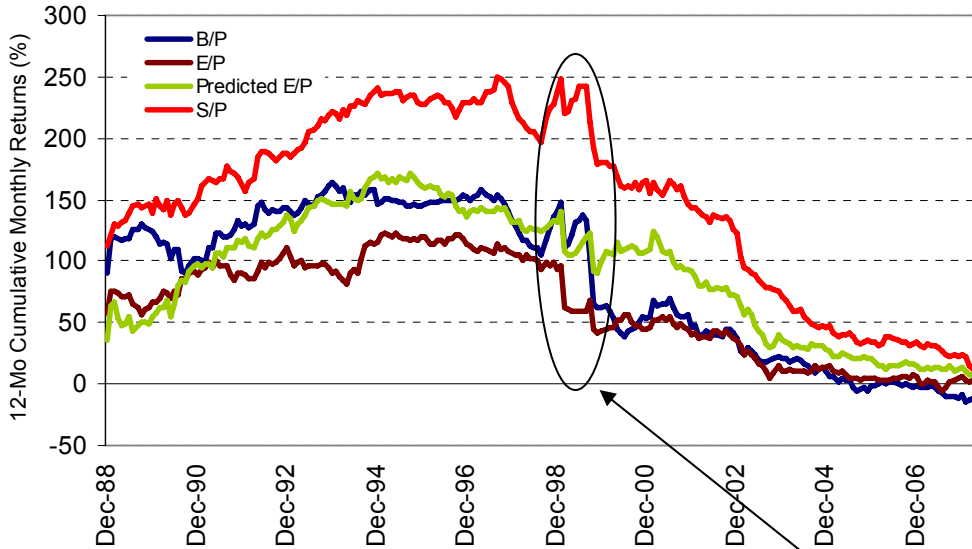


Note: Factor returns based on decile spreads in Russell 1000 for the US, quintile spreads in MSCI Europe for Europe, quintile spreads in MSCI Japan for Japan, and quintile spread in MSCI Asia Pacific ex Japan for Asia. Last data as of 5/30/08.

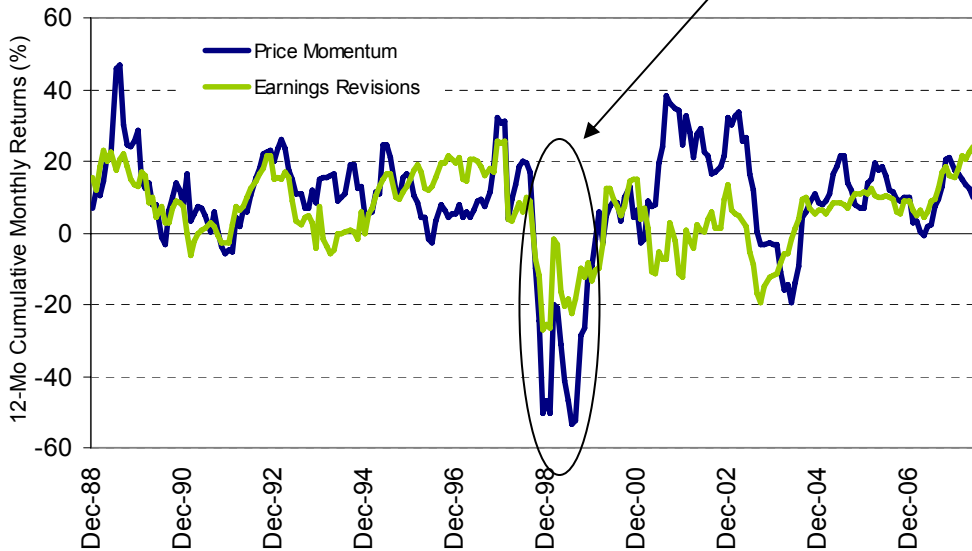
Source: Nomura Securities International, Inc., Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

Value factors have failed for 10 years, but momentum and revisions work

Asia Pacific ex Japan: Value Factor Returns



Asia Pacific ex Japan: Momentum and Revisions Factor Return

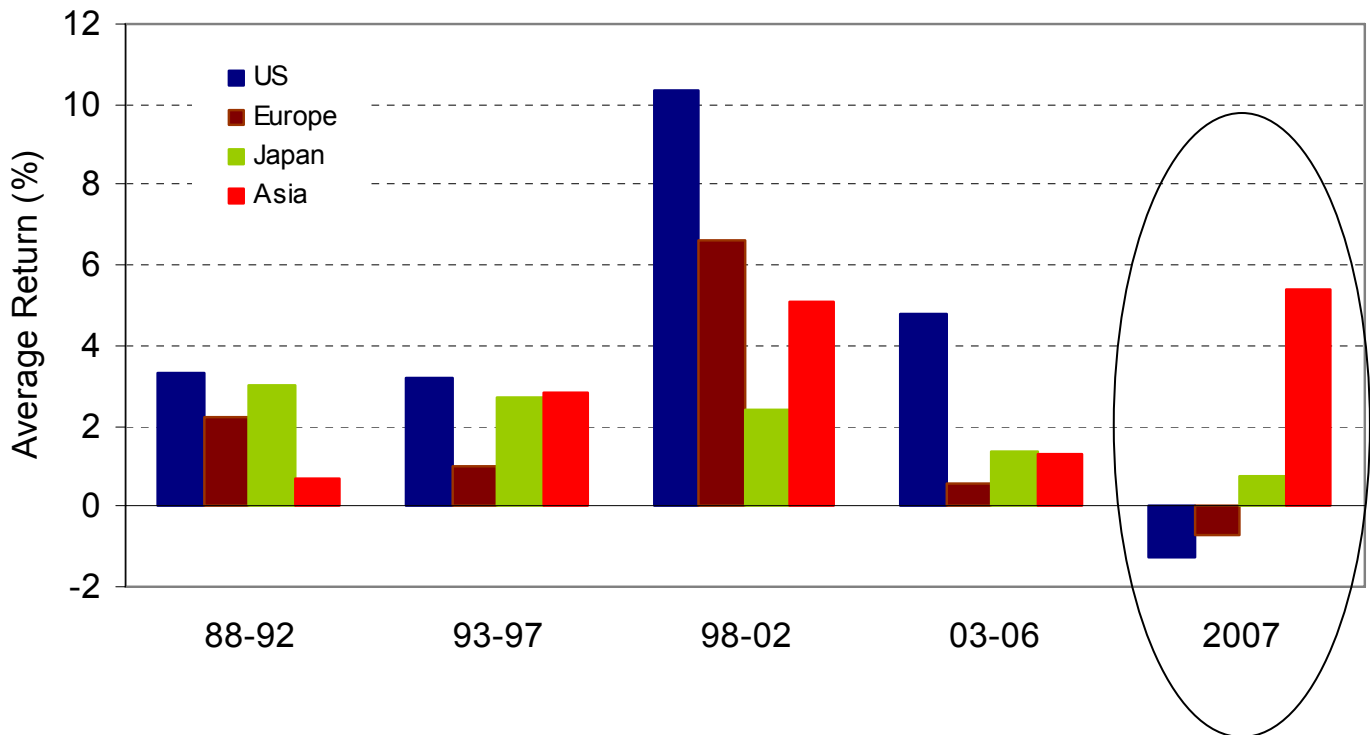


Note: Factor returns based on quintile spreads in MSCI Asia Pacific ex Japan. Last data as of 5/30/08.
 Source: Nomura Securities International, Inc., Worldscope, I/B/E/S, MSCI, Ex-Share.

... still quant factors work in Asia

... even last year

Average Factor Return by Region

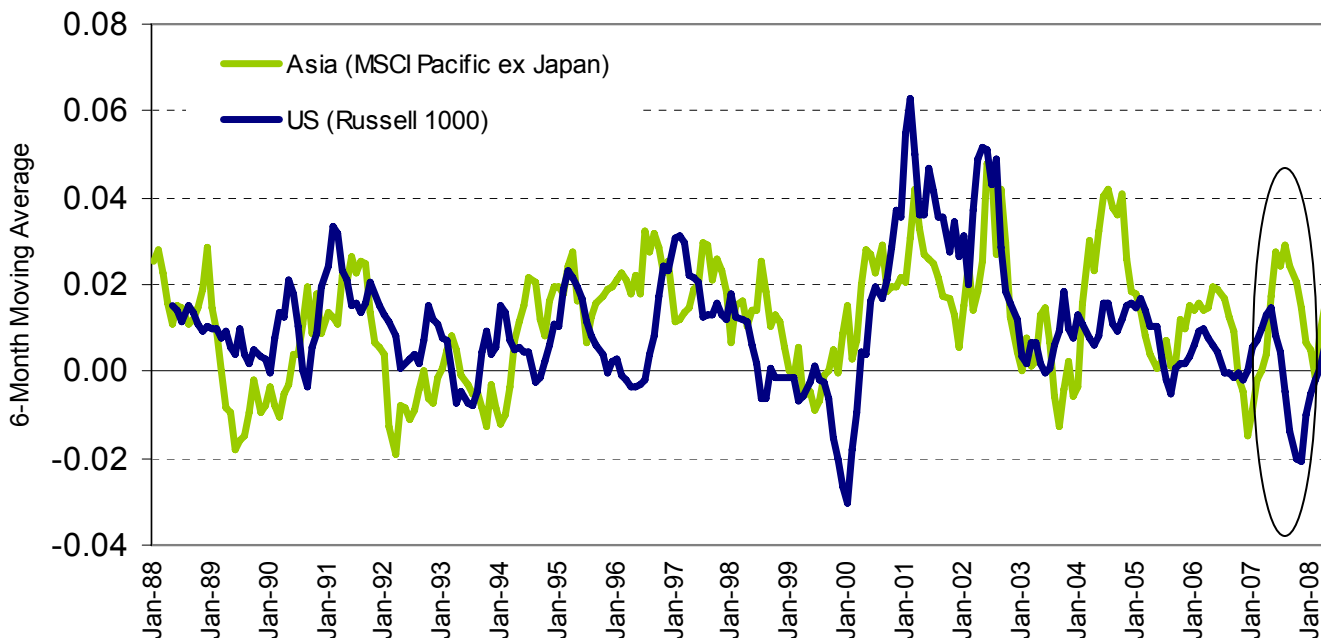


Note: Factor returns based on decile spreads in Russell 1000 for the US, quintile spreads in MSCI Europe for Europe, quintile spreads in MSCI Japan for Japan, and quintile spread in MSCI Asia Pacific ex Japan for Asia. Last data as of 5/30/08. .

Source: Nomura Securities International, Inc., Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

Asia held up during the 2007 Quant meltdown

Information Coefficient for Factors



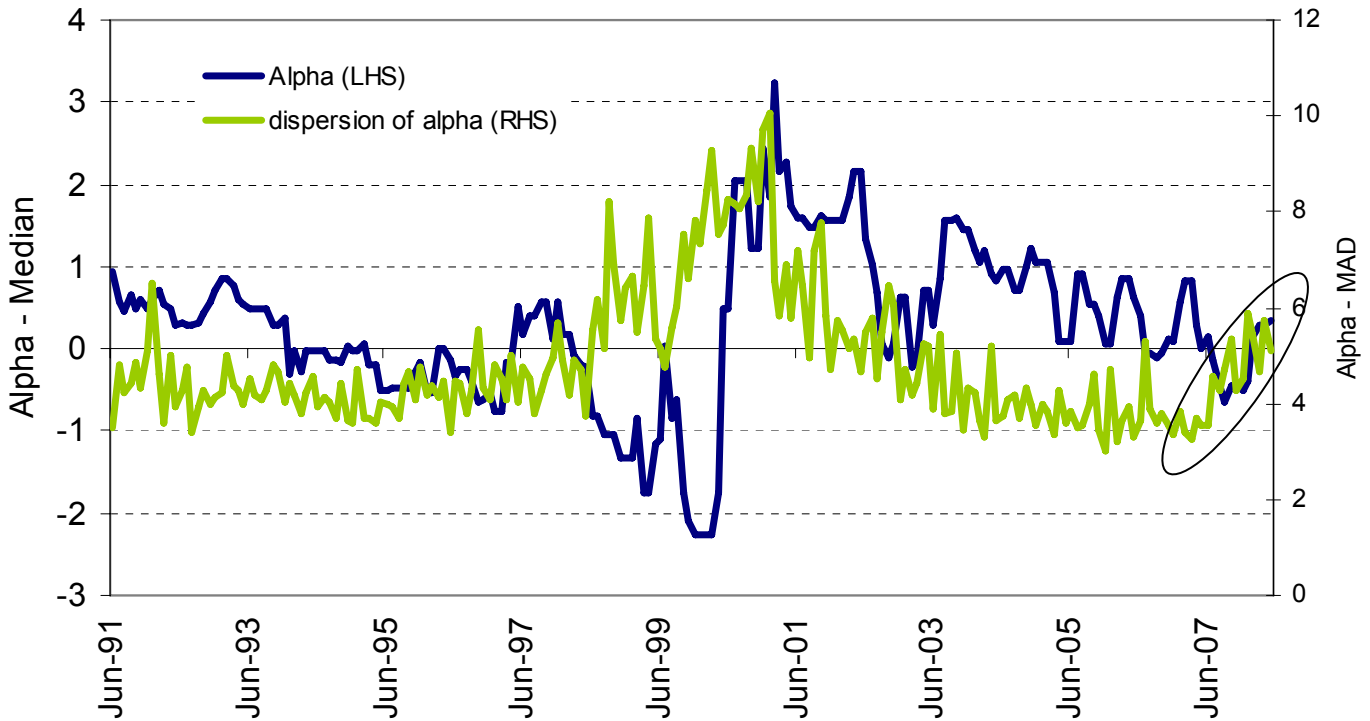
Note: The Information Coefficient measures the correlation of the monthly ranking of stocks according to presumably alpha-delivering factors and the subsequent month's ranking of the returns of these stocks. Last data as of 5/30/08.
 Source: Nomura Securities International, Inc.

What's the outlook for alpha around the world?

Outlook for alpha in the US

Improving alpha outlook clouded by higher dispersion

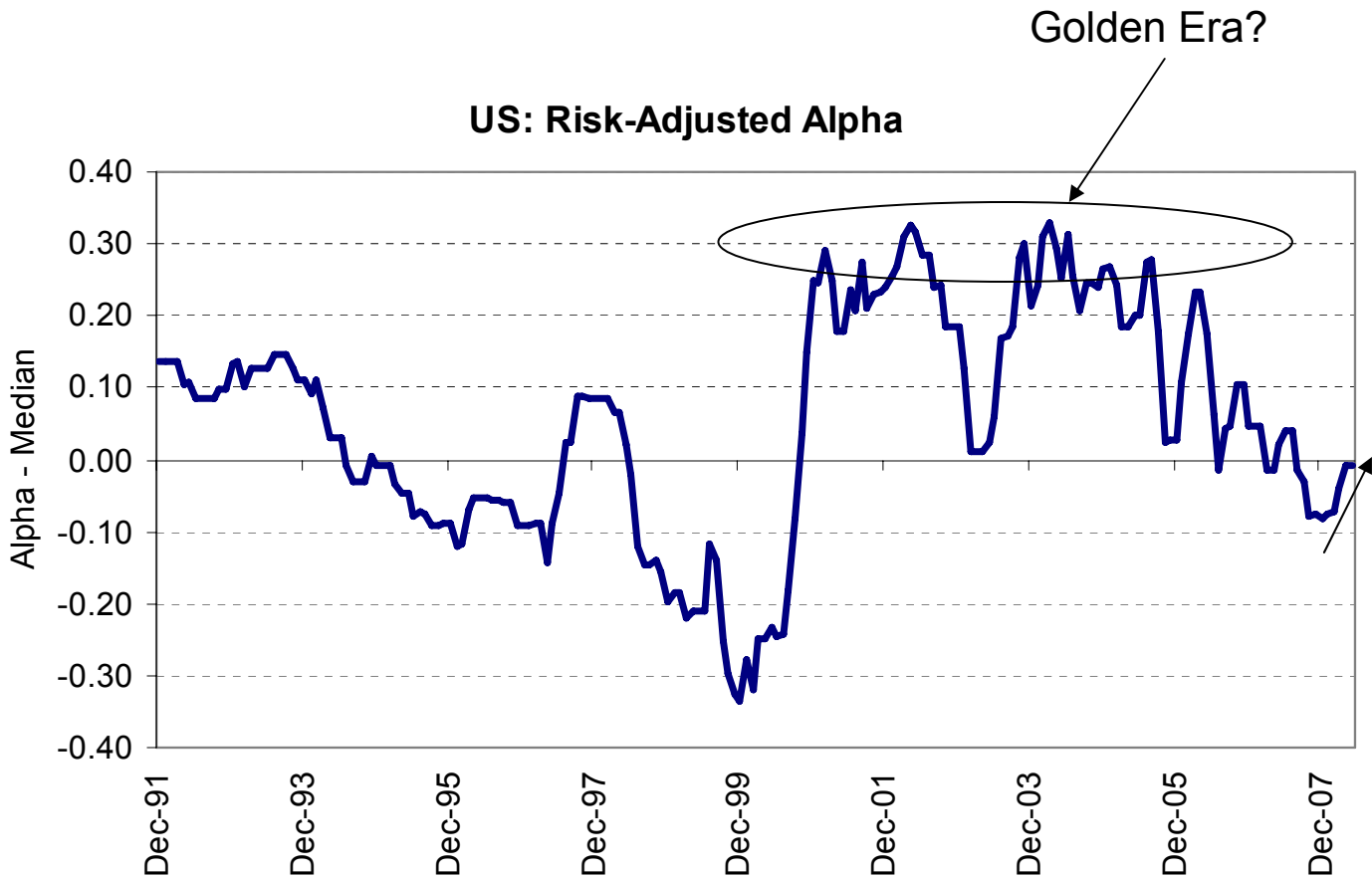
US: Alpha & Dispersion of Alpha



Note: Six-month moving averages for median alphas (the median of realized alphas each month for the Russell 1000 universe is taken as the median alpha available for that month in that universe of stocks) and monthly dispersion of these alphas. Last data as of 5/30/08. Source: Nomura Securities International, Inc. Compustat, Russell, IDC.

Outlook for alpha in the US

Not quite the Golden Era for Quants ...
... but the outlook is better than last summer



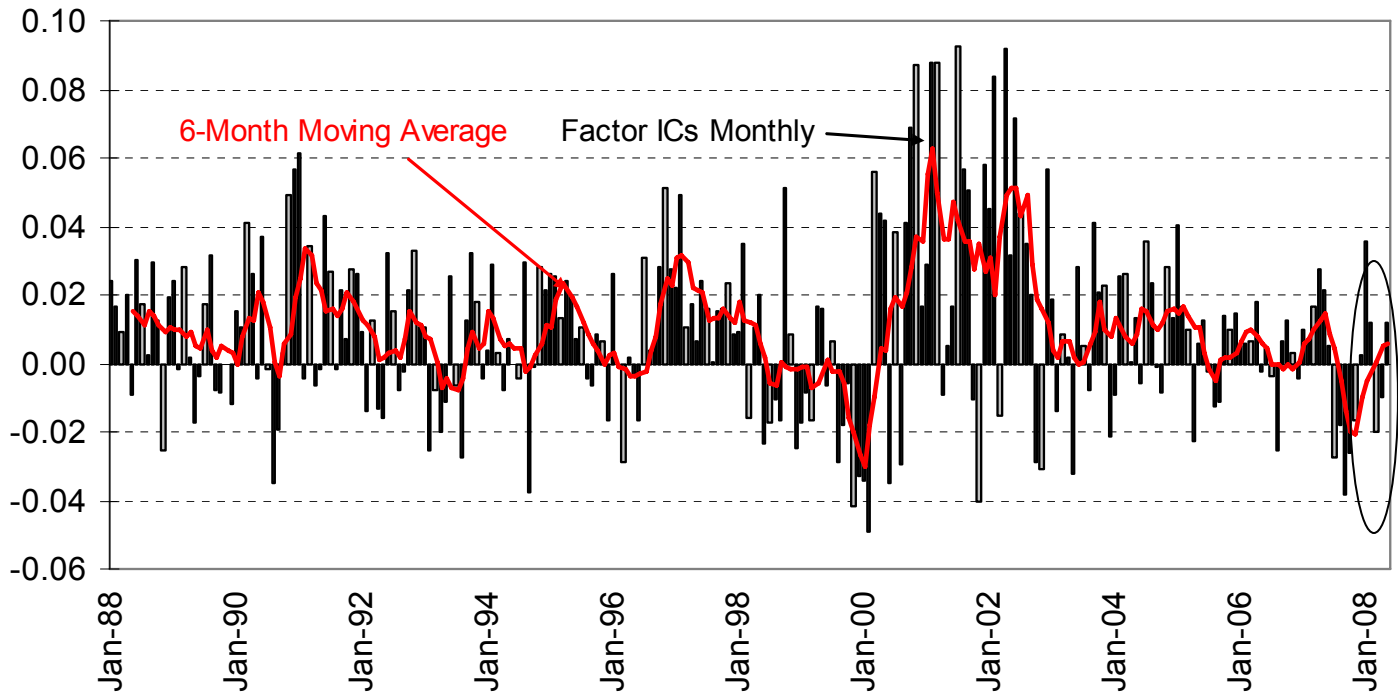
Note: 12-month rolling median of the monthly median of realized alphas divided by 12-month median of the dispersion of these alphas. Last data as of 5/30/08. Universe is Russell 1000. See *The outlook for alpha*, Nomura quantitative research report, 3 January 2008.

Source: Nomura Securities International, Inc. Compustat, Russell, IDC.

Outlook for alpha in the US

... quant factors performance is improving

Russell 1000: Information Coefficient for Factors

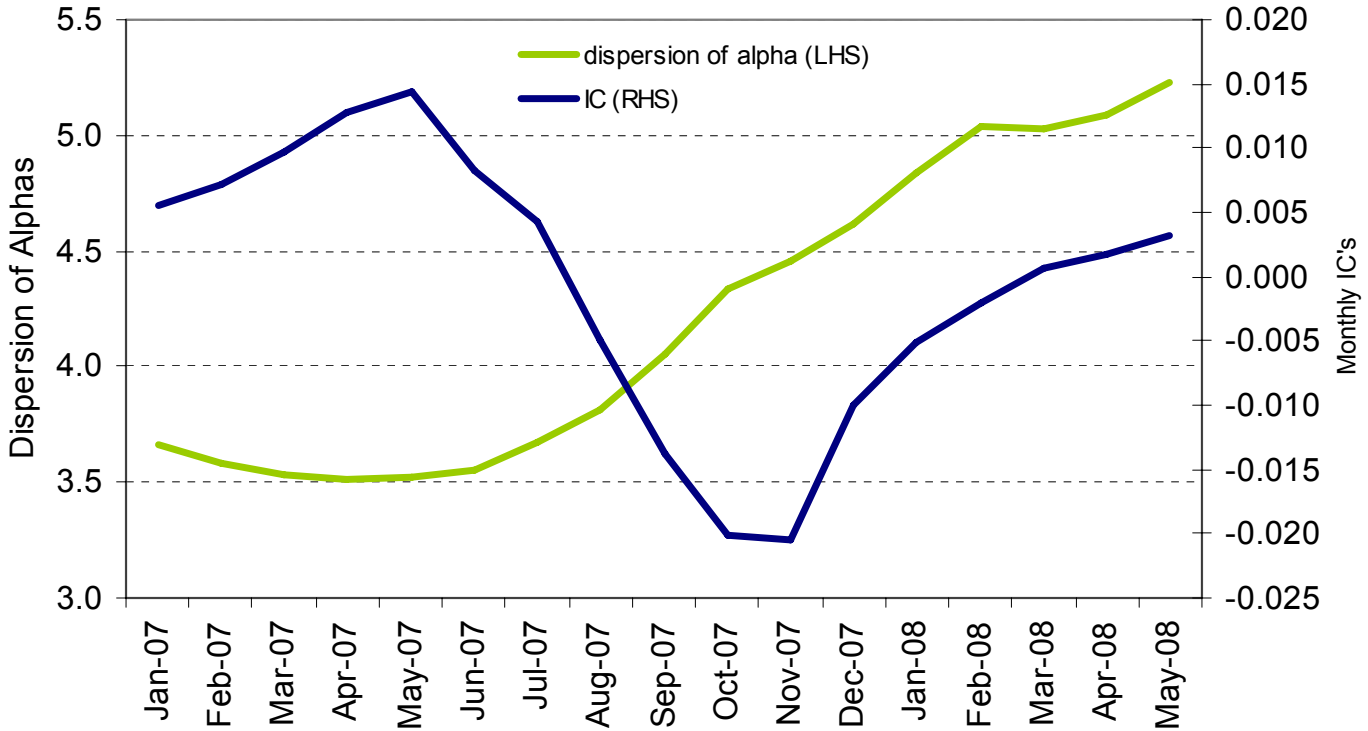


Note: The Information Coefficient measures the correlation of the monthly ranking of stocks according to presumably alpha-delivering factors and the subsequent month's ranking of the returns of these stocks. Last data as of 5/30/08.
Source: Nomura Securities International, Inc.

Outlook for alpha in the US

... rising dispersion of alpha still a challenge

US: Recent Factor IC & Dispersion of Alpha

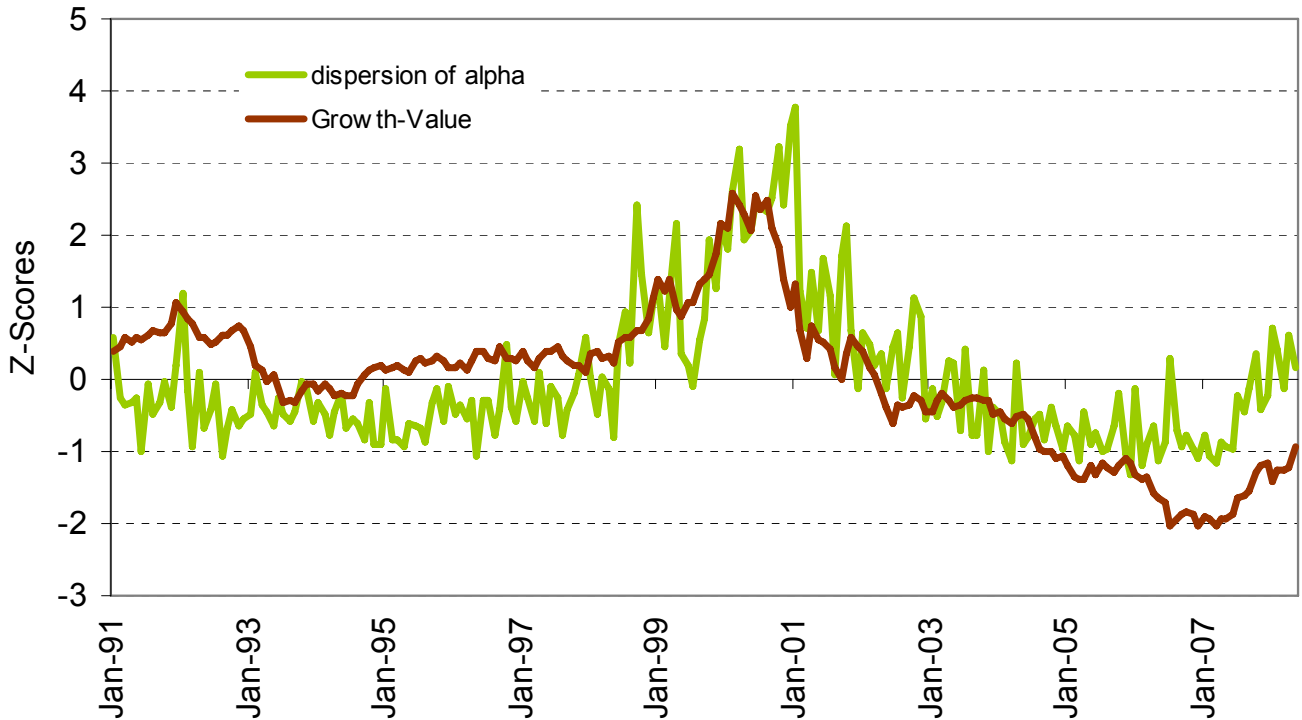


Note: Shows six-month moving averages of monthly dispersion of median alphas and average factor-return information coefficients (the average correlation between the ranking of stocks according to the 55 factors in our factor database and the subsequent returns). Last data as of 5/30/08. Universe is Russell 1000. Source: Nomura Securities International, Inc. Compustat, Russell, IDC.

Outlook for alpha in the US

... growth dominance means continued high dispersion

US: Dispersion of Alpha and Growth



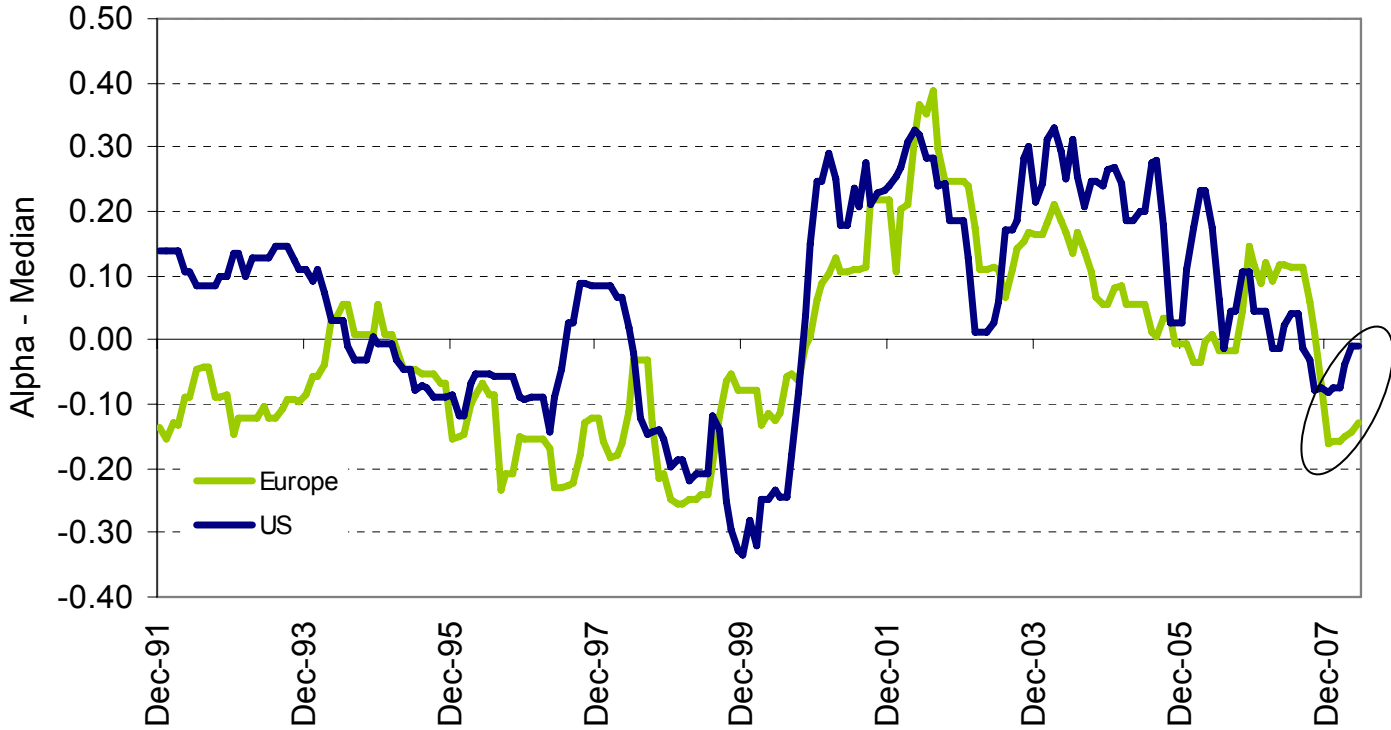
Note: : The "dispersion of alpha" (green) line displays z scores of MAD (median absolute deviation) of monthly realized alphas of Russell 1000; the "growth-value" (red) line displays z scores of the de-trended cumulative difference between Russell 1000 growth and value indices. Last data as of 5/30/08.

Source: Nomura Securities International, Inc, Compustat, Russell, IDC.

Outlook for alpha in Europe

The recovery in risk-adjusted alphas trails the US . . .

Risk-Adjusted Alphas by Region



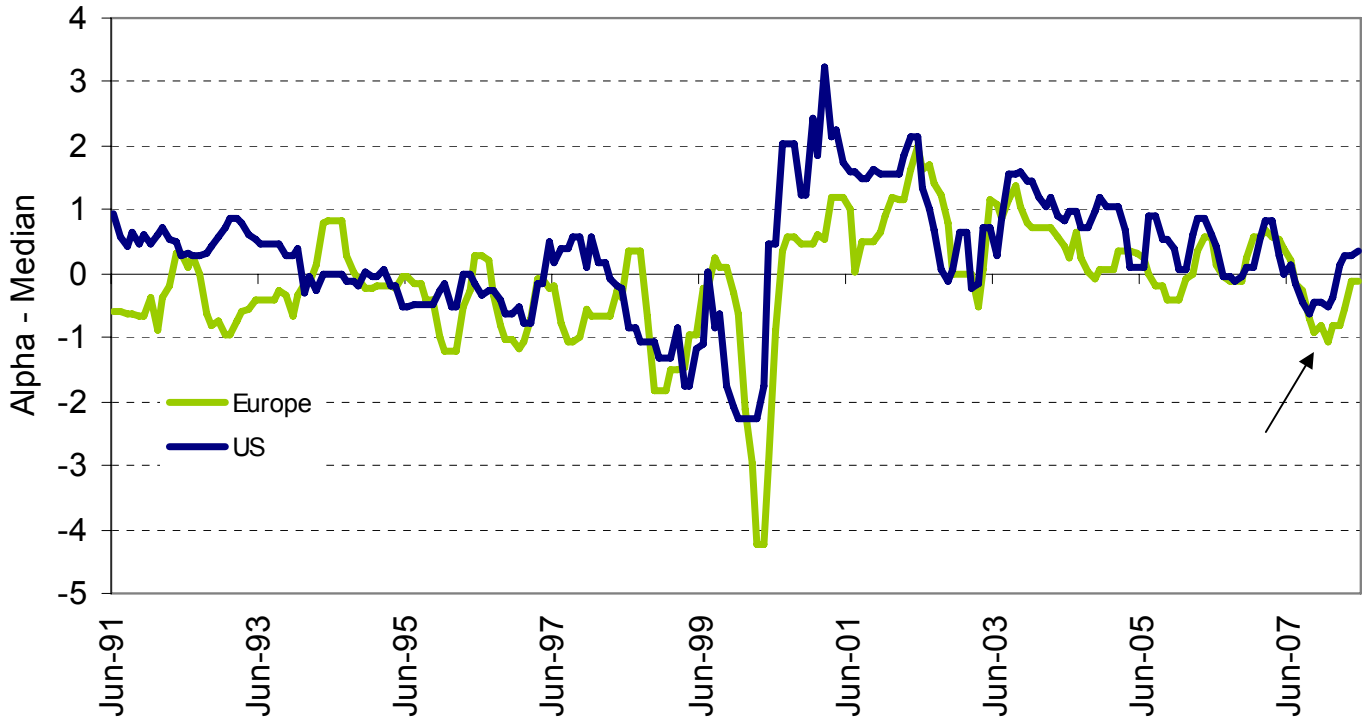
Note: 12-month rolling median of the monthly median of realized alphas divided by 12-month median of the dispersion of these alphas. Universe is Russell 1000 for US, and MSCI Europe for Europe. Last data as of 5/30/08.

Source: Nomura Securities International, Inc., Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

Outlook for alpha in Europe

... because the rout in alphas was more pronounced

Alphas by Region



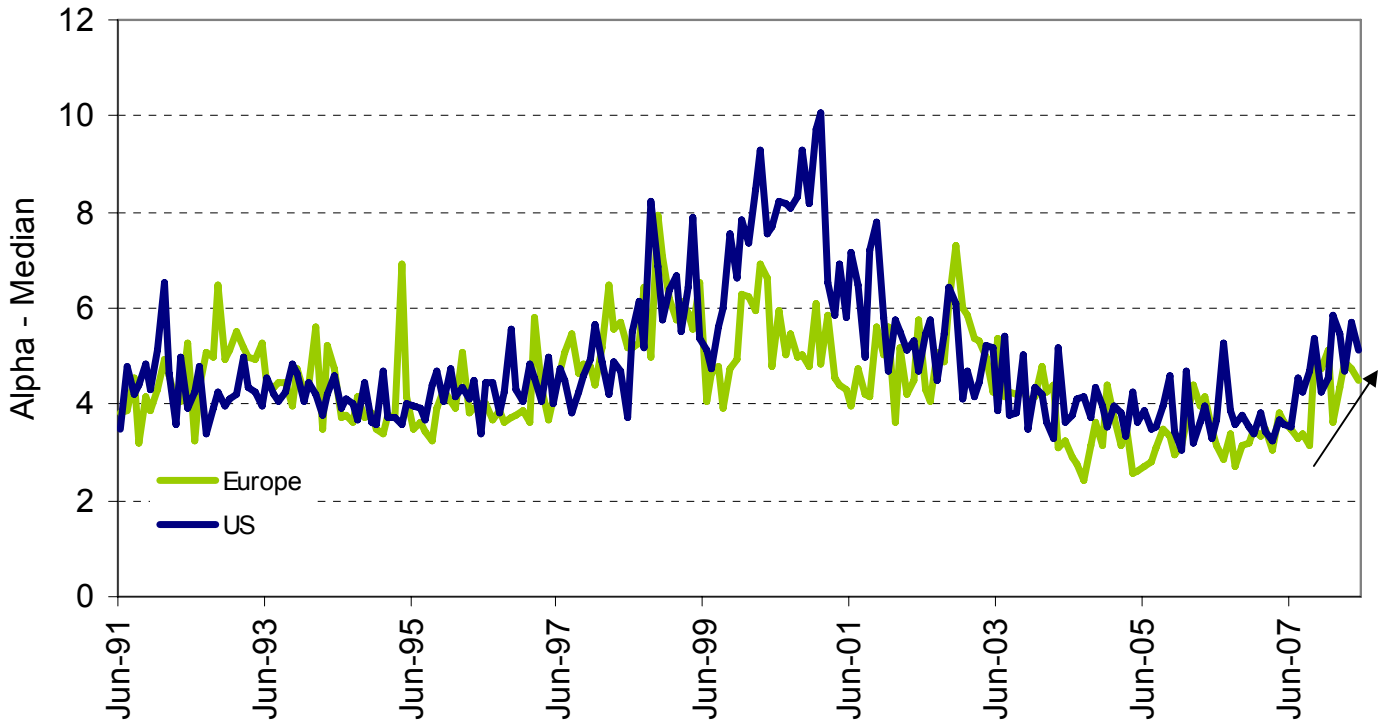
Note: Six-month moving averages for median alphas (the median of realized alphas each month is taken as the median alpha available for that month in each universe of stocks). Universe is Russell 1000 for US, and MSCI Europe for Europe. Last data as of 5/30/08.

Source: Nomura Securities International, Inc., Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

Outlook for alpha in Europe

... and dispersion has risen as well

Dispersion of Alphas



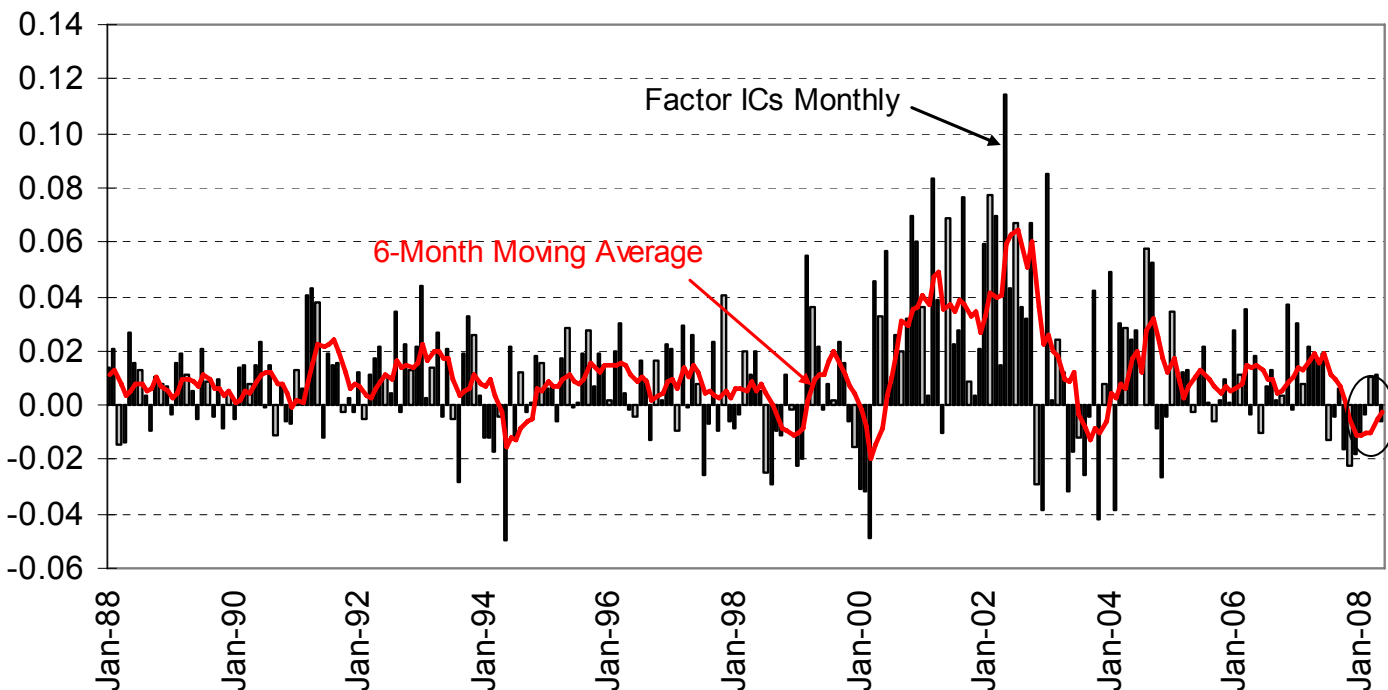
Note: Six-month moving averages for dispersion of alphas (the MAD of realized alphas each month is taken as the dispersion of alphas available for that month in each universe of stocks). Universe is Russell 1000 for US, and MSCI Europe for Europe. Last data as of 5/30/08.

Source: Nomura Securities International, Inc., Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

Outlook for alpha in Europe

... while ICs have not recovered

MSCI Europe: Information Coefficient for Factors



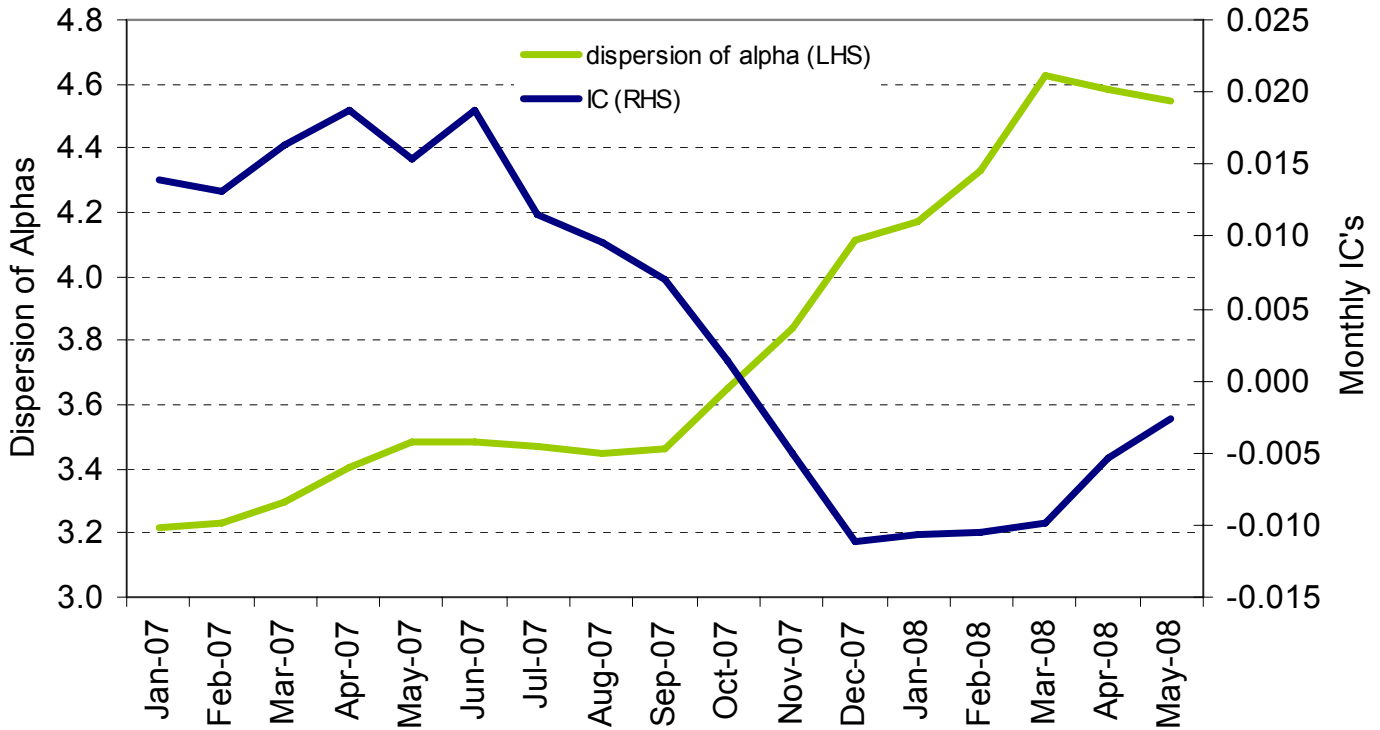
Note: The Information Coefficient measures the correlation of the monthly ranking of stocks according to presumably alpha-delivering factors and the subsequent month's ranking of the returns of these stocks. Last data as of 5/30/08.

Source: Nomura Securities International, Inc.

Outlook for alpha in Europe

High dispersion and negative ICs – not a good combination

Europe: Recent Factor IC & Dispersion of Alpha



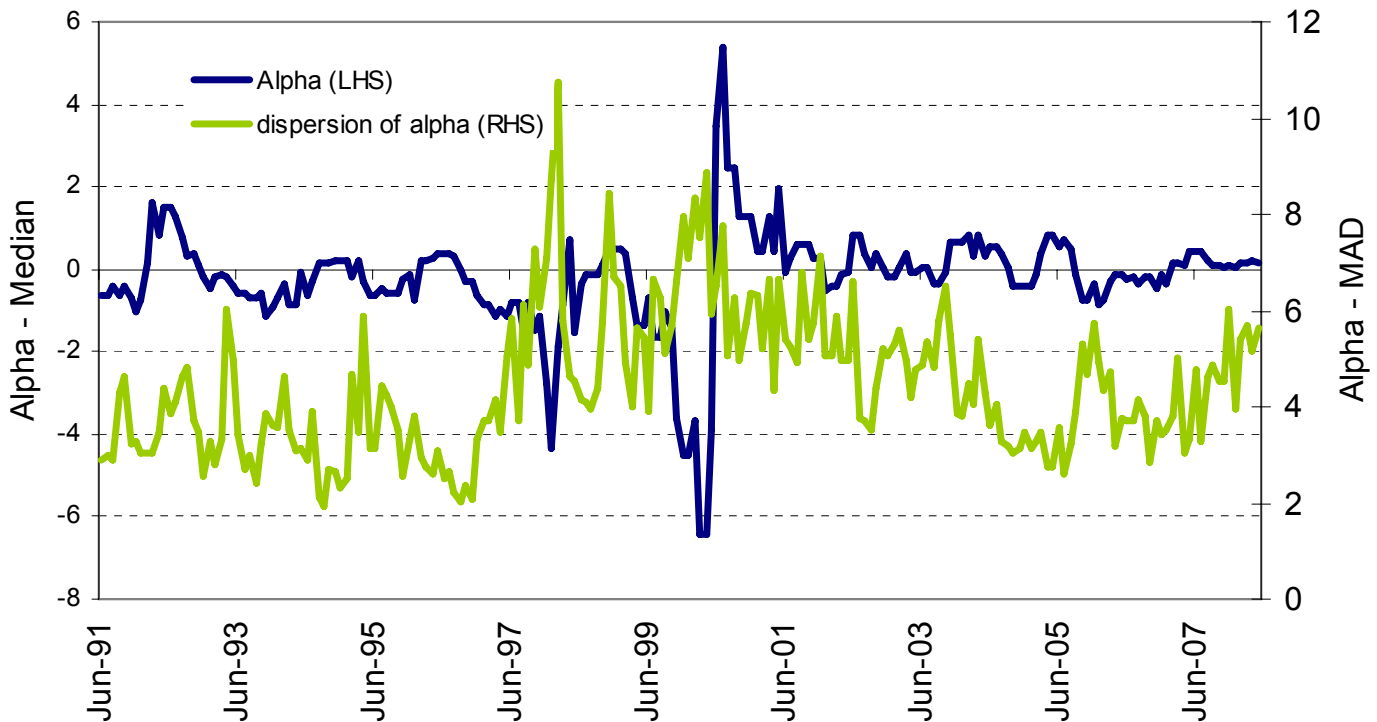
Note: Shows six-month moving averages of monthly dispersion of median alphas and average factor-return information coefficients (the average correlation between the ranking of stocks according to the 50 factors in our factor database and the subsequent returns). Last data as of 5/30/08. Universe is MSCI Europe.

Source: Nomura Securities International, Inc, Worldscope, I/B/E/S, MSCI, Ex-Share.

Outlook for alpha in Japan

Flat alphas and high dispersion ...

Japan: Alpha & Dispersion of Alpha



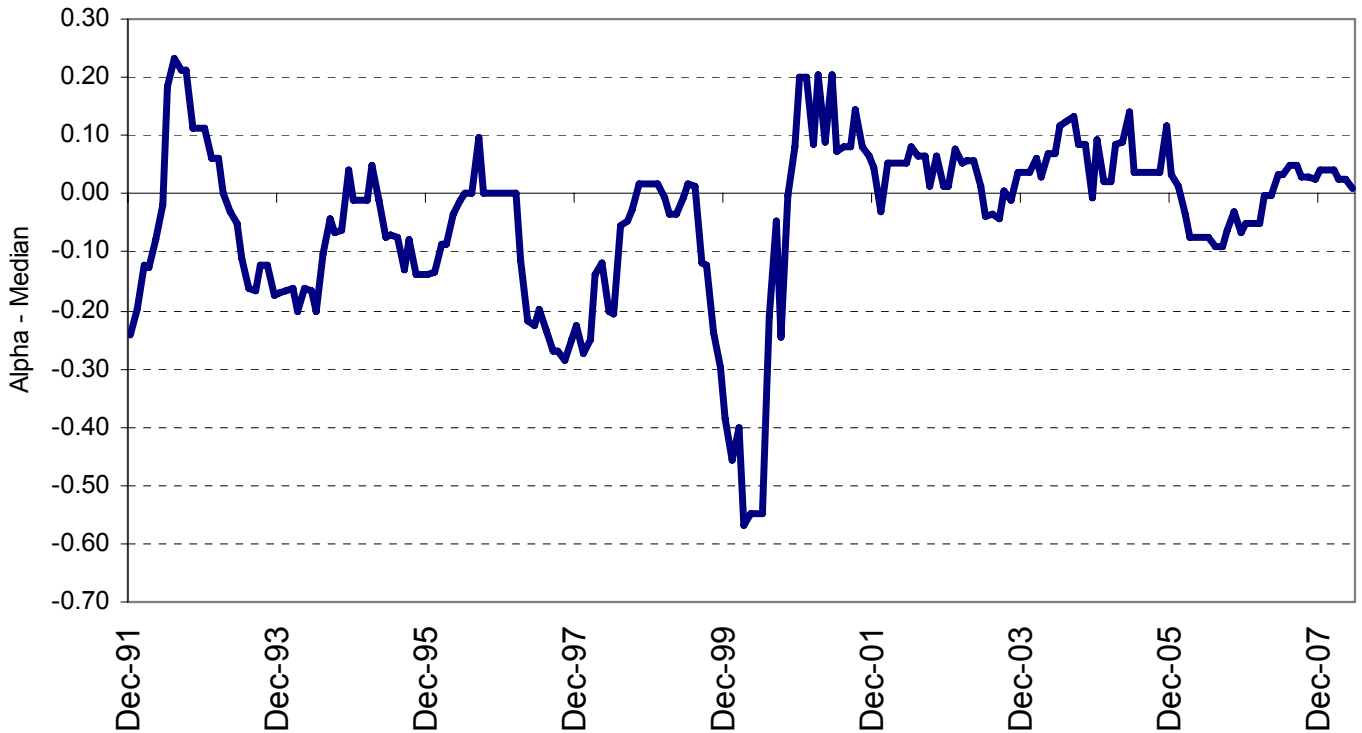
Note: Six-month moving averages for median alphas (the median of realized alphas each month for the MSCI Japan universe is taken as the median alpha available for that month in that universe of stocks) and monthly dispersion of these alphas. Last data as of 5/30/08.

Source: Nomura Securities International, Inc., Worldscope, I/B/E/S, MSCI, Ex-Share.

Outlook for alpha in Japan

... leading to declining risk-adjusted alphas

Japan: Risk-Adjusted Alphas



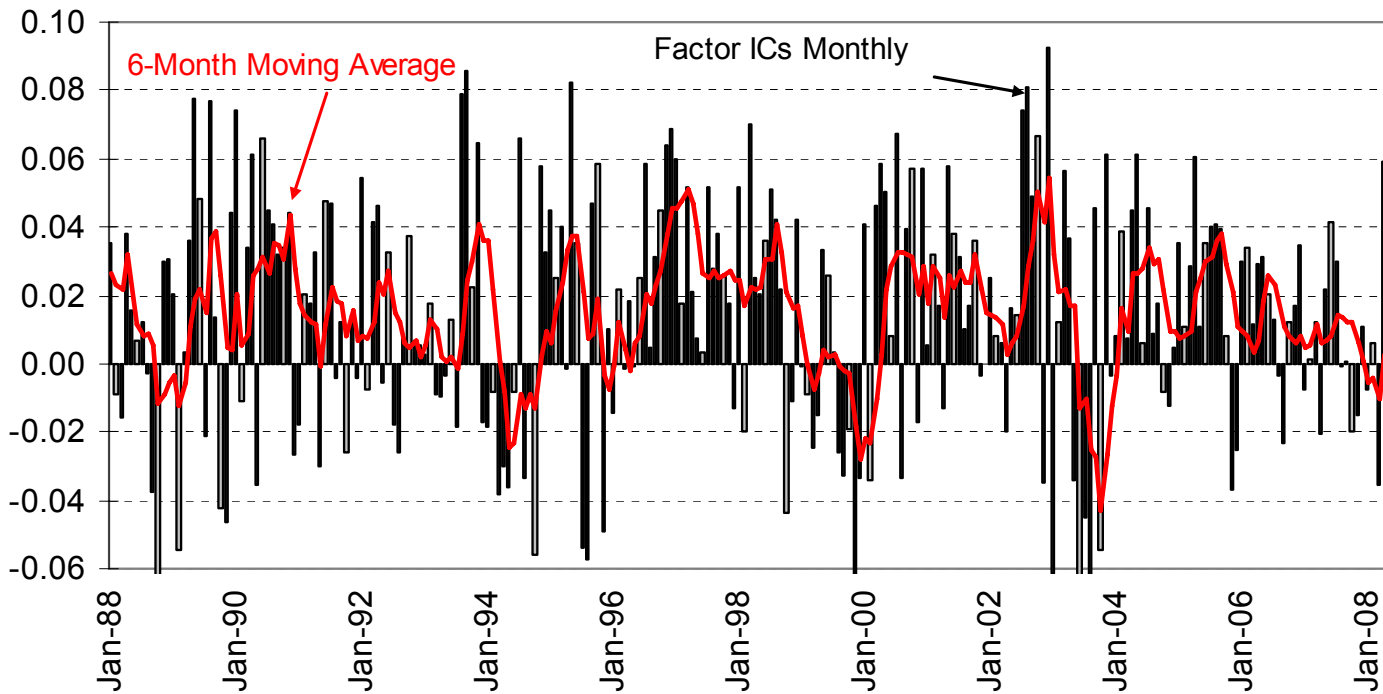
Note: 12-month rolling median of the monthly median of realized alphas divided by 12-month median of the dispersion of these alphas. Universe is MSCI Japan. Last data as of 5/30/08.

Source: Nomura Securities International, Inc., Worldscope, I/B/E/S, MSCI, Ex-Share.

Outlook for alpha in Japan

... but factor performance is improving

MSCI Japan: Information Coefficient for Factors

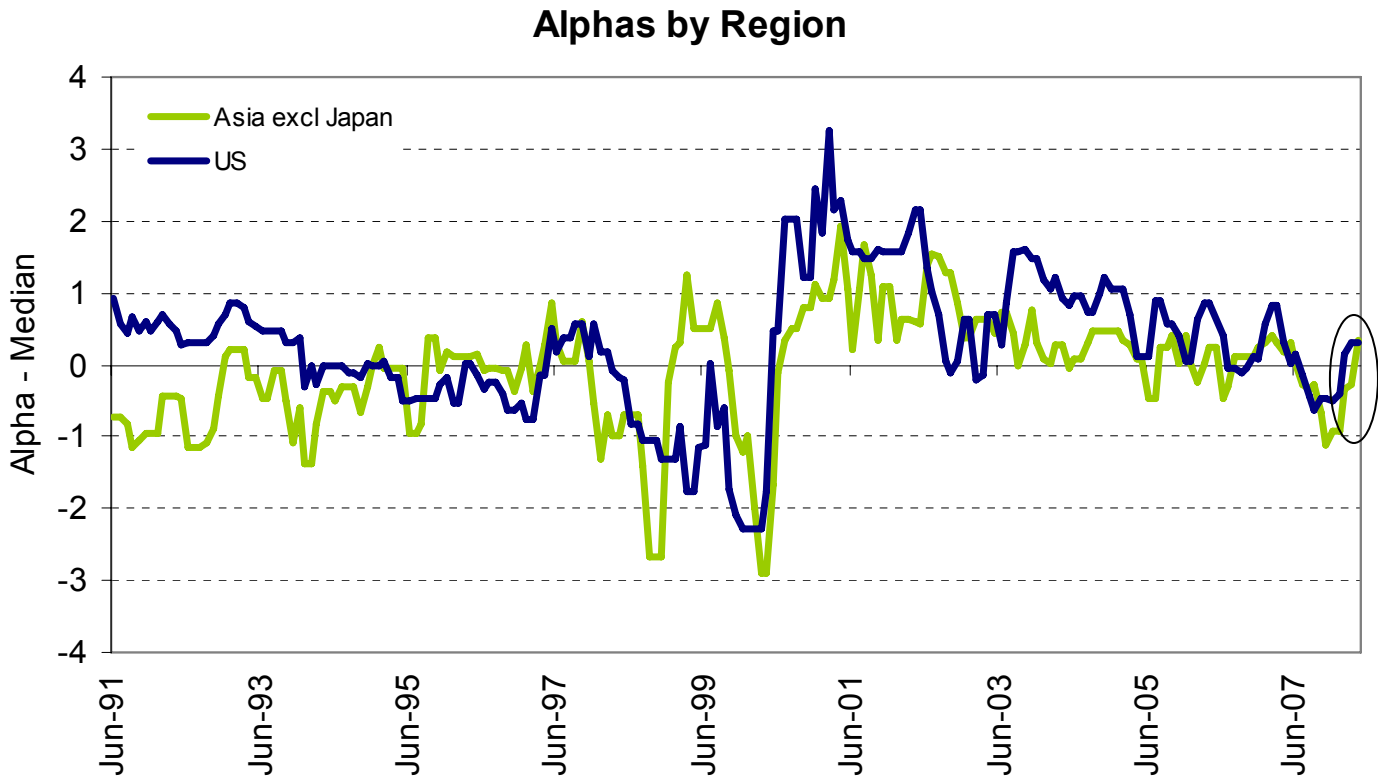


Note: The Information Coefficient measures the correlation of the monthly ranking of stocks according to presumably alpha-delivering factors and the subsequent month's ranking of the returns of these stocks. Last data as of 5/30/08.

Source: Nomura Securities International, Inc.

Outlook for alpha in Asia

Alpha has become scarcer ...



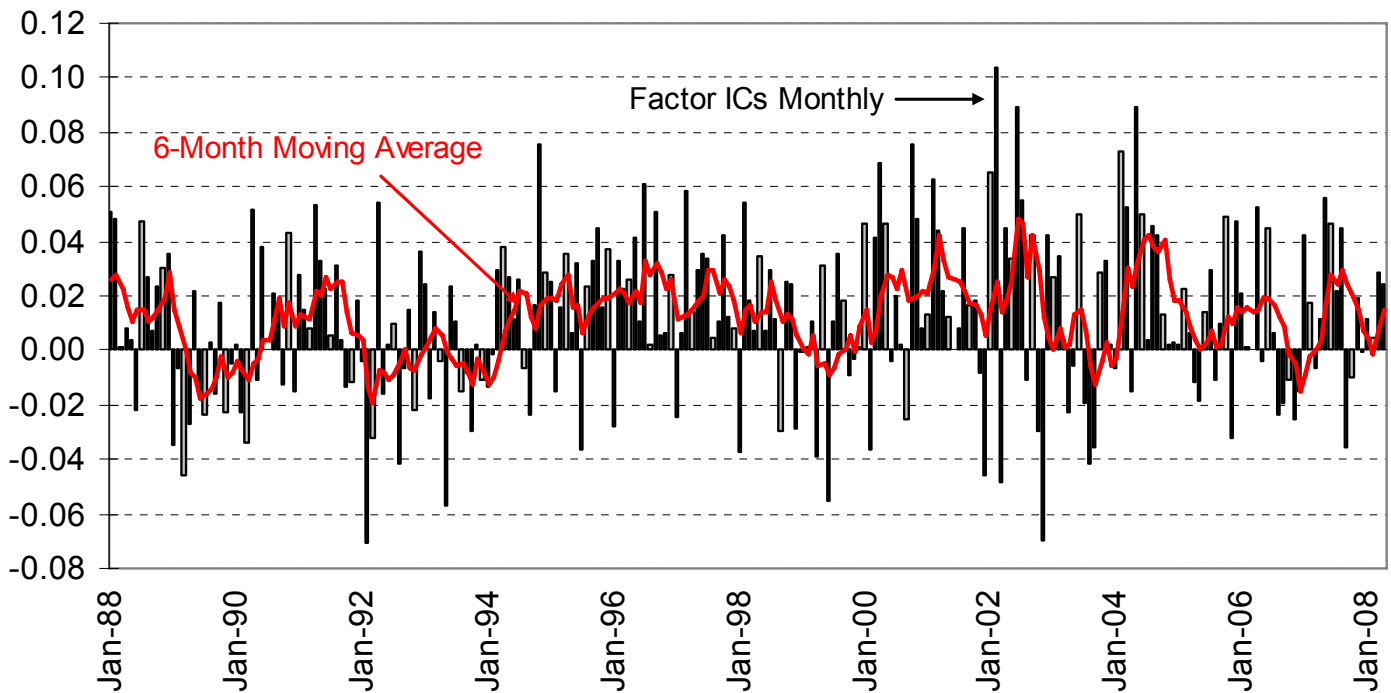
Note: Six-month moving averages for median alphas (the median of realized alphas each month is taken as the median alpha available for that month in each universe of stocks). Universe is Russell 1000 for US, and MSCI Asia Pacific ex Japan for Asia. Last data as of 5/30/08.

Source: Nomura Securities International, Inc., Compustat, Worldscope, I/B/E/S, Russell, MSCI, IDC, Ex-Share.

Outlook for alpha in Asia

... but quant factors can help

MSCI Asia Pacific ex Japan: Information Coefficient for Factors



Note: The Information Coefficient measures the correlation of the monthly ranking of stocks according to presumably alpha-delivering factors and the subsequent month's ranking of the returns of these stocks. Last data as of 5/30/08.

Source: Nomura Securities International, Inc.

What's the outlook for alpha around the world?

- The dominance of growth in the US and Europe suggests difficult times are ahead for quant investors.
- High dispersion of alphas around the world creates severe penalties for being wrong, and great rewards for being right.
- The improving performance of quant factors alleviates the perils of high dispersion in the US.
- Quant investing in Europe remains challenging.
- Worsening alphas in Japan and Asia are mitigated by positive quant factor performance.

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