

Active management headwinds: correlation and fund flows, quant vs. fundamental



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Quantitative strategists

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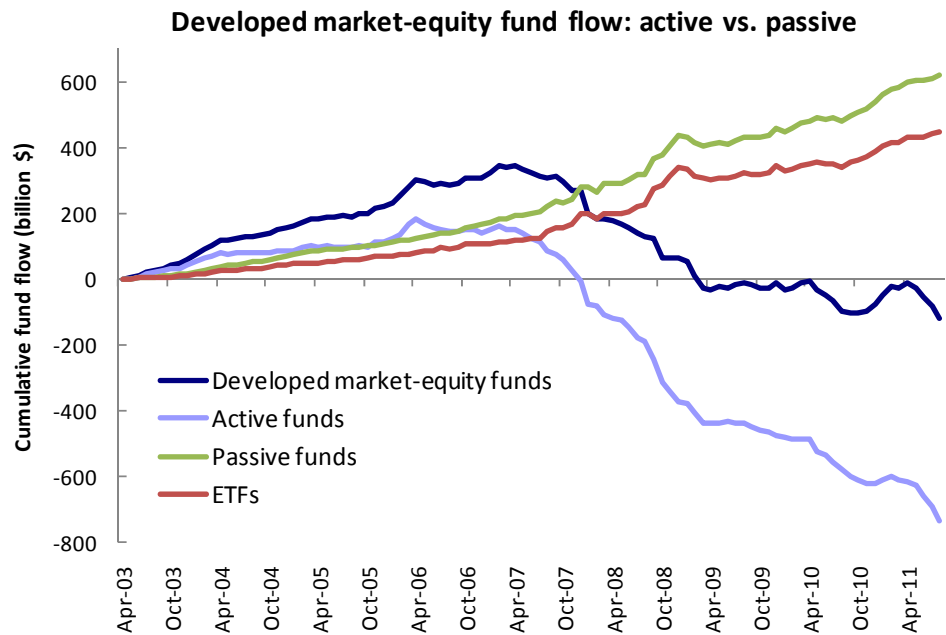
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- Fundamental funds had their worst two-month performance in a decade in August-September, while quant funds managed to stay relatively close to benchmark.
- The extremely high pair-wise correlation of stocks in the market poses a serious hurdle for fundamental fund managers. Stock correlation has been very high in the US and Europe markets compared to Asia and Japan, but in all four regions stock correlation has been on a long-term rising trend.
- Factor return correlation, which has more impact on quantitative fund performance than stock correlation does on fundamental fund performance, has remained relatively more subdued in the US market, but has been rising sharply in Europe and Japan.
- The long-term trend towards high stock correlation is likely related to the movement of funds away from active management and into passive management, especially the increased role of ETFs. The current extreme correlation should at some point decline, but the generally low levels of stock correlation we have seen historically may be a thing of the past.

Global equities trend – passive funds (ETFs) grow, while active funds shrink



Note: Shows cumulative fund flow into developed market-equity funds, active funds, passive funds and ETFs. Period of analysis is from April 2003 through August 2011.

Source: Nomura Securities International, Inc, EPFR.

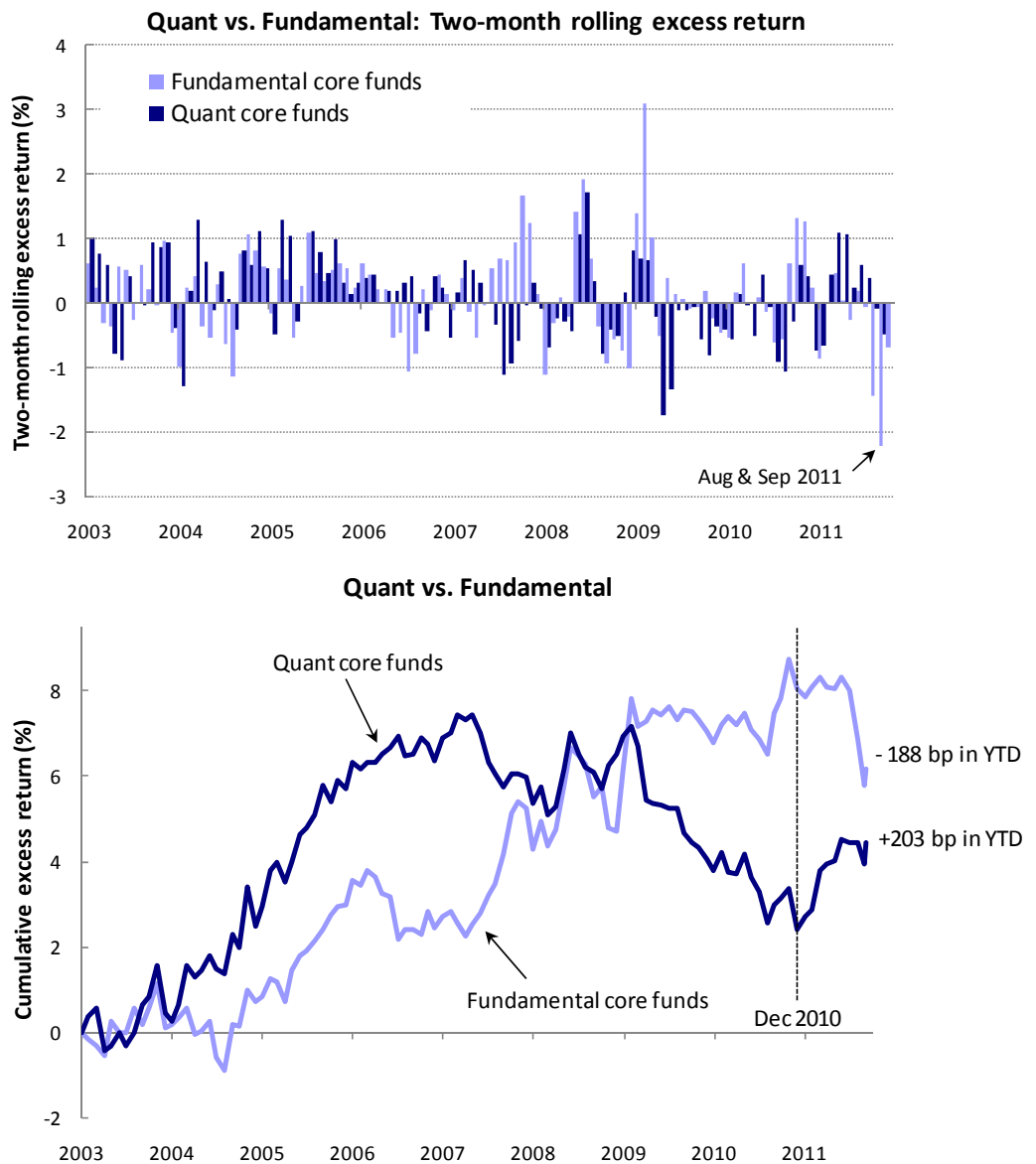
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In August-September, fundamental funds had their worst two-month underperformance in at least 10 years

Active management headwinds: correlations and fund flows, quant vs. fundamental

The visible drama for at least the last few months has been about the fate of the market. Less visible, but perhaps more dramatic, has been the fate of active fund managers, whose job is to outperform the market. The latest update of our index of US core fundamental and quant long-only funds benchmarked to either the S&P500 or Russell 1000 index shows the damage to fundamental managers. The top panel in Exhibit 1 shows two-month rolling excess returns of fundamental core funds and quantitative core funds since 2003, while the bottom panel shows their cumulative excess return. Fund managers are paid to outperform, yet fundamental fund managers had their worst two-month underperformance in at least a decade in August-September.

1. The vanishing alpha



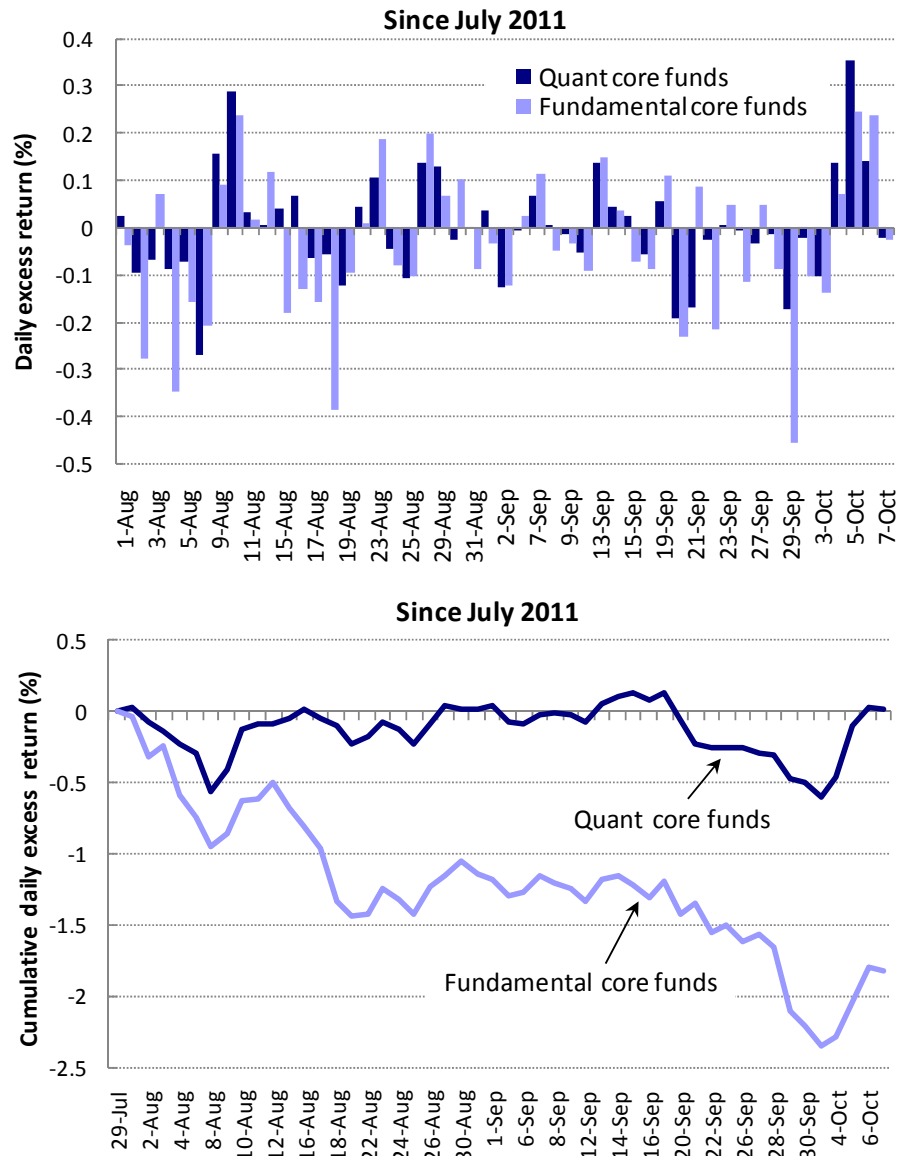
Note: Shows two-month rolling and cumulative average excess return (relative to the benchmark) in long-only large-cap core funds based on quantitative methodologies (dark blue line) and long-only large-cap core funds based on fundamental methodologies (light blue line) from January 2003 through 7 October 2011. Currently there are 15 funds in the quant core universe and 45 funds in the fundamental core universe.

Source: Nomura Securities International, Inc, S&P, Russell, Bloomberg.

Quant funds have been able to stay fairly close to the benchmark, and in October the headwinds for both quant and fundamental funds seem to have abated

Quantitative managers, by contrast, have on average managed to stay fairly close to the benchmark since the end of July. The top panel of Exhibit 2 shows daily excess returns of quants and fundamental core funds since July 2011, while the bottom panel shows their cumulative excess returns. The first half of August and late September severely damaged fundamental managers, but the headwinds – so far – seem to have abated in October.

2. Market since July has been tough for alpha



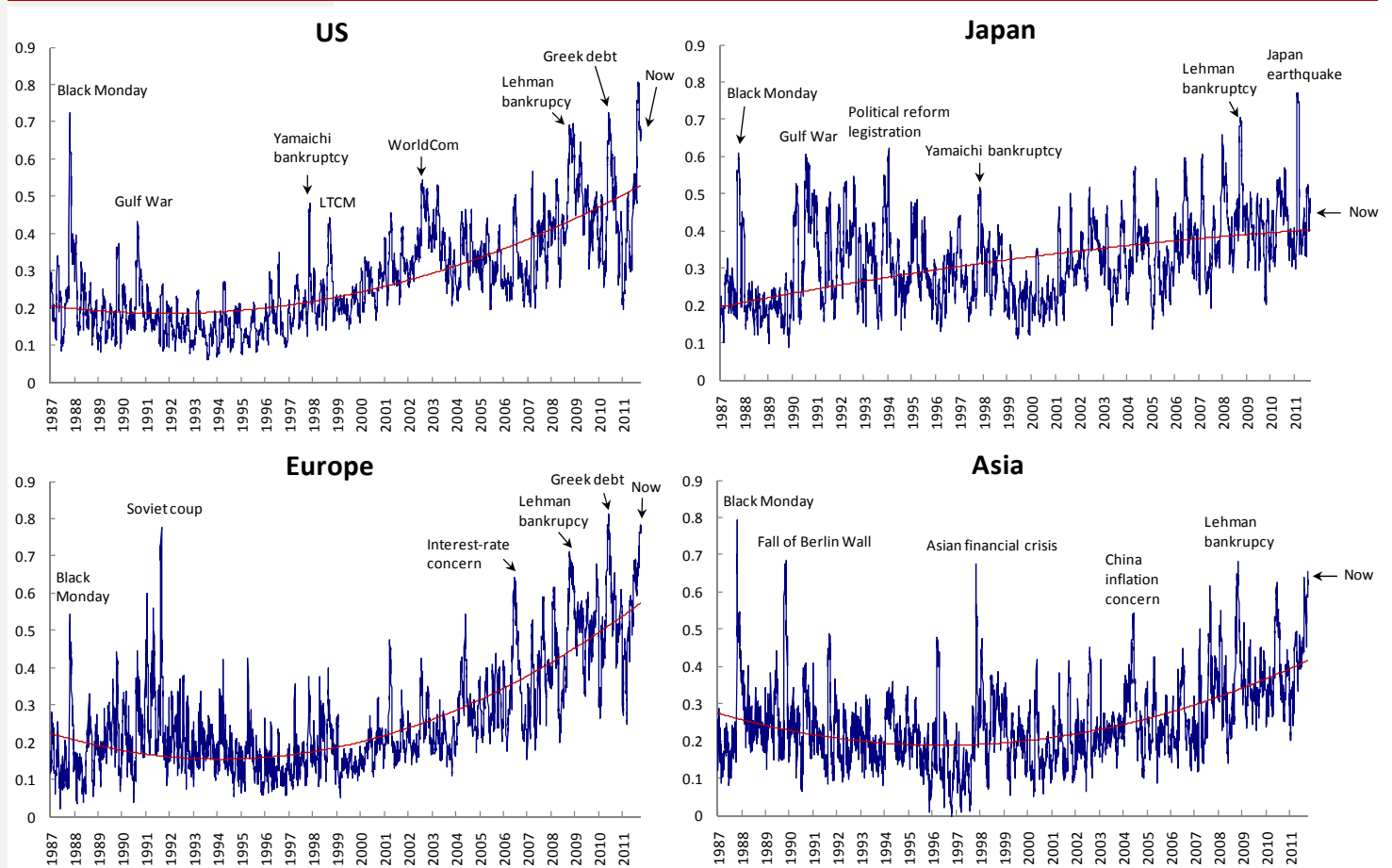
Note: Shows daily excess returns to the benchmark (top panel) and cumulative excess return of daily data (bottom panel) in long-only large-cap core funds based on quantitative methodologies (dark blue line) and long-only large-cap core funds based on fundamental methodologies (light blue line) from 1 August 2011 through 7 October 2011. Currently there are 15 funds in the quant core universe and 45 funds in the fundamental core universe.

Source: Nomura Securities International, Inc, Russell, S&P, Bloomberg.

Extremely high pair-wise correlation of stocks has hurt fundamental funds more than quant funds – stock correlation has recently declined in the US market but remains high in Europe

We have previously pointed out that the extremely high pair-wise correlation of stocks at present poses a serious hurdle for US fundamental managers. Quantitative managers in the US have been less affected by this problem than fundamental managers, as factor-return correlation matters more to the decision-making process of quant managers, and factor-return correlation has been relatively low. Exhibit 3 shows 21-day stock correlation within sectors in the US, Europe, Japan and Asia (ex Japan). As we discussed in “*Global stock correlation – puzzle in the West, opportunity in the East*”, 12 September 2011, stock correlation in the West is higher than in the East (a recent development is that stock correlation has modestly declined in the US market from a record high, while stock correlation in Europe keeps rising).

3. Stock correlation around the globe – the trend is not your friend

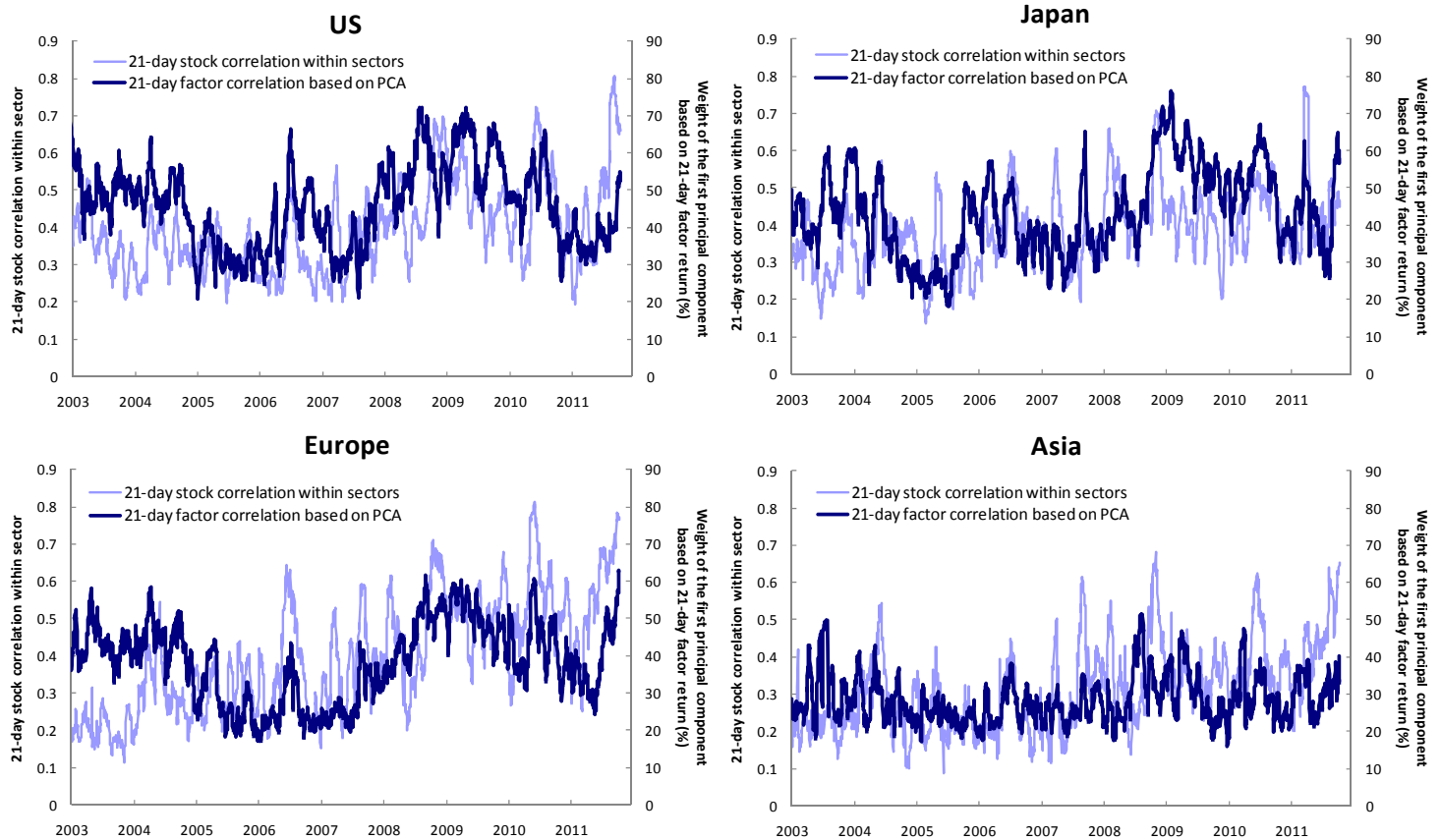


Note: Shows 21-day stock correlation within sector, where the averages of all pair-wise stock correlations are calculated using 21-day total returns within GICS 10 sectors in Russell 1000 (US), MSCI Europe (Europe) and MSCI Asia Pacific ex Japan (Asia) and within QUICK 10 sectors in NOMURA 400 (Japan), and these correlations are averaged over all 10 sectors. Period of analysis is from 2 January 1987 through 7 October 2011.
Source: Nomura Securities International, Inc., Russell, MSCI, IDC, S&P, Exshare.

Regional differences in stock correlation and factor return correlation are important – factor correlation has been rising recently in Japan and Europe; stock correlations have been on a long-term rising trend in all four regions over the past decade

Not only are there regional differences in stock correlation around the globe, it turns out there are also regional differences in the contrast between stock correlation and factor return correlation, which means the fundamental vs. quant contrast in part depends on region (Exhibit 4). In the US, factor return correlation rose in September, but it is still lower than the level in the latest financial crisis. On the other hand, factor correlations in Europe and Japan have been increasing dramatically since summer. The increase is most notable in Europe, which has hit its highest correlations in a decade. A separate, troubling feature of stock correlation is the trend of increasing stock correlation over the past decade, especially in the US and in Europe. That feature is highlighted by the red trend lines in Exhibit 3.

4. Region matters - Stock correlation vs. factor return correlation around the globe



Note: Light blue line shows 21-day stock correlation within sector, where the averages of all pair-wise stock correlations are calculated within GICS 10 sectors in Russell 1000 universe using 21-day total returns and these correlations are averaged over all GICS 10 sectors. Dark blue line shows weight of the first principal component based on 21-day correlation of daily factor returns applied to 22 representative factor returns. Universes are Russell 1000 for the US, Nomura 400 for Japan, MSCI Europe for Europe, and MSCI Asia Pacific ex Japan for Asia. Period of analysis is from 1 January 2003 through 7 October 2011.

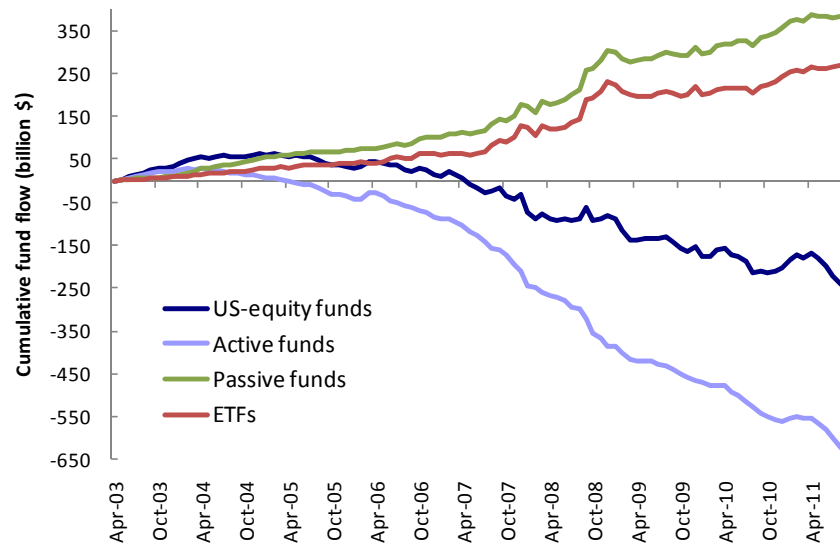
Source: Nomura Securities International, Inc., Russell, MSCI, IDC, S&P, Compustat, Worldscope, I/B/E/S, Exshare.

The long-term trend towards high stock correlation is likely related to the movement of funds away from active management and into passive management, especially the increased role of ETFs. Current extreme correlation should at some point decline, but the generally low levels of stock correlation we have seen historically may be a thing of the past

We relate the trend of increasing stock correlation to the trend of fund flows, which has increasingly seen a movement of funds away from active management and into passive management, evidenced by increasing investment in ETFs (Exhibits 5 and 6). The current extreme stock correlation in the West will at some point undoubtedly recede from record levels, but the generally low stock correlations of the past – helpful for stock selection based on fundamentals – may be a victim of recent trends in equity investing.

5. Source of correlation trend – passive funds (ETFs) grow, while active funds shrink

US-equity fund flow: active vs. passive

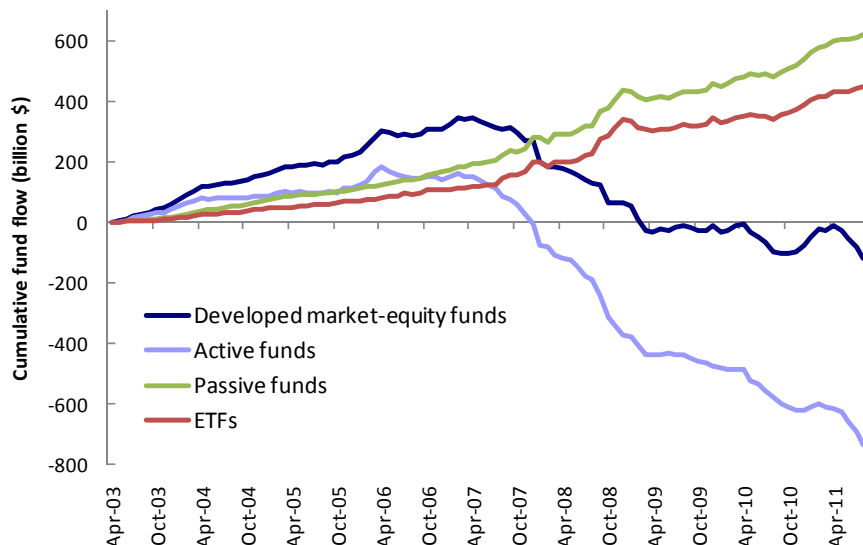


Note: Shows cumulative fund flow into US-equity funds, active funds, passive funds and ETFs. Period of analysis is from April 2003 through August 2011.

Source: Nomura Securities International, Inc, EPFR.

6. Global developed trend – passive funds (ETFs) grow, while active funds shrink

Developed market-equity fund flow: active vs. passive



Note: Shows cumulative fund flow into developed market-equity funds, active funds, passive funds and ETFs. Period of analysis is from April 2003 through August 2011.

Source: Nomura Securities International, Inc, EPFR.

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