6-2012

Asian Hedge Fund Report

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BNP Paribas Hedge Fund Centre
Hedge Fund Insights

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Mission of the BNP Paribas Hedge Fund Centre

The mission of the BNP Paribas Hedge Fund Centre is to facilitate, encourage, and sponsor high-level academic research on hedge funds. The Centre also provides outstanding education to students, executives, and investors, and publishes objective and independent information on hedge funds, while promoting understanding and awareness of alternative investment strategies. Through excellence in research on alternative investments, the Centre is recognized for its capacity to foster stimulating exchange of opinions, and to develop a knowledgeable and objective information base regarding hedge funds.

Specifically, the primary objectives of the BNP Paribas Hedge Fund Centre at the Singapore Management University are to

1. conduct and disseminate high quality academic hedge fund research
2. educate finance practitioners and the investor public on hedge funds, and
3. raise the profile of the hedge fund industry in Asia and Singapore

To achieve these goals, the Centre will collaborate closely with academics at the London Business School. Moreover at all times, the Centre is absolutely committed to the highest ethical conduct and will actively avoid any conflicts of interest with outside parties.

Asian Hedge Fund Report

Melvyn Teo[1]

Executive summary

We survey the Asian hedge fund landscape and shed light on the size, investment region, strategy, and performance metrics of funds operating in Asia. Our findings indicate that hedge funds in the region typically maintain close physical proximity to their investment markets. Institutional quality hedge funds with assets under management greater than US$100m tend to focus on Greater China and Japan. Relative to Hong Kong, Japan, and Australia, Singapore harbors the most diverse group of hedge funds in terms of investment strategy. Between January 2000 and December 2011, Greater China focused funds have on average outperformed hedge funds investing in other regions while India focused funds have underperformed. Over the same period, the alphas of CTA/managed futures, macro and event driven funds have eclipsed those of fixed income, multi-strategy, and equity long/short funds. Given the presence of capacity constraints at the strategy level and the significant number of equity long/short funds operating in Asia, our findings suggest that Asian equity long/short may be overcrowded. On balance however, hedge fund performance in Asia appears to be driven more by investment geography than by investment strategy.

How have the Asian hedge fund universe evolved since the 2008 financial crisis? Where are the important institutional quality funds, with more than US$100m in assets under management, located and invested? How do the performance of funds stratified by investment region, country, and strategy compare both on a raw and risk-adjusted basis? What drives cross-sectional fund performance in Asia? These are some of the questions that we explore in this issue of the hedge fund insight.

Our analysis centers on data culled from the Eurekahedge and Asiahedge databases and on the 1994-2011 period. We merge these databases by hand using fund name and include both Asia focused and Asia based funds in our analysis.[2] This gives us a total of 2,616 funds of which 154 only report fund characteristics information and not returns to the databases, 1,301 are dead funds that stopped reporting returns at some point between 1994 and 2011, and 1,161 are live funds at the end of 2011.

It is clear from the size distribution of live Asia focused and Asia based funds depicted in Figures 1A and 1B respectively, that the majority of funds in Asia are small with assets under management below US$50m. Focusing on larger institutional quality funds with assets greater than US$100m, we find that such funds tend

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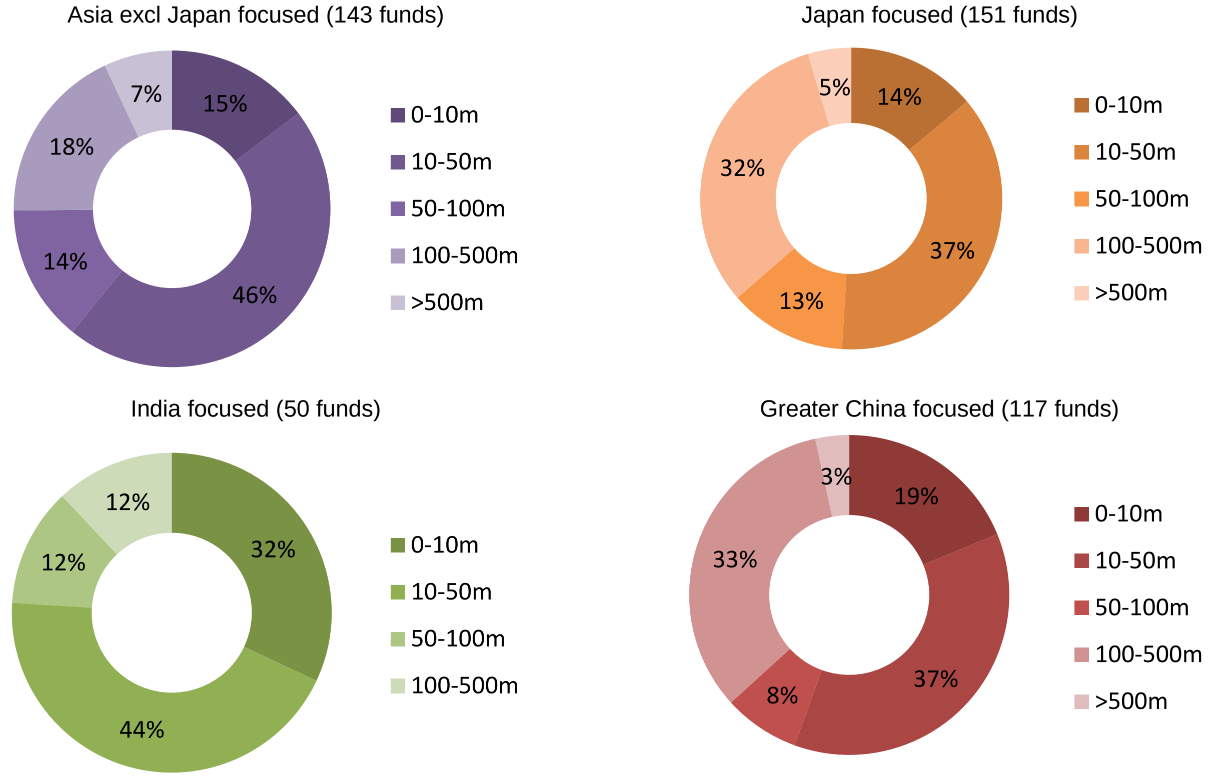
[2] We define funds investing in Asia excluding Japan, Asia including Japan, Australia/NZ, Emerging markets, Greater China, India, Japan, South Korea, and Taiwan as Asia focused funds, and funds managed from Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Mauritius, Singapore, South Korea, Taiwan, and Thailand as Asia based funds.

to invest in Japan and the Greater China region. There are fewer such large funds investing in India and countries within the Asia excl Japan region reflecting the size and depth of these markets.

Figure 1A: Size distribution of Asia focused funds

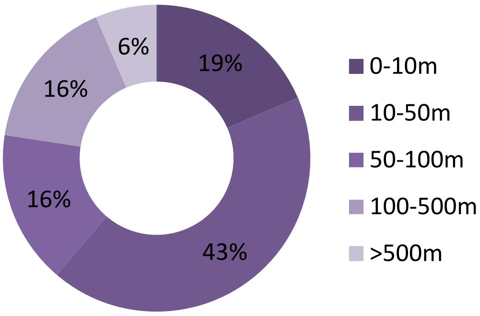


Hedge funds operating from Hong Kong and Japan tend to be larger than those based in Singapore and Australia. Institutonal quality funds form 22% of the hedge fund landscape in the latter two jurisdictions. They make up 32% and 33% of the fund universe in Hong Kong and Japan, respectively. Interestingly, there are no funds managing more than US$500m based in Tokyo. In our sample, there are 8 such funds based in Singapore, 6 based in Hong Kong, and 5 based in Australia. These large funds with aum greater than US$500m include funds managed by Singapore based AR Capital, Arisaig Partners, New Silk Road Investment, and Aisling Analytics, as well as Hong Kong based Long Investment Management, Triskele Capital, and Value Partners. These numbers likely understate the size of the greater than 500m group in asia as it does not include known billion dollar shops such as the Singapore based Broad Peak and Dymon Asia Capital,[3] as well as the Hong Kong based Ortus, Senrigan Capital, and Azentus Capital.

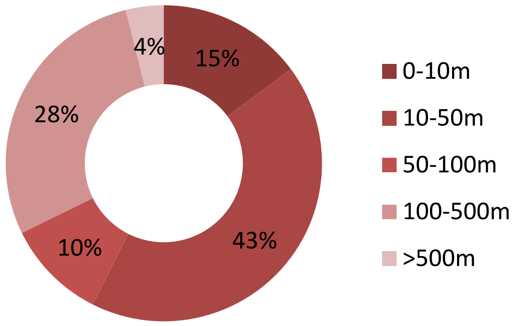
[3] Broad Peak does not report returns to the databases while Dymon Asia Capital stopped reporting returns since April 2011.

Figure 1B: Size distribution of Asia based funds

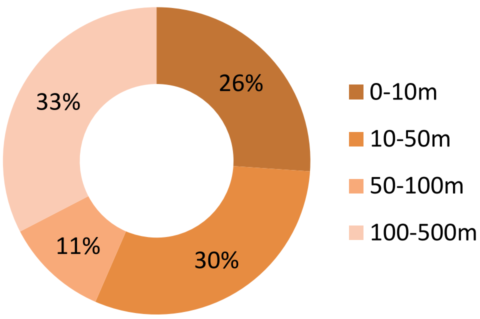
Singapore based (124 funds)



Hong Kong based (155 funds)



Japan based (46 funds)



Australia based (77 funds)

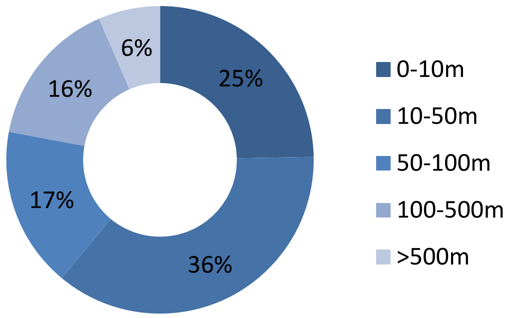
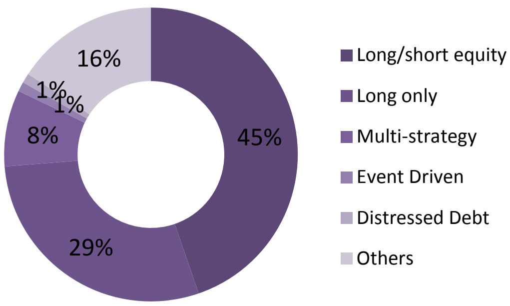
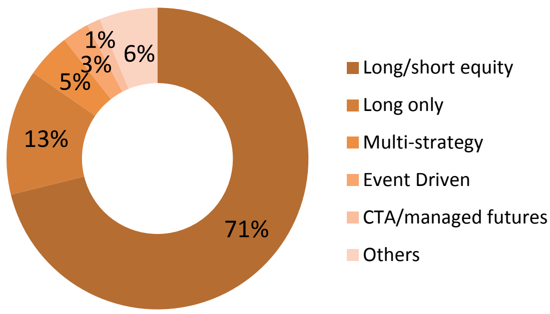


Figure 2A: Strategy distribution of Asia focused funds

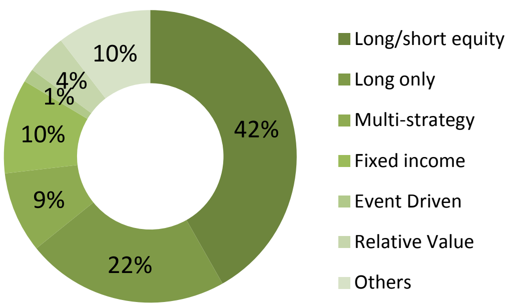
Asia excl Japan focused (190 funds)



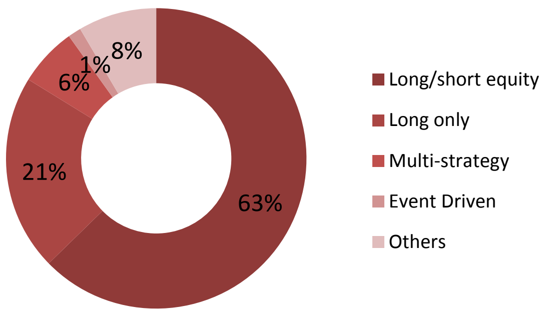
Japan focused (208 funds)



India focused (67 funds)

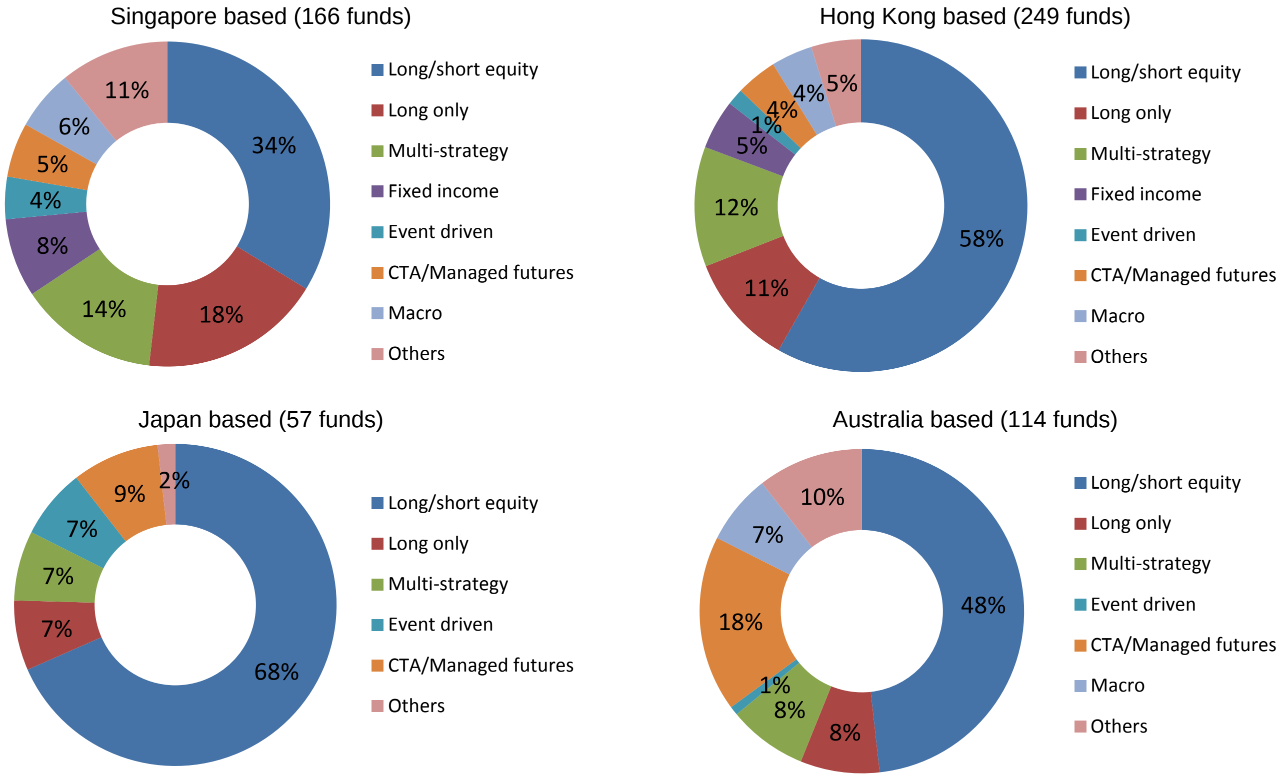


Greater China focused (142 funds)



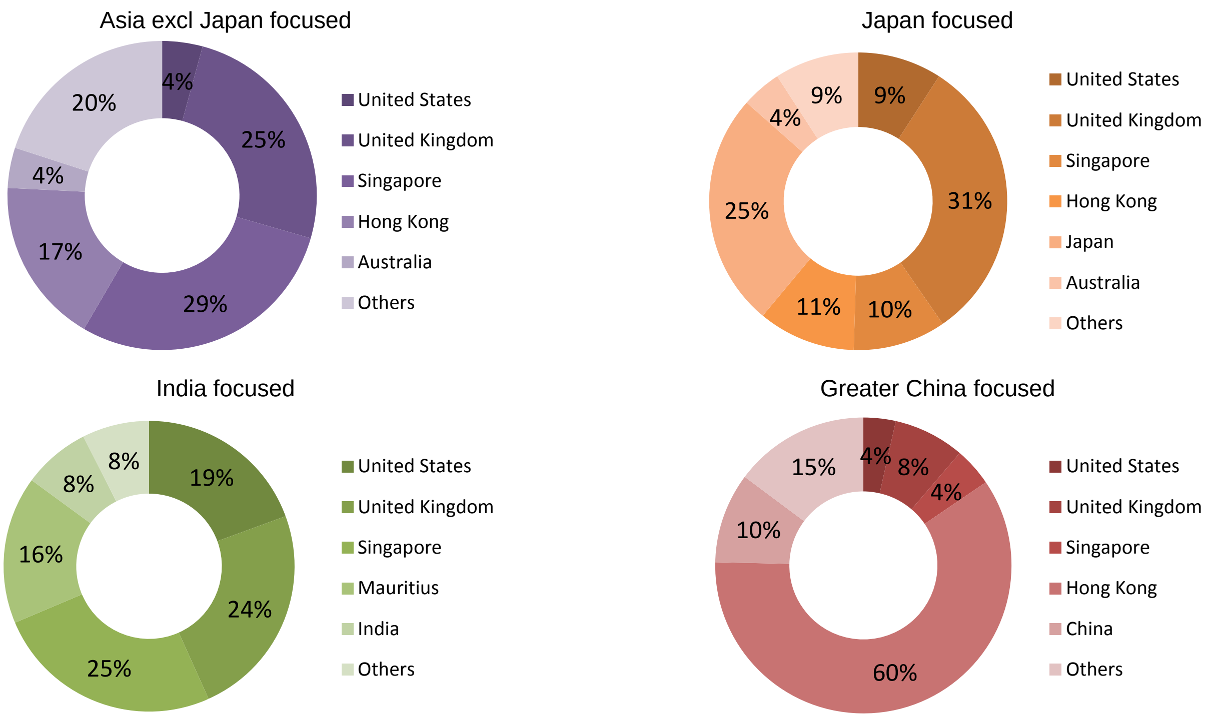
The strategy decomposition for Asia focused and Asia based funds depicted in Figures 2A and 2B indicate that hedge funds in Asia are still predominantly equity long/short and bottom up long only. Such funds form 74% of Asia excl Japan focused funds, 84% of Japan focused funds, 64% of India focused funds, and 84% of Greater China focused funds. Funds investing in India engage in a wider range of investment strategies than do those investing in other Asian regions.

Figure 2B: Strategy distribution of Asia based funds



Likewise, relative to funds based in other countries, funds based in Singapore also engage in wider range of investment strategies. Fixed income, macro, CTA/managed futures, and event driven funds are well represented in Singapore. Australia hosts a disproportionately large number of CTA/managed futures funds reflecting its commodity driven economy, while Japan harbors a disproportionate number of equity long/short funds.

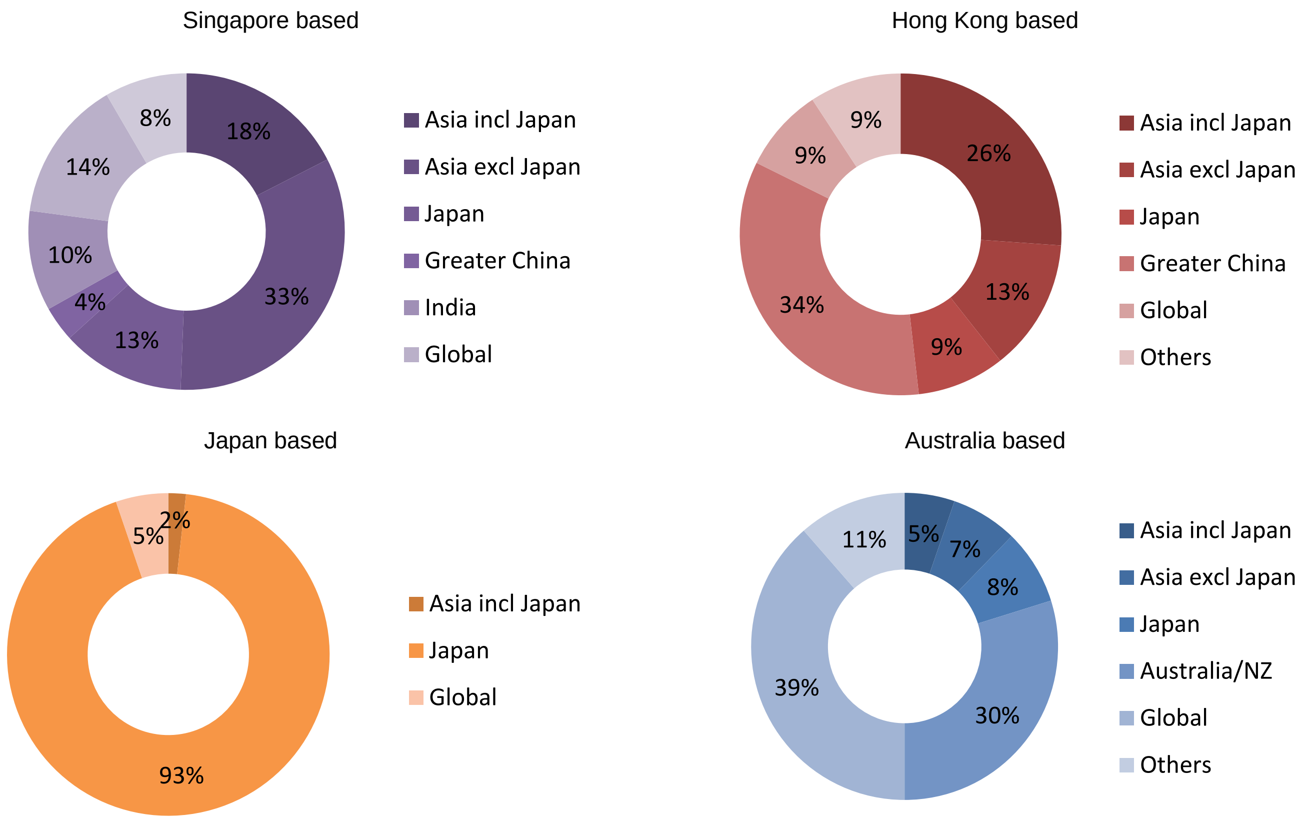
Figure 3A: Location of Asia focused funds



The need to maintain geographic proximity to fund investment markets largely determines fund location in Asia. As can be seen from Figure 3A, funds investing in Asia excl Japan tend to be based in Asia, funds investing in Japan tend to be managed in Singapore, Hong Kong, and Japan, funds investing in India usually operate from Singapore, Mauritius, and India, and the majority, i.e., 60% of funds investing in the Greater China region reside in Hong Kong. Funds investing in Japan are not managed exclusively from Japan due to the difficulty in conducting discretionary operations in Japan. We note that quite a significant pool of Asia focused hedge funds continue to be based in the US and UK perhaps motivated by the ease of raising capital in these countries. As shown in Teo (2009) nearby Asia focused hedge funds tend to outperform distant hedge funds. Yet the distant hedge funds based in the US and UK are able to raise more capital, charge higher fees and set more onerous redemption terms.

The investment region distributions illustrated in Figure 3B largely mirror the location graphs in Figure 3A. Japan based funds largely trade the Japanese market (93%), Hong Kong based funds typically focus on the Greater China region (34%), while a significant pool of Australia based funds gravitate towards the Australian and New Zealand space (30%). Since Australia is dominated by CTA/managed futures funds and these funds typically trade global securities, it is not surprising that 39% of funds based in Australia invest globally. Relative to funds based in other jurisdictions, Singapore based funds invest in a wider range of regions including Japan (13%), India (10%), Greater China (4%), and Global (14%).

Figure 3B: Investment region distribution of Asia based funds

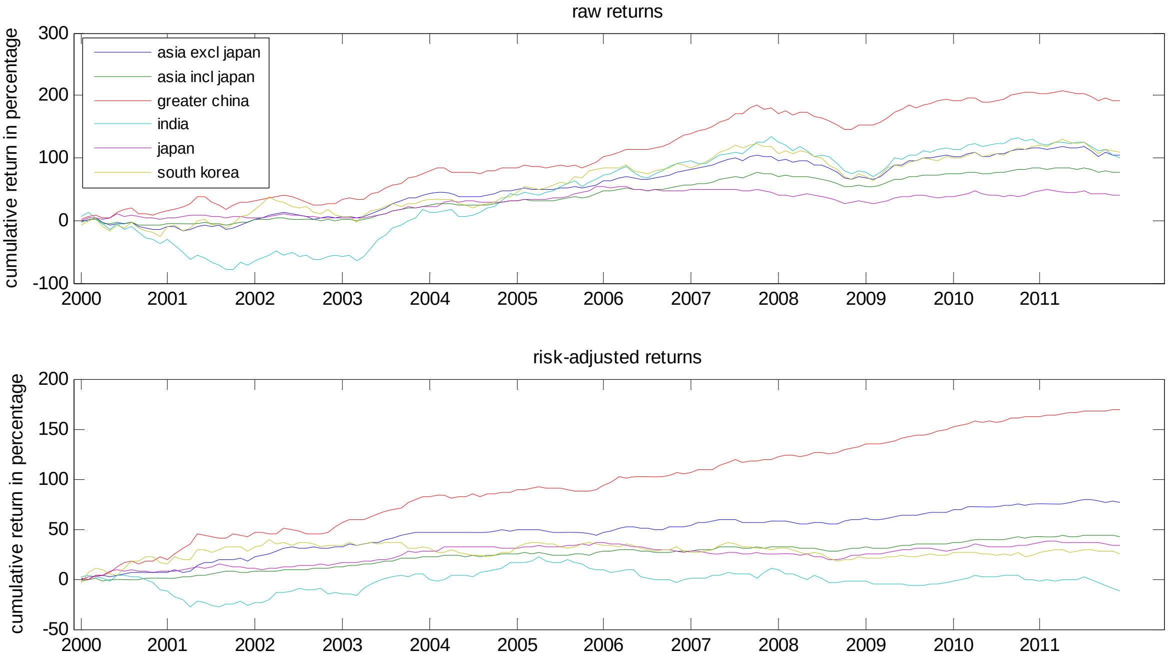


The analysis thus far has shed light on the characteristics of funds operating in and from the Asia. How have these funds performed in the recent years? Are there notable differences in returns and alpha between funds stratified along the dimensions of location, strategy, and investment region? The top graph in Figure 4A traces the cumulative returns of hedge funds in Asia grouped by their investment region, between January 2000 and December 2011. We include funds investing in South Korea, a jurisdiction that is likely to see regulatory induced growth in hedge fund activity. Clearly, Greater China funds have outperformed other funds at least based on raw returns. India and South Korea focused have also done well over the last 12 years. Japan focused funds on the other hand have languished at the bottom of the return rankings. Greater China funds have delivered an annualized return of 15.92% over this period. This eclipses the 3.47% annualized return chalked up by Japan funds. The average India and South Korea fund has rewarded investors with returns of 8.27% and 9.10%, respectively.

One worry is that these returns are more an artifact of manager risk-taking behavior as opposed to alpha. Fund managers operating in Greater China, India, and South Korea may have loaded up on beta with respect to their corresponding equity markets. To address this issue, we compute risk-adjusted returns by first regressing fund performance on the Fung and Hsieh (2004) factors augmented with factors constructed from seven Asian equity indices. The Fung and Hsieh (2004) factors include the S&P500 factor, the size factor, the term spread, the default spread, and trend following factors for bonds, foreign exchange, and commodities. The seven Asian indices we use include the Korean KOSPI, the Hong Kong Hang Seng, the Chinese Shanghai Composite, the Japanese Nikkei 225, the Australian ASX 200, the Indian Bombay Sensex, and the MSCI Asia excl Japan

Index. Our risk adjustment model includes a sample break for September 2008 which coincides with the collapse of Lehman Brothers and the height of the 2008 global financial crisis. We note that our augmented model explains an impressive 75% of the variation in returns of these investment region fund indices. In contrast, the basic Fung and Hsieh (2004) model explains 38% of the return variation of Asian focused funds. Next, we compute risk-adjusted returns by subtracting from the raw returns the product of the factor exposures and the factor realizations.

Figure 4A: Fund performance stratified by investment region (2000-2011)



The cumulative risk-adjusted return graphs depicted in the bottom plot of Figure 4A corroborate the view that the performance of India focused and, to a lesser extent, South Korean focused funds have been driven by exposure to the equity market. However, Greater China funds continue to dominate other hedge funds even after adjusting for risk.[4] The annualized risk-adjusted return of Greater China funds is 14.09% (*t*-statistic = 6.74) eclipses the 6.38% risk-adjusted return (*t*-statistic = 5.10) of the next best investment region, i.e., Asia excl Japan.

We next turn to fund performance stratified by fund location. Figure 4B indicates that Australia and Hong Kong based funds have outperformed Singapore and Japan based funds whether or not one adjusts for risk. The risk-adjusted annualized returns of Australia based and Hong Kong based funds are 8.23% and 6.85%, respectively. In contrast, the annualized alphas for Singapore based and Japan based funds are 5.15% and 2.07%, respectively. The stellar performance of Greater China focused funds clearly contributes to the outperformance of funds managed from Hong Kong while the poor performance of Japan focused funds likely explains the underperformance of funds operating from Japan. We note that the alphas for Australia, Hong Kong, and Singapore based funds are all statistically significant at the 1% level while that for Japan based funds is unreliably different from zero at the 10% level.

[4] These results persist after we control for backfill bias by removing the first 12 months of each fund's returns.

Figure 4B: Fund performance stratified by fund location (2000-2011)

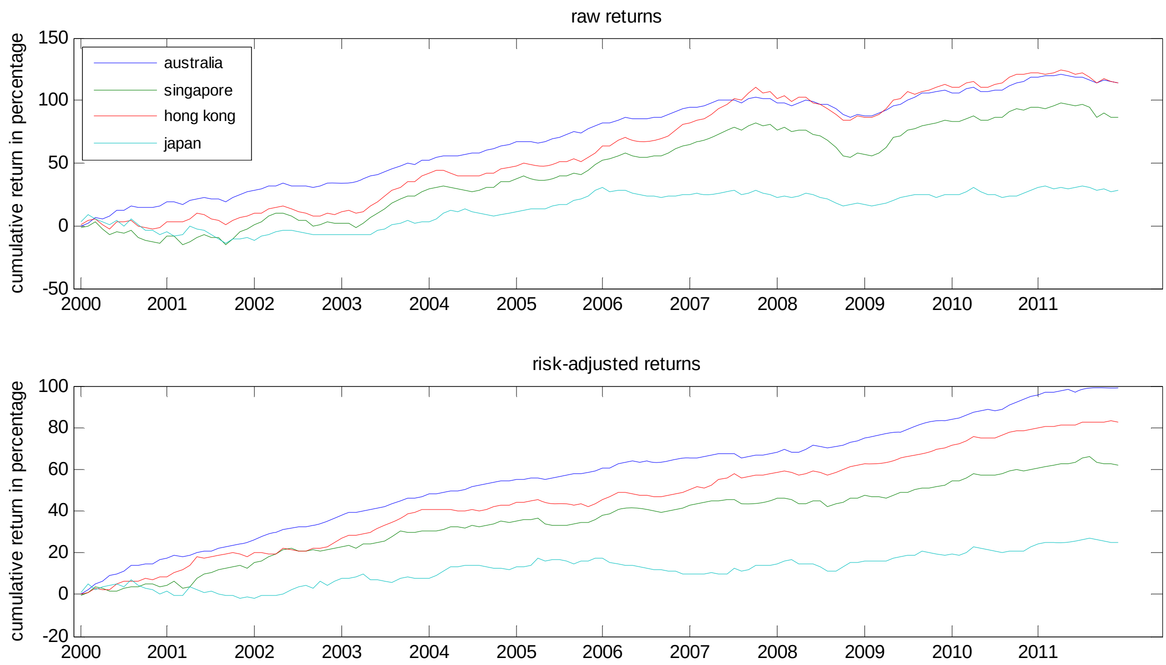
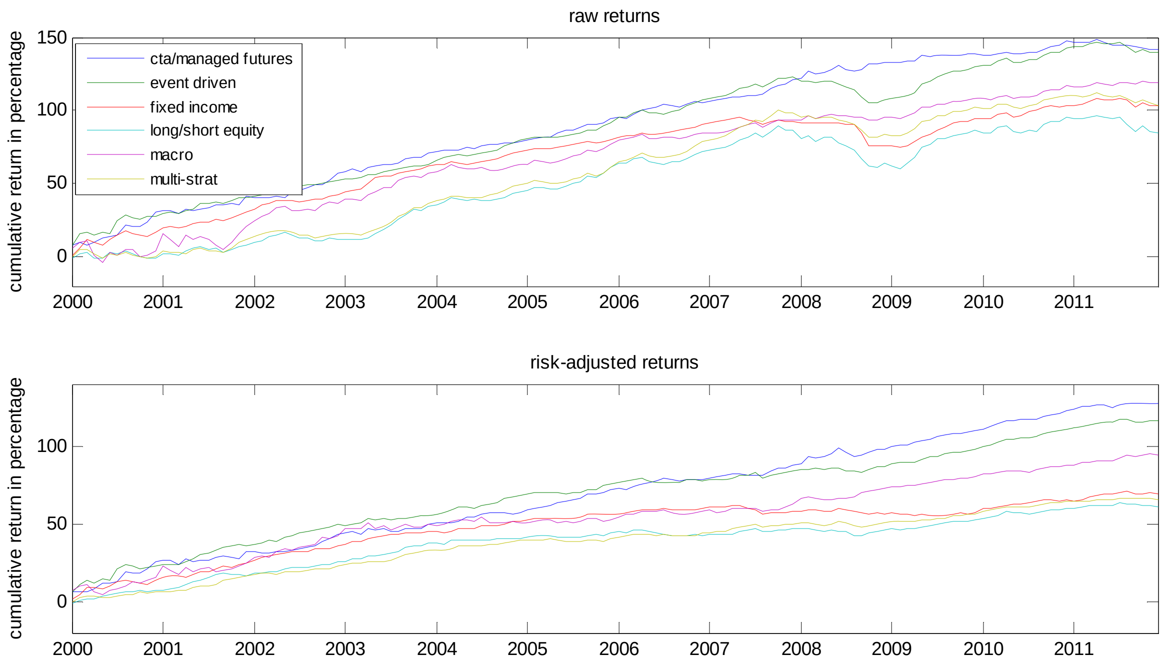


Figure 4C: Fund performance stratified by investment strategy (2000-2011)



Next, we turn to fund performance grouped by fund investment strategy. The raw return and risk-adjusted return graphs in Figure 4C paint a consistent picture. CTA/managed futures, event driven, and macro funds have outperformed over the sample period whereas fixed income and equity long/short funds have underperformed, both on a raw and risk-adjusted basis. The performance dispersion across investment strategies is not as wide as the performance dispersion across investment regions. The annualized risk-adjusted return spread between the best performing strategy (CTA/managed futures) and the worst performing strategy (equity long/short) is only about 5.53%. This is dwarfed by the corresponding spread between Greater China and India focused funds of about 15.09%.

To better understand the recent performance of Asia focused and Asia based hedge funds, we construct bar graphs that depict fund returns and risk-adjusted returns for funds stratified by investment region (Figure 5A), country (Figure 5B), and investment strategy (Figure 5C). The findings from these graphs largely echo those from the cumulative return charts. We find from Figure 5A that over the last three years, Greater China focused funds have outperformed relative to those based in other investment regions. Specifically, Greater China funds have returned on a risk-adjusted basis 12.11% per annum while India focused funds have only delivered on a risk-adjusted basis -3.25% per annum. Figure 5B indicates that Australian based funds have continued to outperform even when we focus on the recent years, while Japan based funds have continued to underperform. When funds are grouped by investment strategy and after adjusting for risk, we find that even in the last three years CTA/managed future, event driven, and macro funds have outperformed while fixed income, multi-strategy, and equity long/short funds have languished, as is evident from Figure 5C. Macro in particular had a stellar year in 2011, it being the only investment strategy that delivered positive returns, both on a raw and risk-adjusted basis. Given the strategy level capacity constraints documented by Naik, Ramadorai, and Stromqvist (2007) and the preponderance of equity long/short funds in Asia, our findings are consistent with the view that the equity long/short space in Asia is overcrowded.

Figure 5A: Fund performance stratified by investment region (2009-2011)

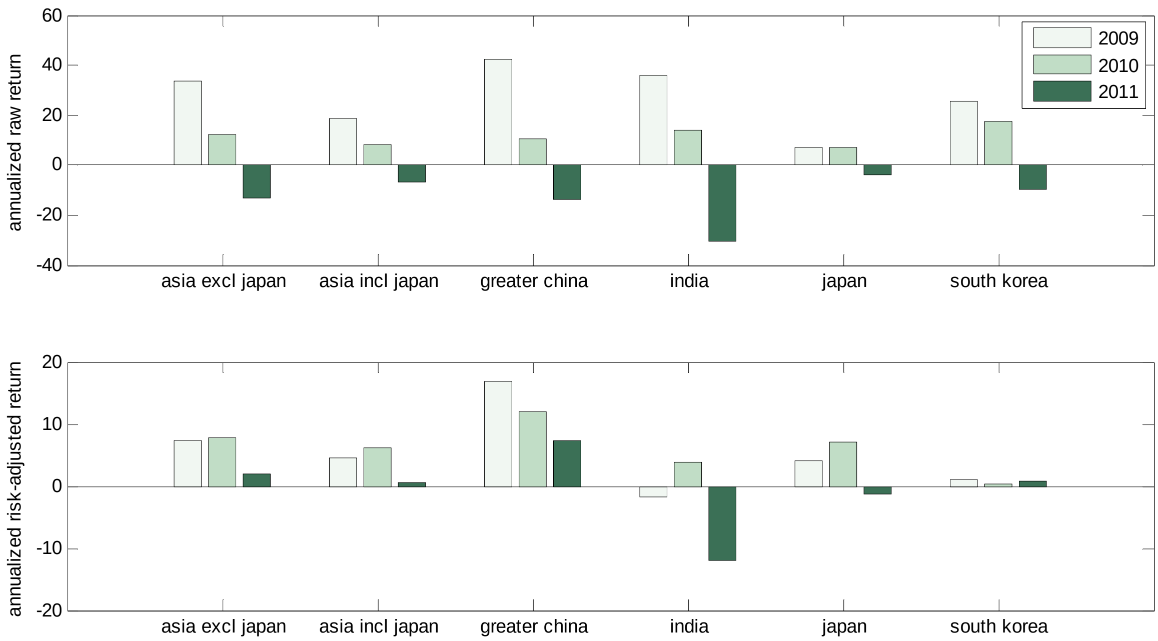


Figure 5B: Fund performance stratified by fund location (2009-2011)

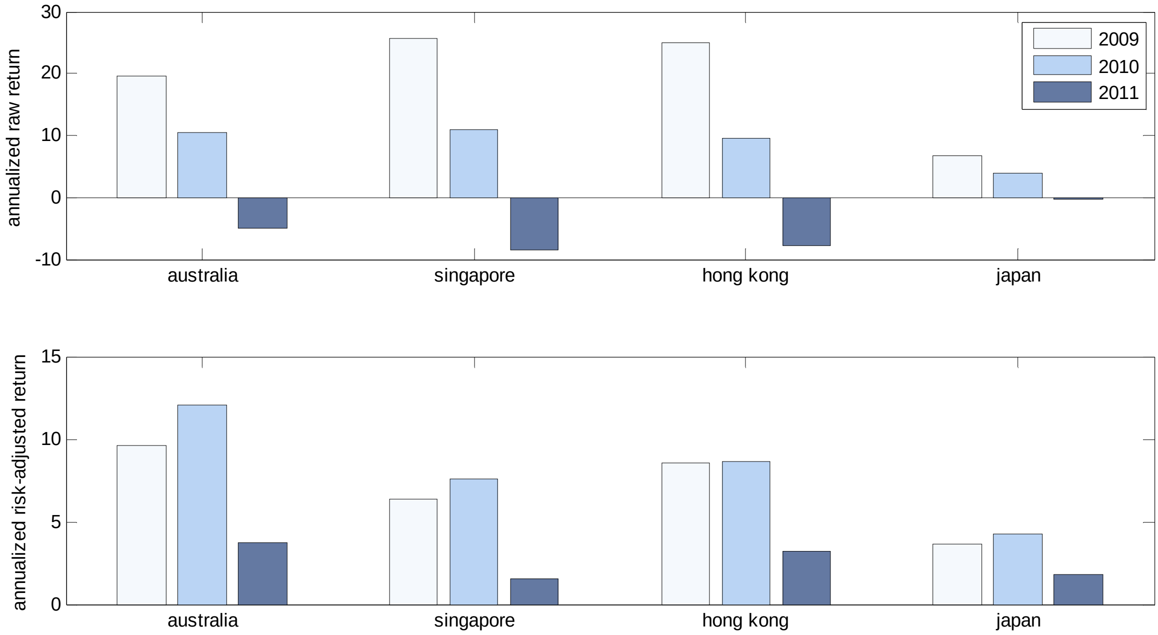
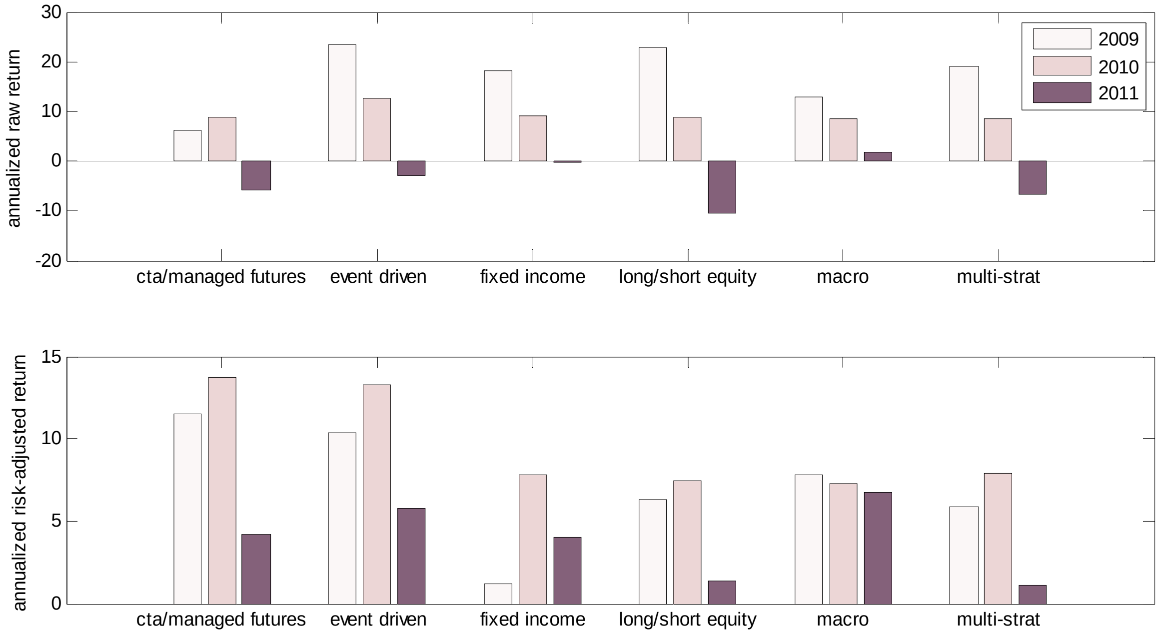


Figure 5C: Fund performance stratified by investment strategy (2009-2011)



Conclusion

We distill lessons from the size, investment geography, strategy, and performance distribution of funds in Asia. Our findings support the view that fund location is heavily influenced by fund proximity to investment markets, among other factors. They also suggest that investment geography better explains fund performance than investment strategy. In addition, we uncover some puzzling results. While the performance of equity long/short funds have trailed those of other strategies like macro, event driven and CTA/managed futures by a significant margin, raising concerns that the pool of arbitrage opportunities in the equity long/short space may have been over fished, Greater China equity long/short funds have continued to deliver stellar risk-adjusted performance. Going forward, an investigation into the factors driving the robust returns of Greater China funds may prove to be fruitful.

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Update on the Centre's Activities

Education

Aje Saigal gave a presentation on "A New and Better Way to Invest for the Next Decade" at a seminar hosted by the centre on 27 April. Aje is consultant at GIC and CIO designate at Nuvest Capital, a global multi-asset class investment firm. Aje has more than 30 years of experience at GIC which he joined since inception. During his tenure at GIC, Aje held various senior appointments including CIO of Global Equities and Director of Investment Policy and Strategy. At his talk, Aje elaborated on the benefits of the risk parity approach to global asset allocation. According to him, astute investors should be forward looking and emerging markets biased. They should harvest strategy betas and have a risk balanced portfolio. Finally, they should practice dynamic asset allocation and seek to minimize fee drag. 56 practitioners and 23 members of the SMU community attended the talk.

For more information on our upcoming events, please visit our events website:

http://www.smu.edu.sg/centres/hfc/events.asp

For more information regarding the BNP Paribas Hedge Fund Centre at SMU and our upcoming activities, please contact Ms Karyn Tai, centre coordinator (Tel: +65-6828-0933, E-mail: hfc@smu.edu.sg) or visit our webpage at http://www.smu.edu.sg/centres/hfc/index.asp. We look forward to receiving your suggestions and comments.