6-2010

# Weathering the Storm: Asian Hedge Funds

Melvyn TEO
*Singapore Management University*, melvynteo@smu.edu.sg



Citation
Teo, Melvyn. 2010 June. Weathering the Storm: Asian Hedge Funds. *Hedge Fund Insights: Newsletter of the BNP Paribus Hedge Fund Centre at SMU*, 2-11.

# Newsletter of the BNP Paribas Hedge Fund Centre at SMU

## Summary

- Mission of the BNP Paribas Hedge Fund Centres
- Weathering the storm: Asian hedge funds, by Melvyn Teo
- Update on the Centre's Activities

## Mission of the BNP Paribas Hedge Fund Centres

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

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 its sister centres at the London Business School and HEC. 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.

# Weathering the storm: Asian hedge funds

Melvyn Teo[1]

**Abstract**

How has the financial crisis shaped the hedge fund industry in Asia? We survey the style, investment region, and assets under management landscape of Asia-based hedge funds before and after the recent economic downturn. Our findings suggest that during the early part of the crisis in 2007, macro and fixed income funds based in Australia were especially vulnerable. When Asian financial markets succumbed in 2008 and 2009, hedge fund exits ramped up in Singapore and Hong Kong, particularly amongst event driven and Japan-focused funds. Small funds were most susceptible to closure during the liquidity crunch. Conversely, CTAs and Greater China-focused funds appear to have weathered the stormy conditions relatively well.

---

The recent subprime financial crisis has wreaked havoc on the hedge fund industry. Assets managed by hedge funds worldwide had plunged from a high of US$1.9 trillion to a low of US$1.4 trillion.[2] Many funds have been forced to terminate their operations due to poor performance, investor outflows, or both. Other hedge funds have raised gates in a desperate move to stanch the waves of investor redemptions. Some of these funds are now still facing massive redemption overhangs.[3] In response to these events, investors are now clamoring for managed accounts, lower fees, and greater transparency.

This newsletter surveys the hedge fund industry in Asia in the wake of the financial crisis. Specifically, we evaluate the investment style, geographical region, and assets under management distribution of hedge funds based in Asia, before and after the crisis. We focus on the impact of hedge fund closures on the alternative investment landscape in Asia so as to sidestep performance and risk measurement issues.

To evaluate the hedge fund industry in Asia, we merge the Eurekahedge and Asiahedge[4] databases. The combined database includes hedge fund returns from May 2000 to April 2010 although we focus on the period between January 2007 and February 2010[5]. We assume that funds that dropped out of the databases during this period terminated their operations. While

[1] Melvyn Teo is Associate Professor of Finance and Director, BNP Paribas Hedge Fund Centre at the Singapore Management University. E-mail: melvynteo@smu.edu.sg. Phone: +65-6828-0735. We benefited from conversations with Narayan Naik.

[2] See “Hedge funds look to rebound – inward flows are seen topping outward flows for the first time since 2007,” The Wall Street Journal, 16 March 2010.

[3] See “Hedge funds hold investors hostage after rebound,” Bloomberg News, 20 January 2010.

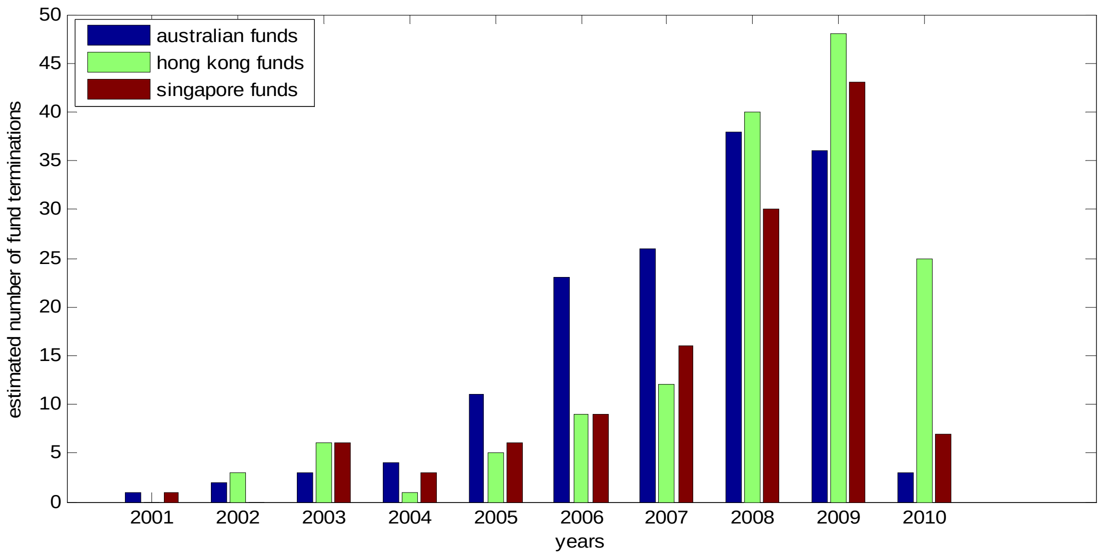
[4] The disadvantage of the Asiahedge database is that it does not include monthly assets under management data. Therefore, we exclude Asiahedge funds from the fund size analysis.

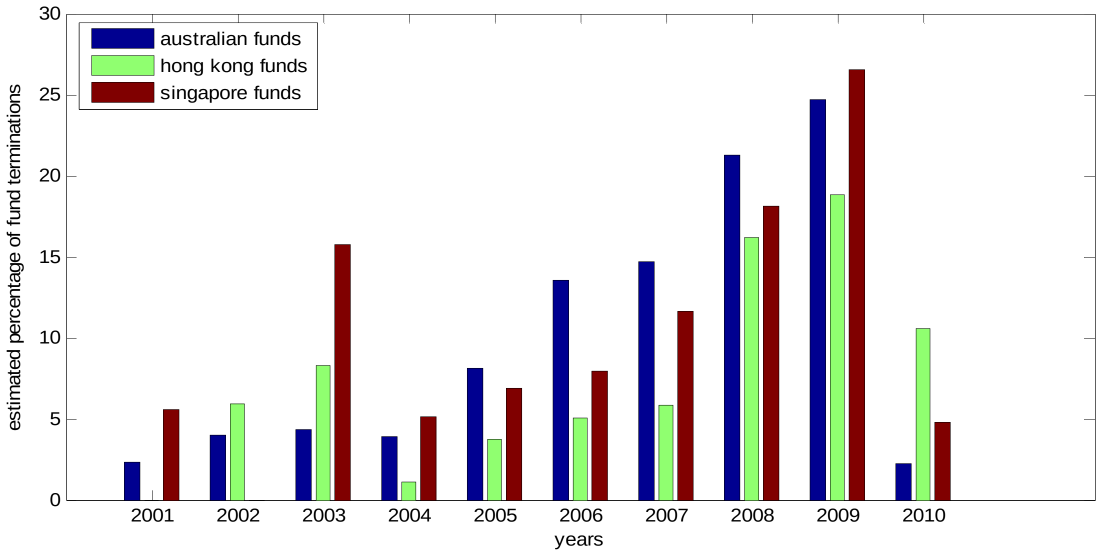
[5] By ending the sample period in February 2010, we allow for the possibility that some funds may be late in reporting their returns to the databases. Otherwise, we may erroneously conclude that these funds terminated their operations.

funds in general may voluntarily drop out of databases because of capacity issues, given the nature of the financial markets during this period, we believe that most of the fund closures came on the back of poor performance and outflows.

As the study focuses on Asia-based hedge funds, we restrict the sample to funds headquartered in Hong Kong, Singapore, or Australia. Funds with a main office elsewhere but with a research or branch office in these locations are not included in the study as it is unclear as to what proportion, if any, of the funds' assets were managed from locations in Asia. All in all we have a total of 924 funds in our sample, of which 261 are unique to Eurekahedge, 246 are unique to Asiahedge, and 417 report to both Eurekahedge and Asiahedge.

**Figure 1: Estimated number and percentage of hedge fund terminations in Asia**



As a prelude to the style, geographical region, and AUM analysis, we graph the number and percentage of dead funds grouped by country and year in Figure 1. It shows that between 2007 and 2010, Hong Kong and Australia had the highest number and percentage of fund terminations, respectively. From January 2007 to February 2010, a total of 125 Hong Kong-based funds, 103 Australia-based funds, and 96 Singapore-based funds dropped out of the combined database. Moreover, between 2007 and 2009, the average annual percentage of terminated funds (as a proportion of funds alive at the start of the year) was 20.19 percent for Australia, 18.74 percent for Singapore, and 13.61 percent for Hong Kong. We note that Figure 1 also suggests that the crisis impacted Australia-based funds first. The number of fund exits in Australia increased early during the crisis in 2007 and peaked in 2008. Conversely, funds based elsewhere only started dropping out in 2008, with fund exits peaking in 2009.

**Figure 2A: AUM distribution of funds on Jan 2007**

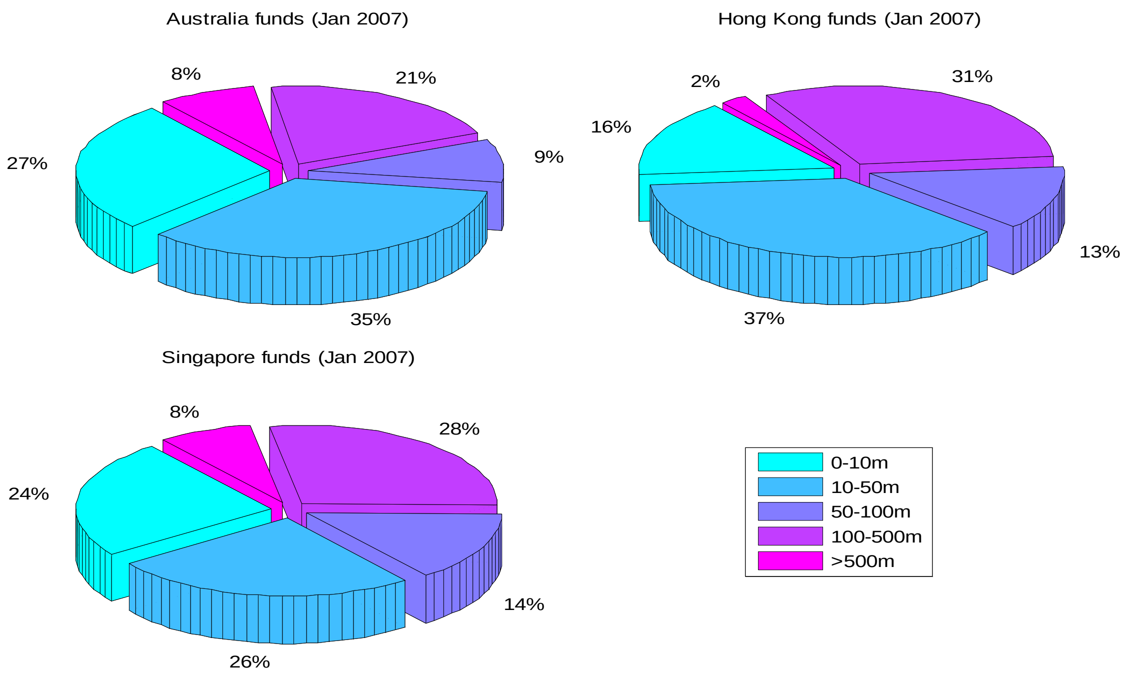
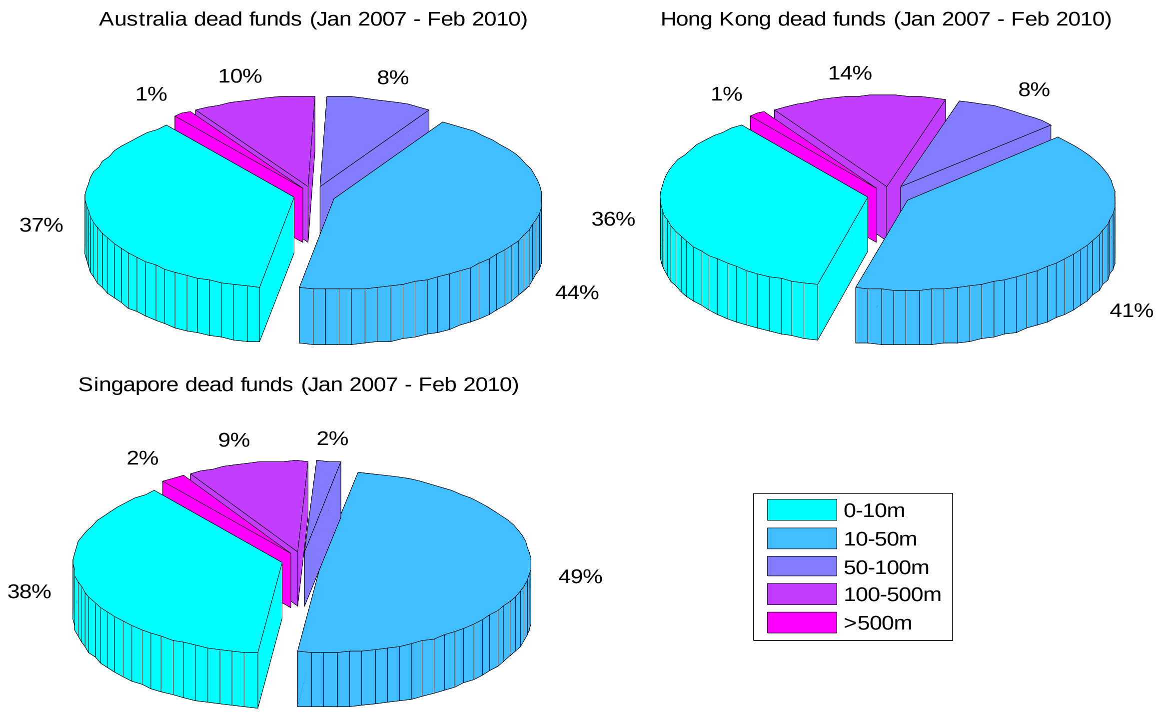



Figure 2A depicts the AUM distribution of hedge funds headquartered in the three Asian hedge fund hubs with Eurekahedge returns on January 2007. The pie charts reveal subtle differences between the AUMs of funds in these three localities. For example, a greater percentage of funds in Hong Kong manage assets between US$100-500m than in either Singapore or Australia. At the same time, Hong Kong features a smaller percentage of very small funds with assets below US$10m than the other two locations. This may simply reflect the tighter regulatory environment as well as the relative ease of raising capital in Hong Kong. We note, however that there are proportionally fewer very large hedge funds with greater than US$500m in capital based in Hong Kong. For this reason, the average AUMs of funds based in Singapore (US$144m) and in Australia (US$149m) were larger than that for funds based in Hong Kong (US$117m).

**Figure 2B: AUM distribution of funds that died between Jan 2007 - Feb 2010**




The financial crisis appears to have decimated small funds in Asia. Figure 2B graphs the AUM of funds just prior to exiting the Eurekahedge database between January 2007 and February 2010. Most of the funds that stopped reporting returns are small funds with assets less than US$50m. For example, 81 percent of Australia-based funds that exited the database had assets less than US$50m. Similarly, 77 percent of Hong Kong-based funds and 87 percent of Singapore-based funds that stopped reporting managed less than US$50m. These small funds may have been forced to close in response to redemptions from key investors that make fund operations no longer viable.

Figure 2C, which charts the distribution of fund AUM for funds with Eurekahedge returns in February 2010, suggests that the AUM landscape has changed most significantly in Singapore. The proportion of small funds in Singapore with AUM less than US$50m has increased from 50 percent to 64 percent. In contrast, the percentage of small funds in Australia and Hong Kong has changed marginally from 62 to 69 percent and from 53 to 50 percent, respectively. Consistent with these changes, the average AUM in Singapore is now US$104m, lower than that in Australia (US$112m) and Hong Kong (US$118m). Why has the number of small funds increased sharply in Singapore but not elsewhere? Fund startups during this period probably faced extreme difficulties raising capital and hence were likely to be small funds. At the same time, the friendly regulatory regime in Singapore was helpful to the establishment of smaller hedge funds.

**Figure 2C: AUM distribution of funds on Feb 2010**

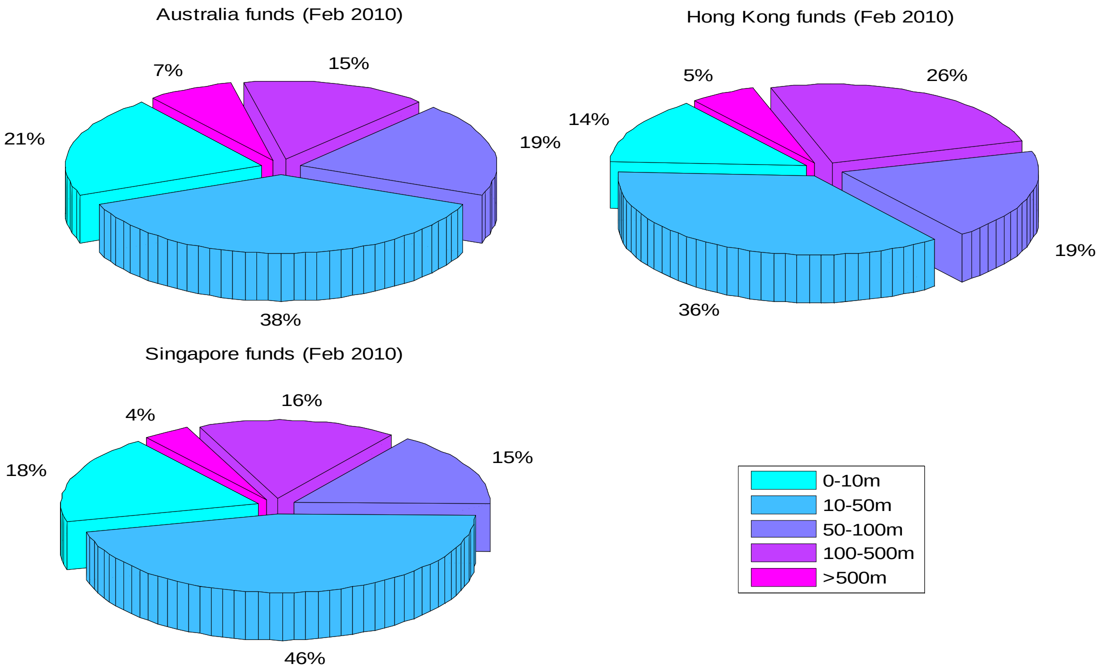
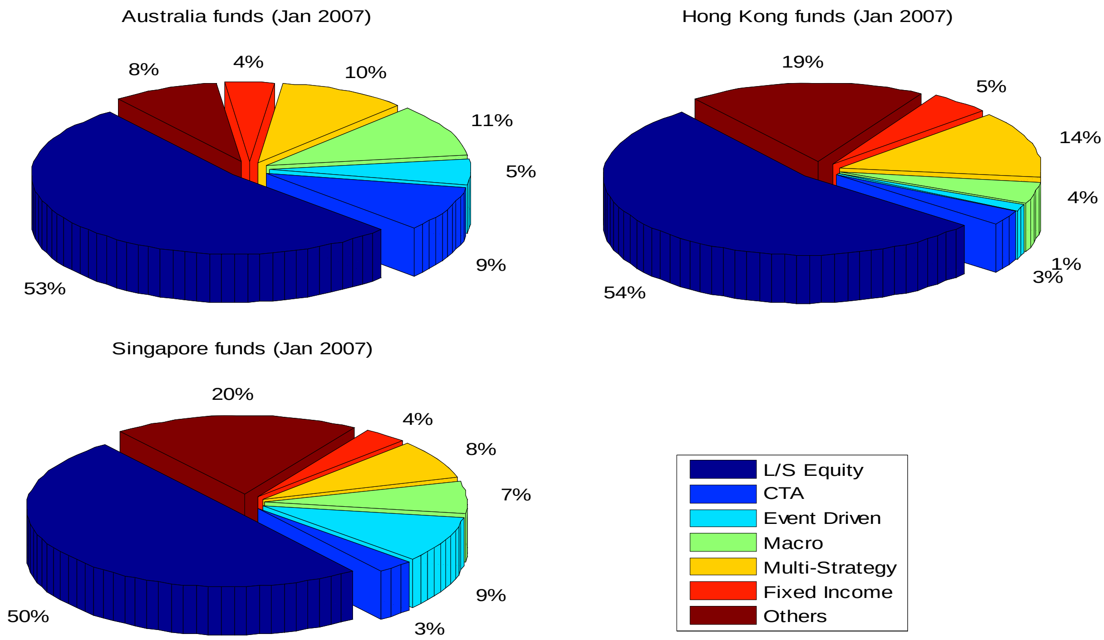



**Figure 3A: Investment style of funds on Jan 2007**




Given the relatively underdeveloped nature of financial markets in Asia, it is not surprising that the investment style landscape in Asia has been dominated by equity long/short funds. Figure 3A illustrates the relative importance of the various investment styles to the three hubs using the merged Eurekahedge and Asiahedge database. The largest group of funds in all three locales was equity long/short. In Australia, there was also a predominance of macro and CTA/managed futures funds. In Singapore, event driven and macro funds were well-represented. Hong Kong, on the other hand, housed mostly multi-strategy and equity long/short funds.

**Figure 3B: Investment style of funds that died between Jan 2007 - Feb 2010**

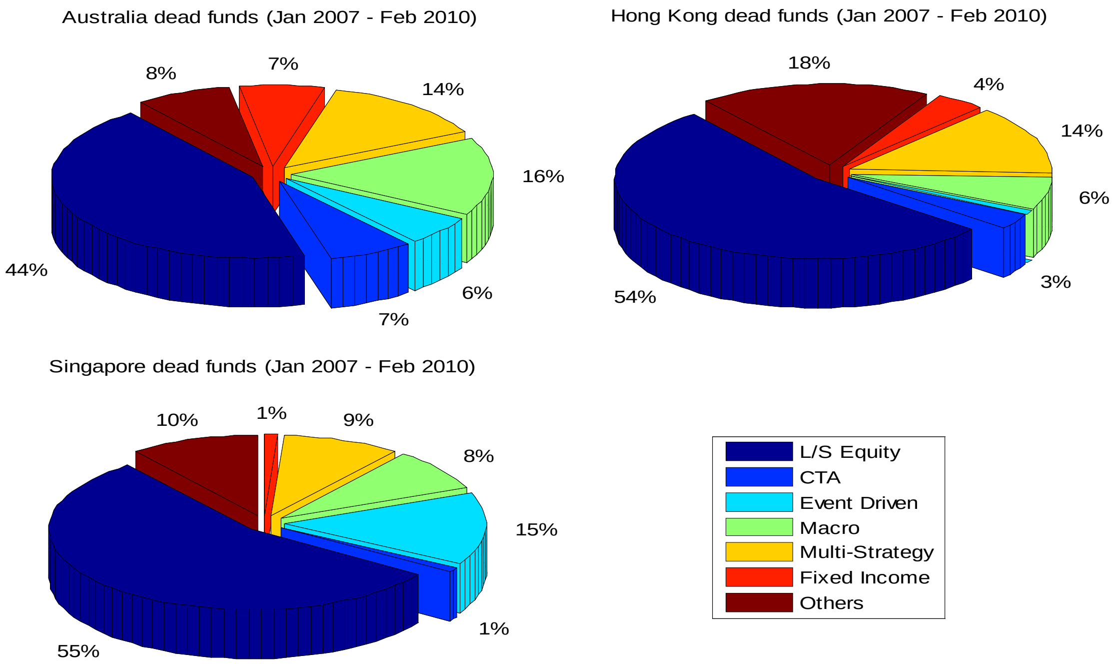



Figure 3B reveals that the financial crisis affected funds across a wide spectrum of investment styles. That said, in Australia, macro and fixed income funds were particularly hard hit. In results not reported we find that most of the Australia-based macro and fixed income funds exited the database in 2007 at the start of the crisis. For Singapore, a disproportionate number of event driven funds stopped reporting to the hedge fund databases. In general, CTA/managed futures funds weathered the crisis better than did the other funds while macro funds, despite their purported ability to ride volatility, generally succumbed to the turbulent economic conditions.

In line with the previous findings, the investment style landscape has remained fairly stable between 2007 and 2010. Figure 3C indicates that the diversity of investment styles (as measured by the proportion of event driven, macro, fixed income, and CTA/managed futures funds based in each location) has remained unchanged over time. Australia offers the most diverse mix of hedge funds, followed by Singapore, and then Hong Kong. In Singapore and Australia, the proportion of CTA funds has increased over time while the proportion of macro funds has waned. Consistent with the findings of Figure 3B, relative to the pre-crisis period, Australia now houses a smaller pool of fixed income funds while Singapore features fewer event driven funds.

**Figure 3C: Investment style of funds on Feb 2010**

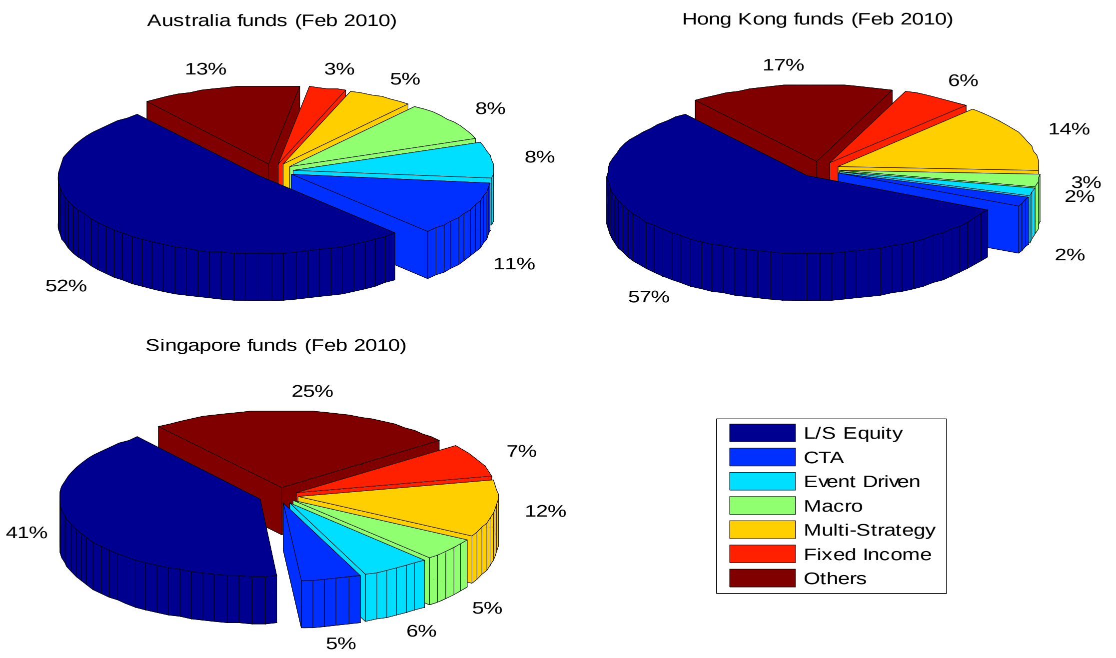
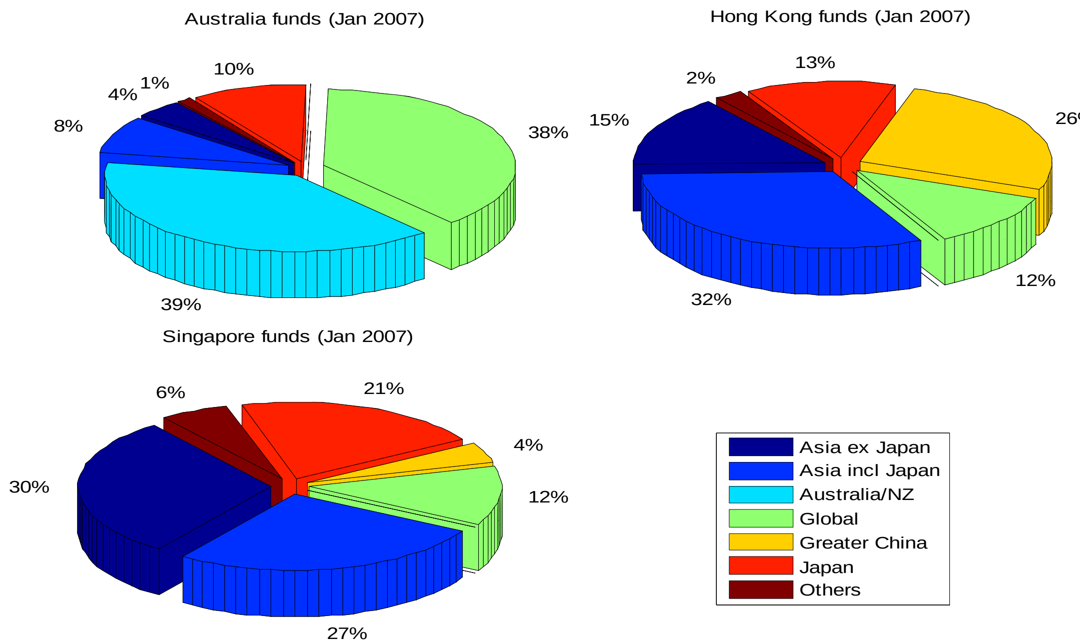



**Figure 4A: Investment region of funds on Jan 2007**




Relative to the investment style landscape, the investment region landscape appears more heterogeneous within Asia. As shown in Figure 4A, in Australia, there was a preponderance of funds investing in global and Australia/New Zealand securities. Singapore and Hong Kong both were dominated by Asia excluding Japan and Asia including Japan funds. The main difference was that there were more Greater China-focused funds in Hong Kong and more Japan focused funds in Singapore. The former can be traced to the geographical proximity of Hong Kong to China while the latter stemmed mainly from the widespread use of the English language in Singapore. Native Japanese fund managers who are more likely to understand English than Cantonese may therefore find it easier to operate from Singapore.

**Figure 4B: Investment region for funds that died between Jan 2007 - Feb 2010**

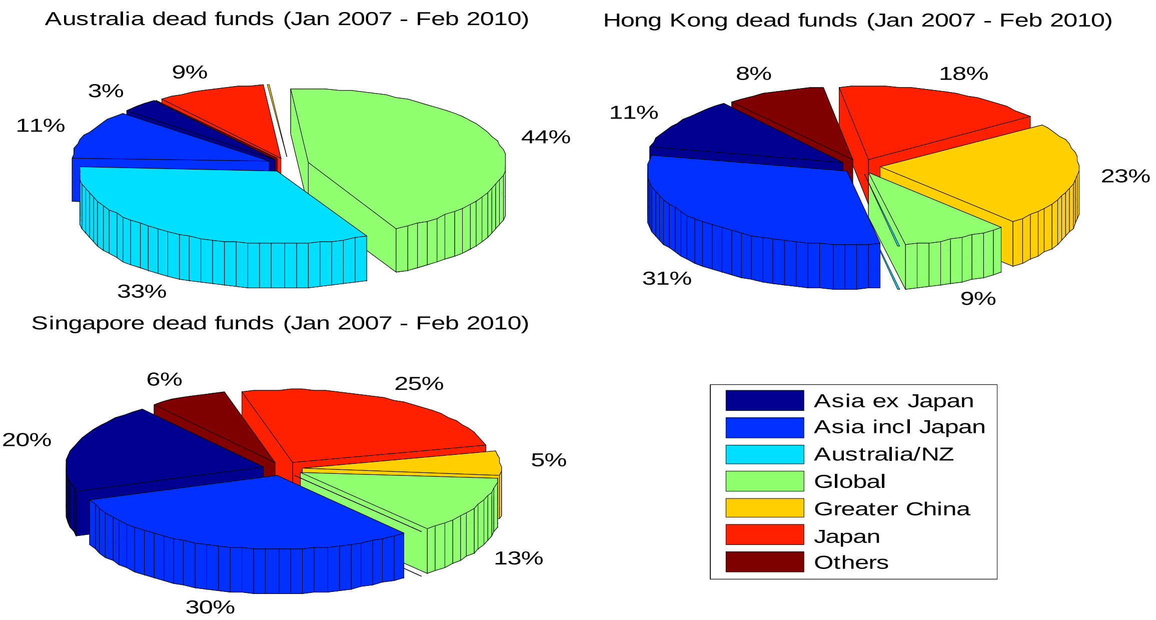
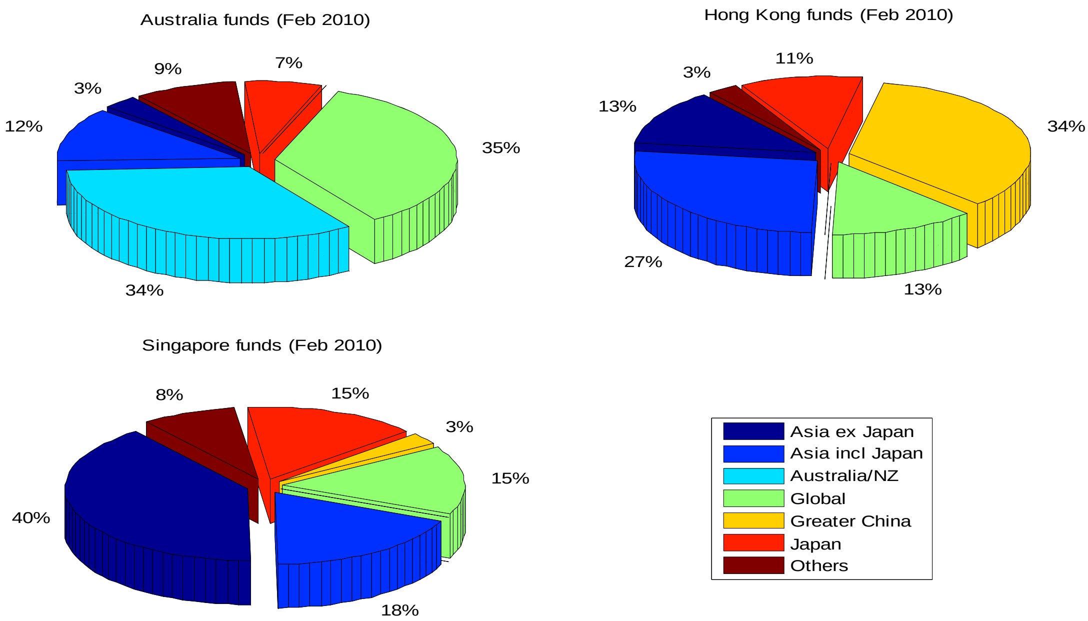



Figure 4B suggests that the financial crisis affected funds investing in all geographical regions, although, global funds based in Australia as well as Japan-focused funds based in Singapore and Hong Kong were most affected. Consequently by February 2010, while the investment region landscape has not changed dramatically, there are now fewer Japan focused funds in general as well as fewer Global funds based in Australia. Greater China-focused funds, which have been relatively insulated from the market turmoil, have increased their footprint in Hong Kong. As a proportion of all funds based in Hong Kong, the number of Greater China funds has increased from 26 percent in January 2007 to 34 percent in February 2010.

To identify factors that were related to fund death, we estimate a Logit regression on a fund death indicator variable for funds that reported to the Eurekahedge database in December of 2006.[6] The fund death variable takes a value of one for funds that died or stopped reporting between January 2007 and February 2010, and a value of zero otherwise. We include as explanatory variables fund management fee, performance fee, redemption notice period, log of fund size on December 2006, as well as country, investment style, and investment region dummies.

[6] Note that the conclusions from the regression analysis may differ from those obtained from the figures as the regression does not account for funds that entered the databases after December 2006. The regression also does not include funds unique to Asiahedge.

**Figure 4C: Investment region of funds on Feb 2010**




The results from the Logit analysis are reported in Table 1 below. They broadly corroborate our observations from the pie charts and indicate that smaller funds, macro funds, and event driven funds were more likely to close during the financial crisis. Also, the positive and statistically significant coefficient estimate on the Australia dummy suggests that, consistent with our findings from Figure 1 on the percentage of fund deaths by country, funds based in Australia were more likely to terminate their operations than funds based in Singapore or Hong Kong. Specifically, Australia-based funds were 18 percent more likely to stop reporting returns than funds based elsewhere.

## Summary

The financial crisis has shaped the hedge fund landscape in Asia. By analyzing the AUM, investment style, and geographical region mix of the funds operating from Asia, we uncover some interesting insights. In 2007, during the early part of the crisis, fixed income and macro funds based in Australia were particularly vulnerable, in part due to their exposure to global securities and subprime mortgages. When the economic malaise spread to Asian equity markets later in the crisis, hedge fund exits in Singapore and Hong Kong ramped up significantly, especially amongst event driven and Japan-focused funds. Small funds were more at risk during this period as redemptions from key investors often made operations untenable. In contrast, CTAs and Greater China-focused funds thrived during this period. The former were able to successfully ride the volatile conditions while the latter benefited from the relatively buoyant Chinese equity market.

**Table 1: Logit regression on fund death (Jan 2007-Feb 2010)**

| | Independent variable | Dependent variable = fund death indicator | | | |
|---|---|---|---|---|---|
| | Management fee (percent) | 0.034 | 0.062 | 0.005 | 0.016 |
| | | (0.43) | (0.80) | (0.07) | (0.20) |
| | Performance fee (percent) | 0.006 | 0.002 | 0.000 | 0.005 |
| | | (0.96) | (0.34) | (0.00) | (0.87) |
| | Redemption notice (days) | -0.002 | -0.001 | -0.002 | -0.001 |
| | | (-0.85) | (-0.03) | (-0.89) | (-0.44) |
| | Log (fund size) on Dec 2006 | -0.053** | -0.052** | -0.052** | -0.05** |
| | | (-3.07) | (-3.00) | (-2.91) | (-2.90) |
| Country dummies | Australia | | 0.182* | | |
| | | | (2.51) | | |
| | Hong Kong | | -0.001 | | |
| | | | (-0.01) | | |
| Investment style dummies | CTA/managed futures | | | 0.214 | |
| | | | | (1.42) | |
| | Event driven | | | 0.342* | |
| | | | | (2.59) | |
| | Equity long/short | | | 0.138 | |
| | | | | (1.75) | |
| | Macro | | | 0.278* | |
| | | | | (2.35) | |
| | Multi-strategy | | | 0.192 | |
| | | | | (1.79) | |
| | Fixed income | | | 0.253 | |
| | | | | (1.66) | |
| Investment region dummies | Asia ex Japan | | | | -0.087 |
| | | | | | (-0.42) |
| | Asia incl Japan | | | | 0.01 |
| | | | | | (0.05) |
| | Australia/NZ | | | | -0.021 |
| | | | | | (-0.10) |
| | Global | | | | 0.106 |
| | | | | | (0.50) |
| | Greater China | | | | -0.077 |
| | | | | | (-0.36) |
| | Japan | | | | 0.086 |
| | | | | | (0.40) |

# Update on the Centre's Activities

## Education

The centre organized a seminar on May 21 with David Ong of Octagon Capital as the speaker. David presented chronicles and interesting anecdotes of an apprentice who went from a software developer to a research analyst/portfolio manager in a local quantitative hedge fund run by ex-GIC employees. The seminar drew an audience of 58 people comprising mainly students and investment professionals.

## Research

The centre sponsored paper "The Liquidity Risk of Liquid Hedge Funds," by Melvyn Teo, has been accepted for presentation at the upcoming European Finance Association meetings in August 2010.

Working versions of centre sponsored papers are available for download from our research webpage

---

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.