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Flagship Funds at Hedge Fund Families

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Newsletter of the BNP Paribas Hedge Fund Centre at SMU

Summary

- Mission of the BNP Paribas Hedge Fund Centres
- Flagship Funds at Hedge Fund Families by Melvyn Teo
- Update on the Centre's Activities

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.

Flagship Funds at Hedge Fund Families

Melvyn Teo[1]

Abstract

Motivated by the stellar performance of flagship funds such as the Renaissance Medallion fund, we investigate whether hedge fund firms (e.g., Renaissance Technologies) have incentives to protect the performance of their flagship funds (e.g., Medallion). We find that the flagship fund tends to outperform other funds within the fund family. The fees and redemption terms of non-flagship funds at launch tend to be correlated with the past performance of the flagship fund. Finally, flagship fund performance has a positive impact on net flows into the other funds within the same family.

The success of the Medallion Fund has catapulted Renaissance Technologies and its founder, mathematician Jim Simons, to fame and fortune. Not only has the phenomenal performance of Medallion allowed Jim Simons to get away with charging a 5 percent management fee and a 44 percent performance fee for Medallion but it has also allowed Renaissance to raise significant capital for other funds including the Nova Fund and the Renaissance Institutional Equities Fund. Clearly, the reputation of Renaissance depends on the performance of its flagship Medallion fund. It is not surprising therefore, that Renaissance preserves the performance of Medallion by limiting its investor base to employees of the firm, effectively closing it to outside investors.

In this issue of the newsletter, we explore the idea that hedge fund families protect the performance of their flagship fund and do so because flagship performance confers significant benefits to the other funds within the same family. We ask the questions: Do hedge fund families protect the performance of their flagship funds? What are the spillover effects from flagships to non-flagships within the same family?

As a prelude to conducting the empirical analysis, we first merge Barclayhedge, HFR, and Lipper Tass databases. These are some of the largest and most widely used databases in hedge fund research. The sample period extends from January 1996 to December 2010. In total, the combined database consists of 22,031 funds of which 13,778 funds stopped reporting returns at the end of our sample period. We note that the funds in our sample belong to 6,940 distinct fund families.

To understand the performance of the flagship fund relative to the other funds managed by the same family, we sort funds into 10 portfolios based on when they were launched. If a fund is the first fund launched by a fund family, it is placed into portfolio 1. In general, if is the *n*th fund

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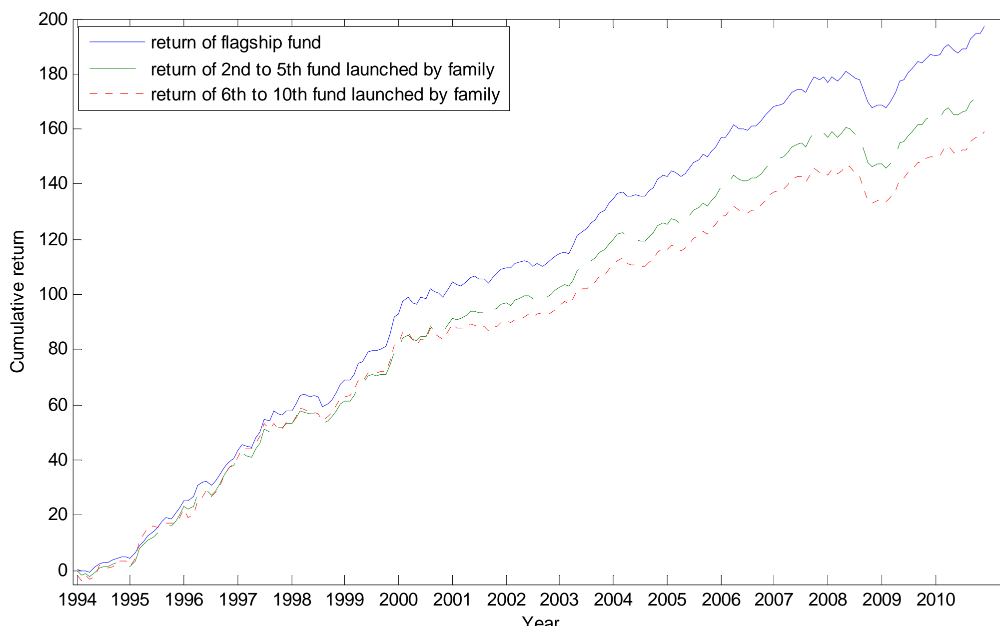
launched by a fund family, it is placed into portfolio *n*.[2] We assume that the first fund launched by a fund family is the flagship. Therefore, portfolio 1 is our flagship portfolio. We average the returns across funds in each portfolio and plot their cumulative returns in Figure 1. To facilitate inference, we average the returns of portfolios 2 to 5 and the returns of portfolios 6 to 10.

Figure 1: Returns of Flagship Fund versus non-Flagship Funds

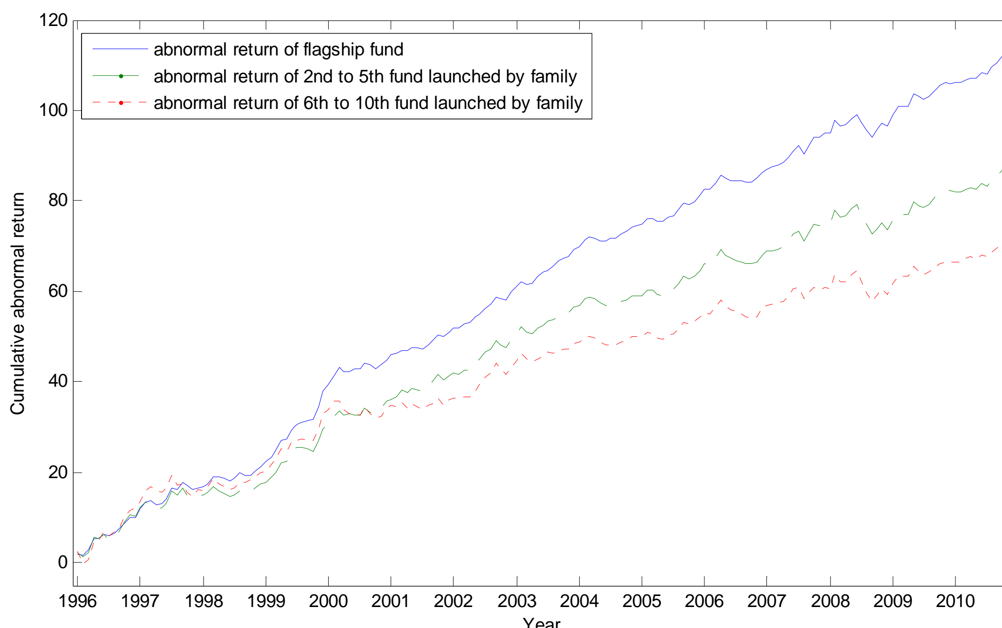


We find that based on raw returns, flagship funds outperform non-flagship funds. Relative to the funds in portfolios 2 to 10, the flagship portfolio outperforms by 1.89 percent per year (*t*-statistic = 4.33). One reason for this could be that flagship funds take on more risk than do non-flagship funds. To address this concern, we adjust for risk using the Fung and Hsieh (2004) 7-factor model and plot the cumulative abnormal returns of the portfolios in Figure 2. We find that on a risk-adjusted basis, the flagship fund portfolio continues to outperform. Relative to the aggregate non-flagship fund portfolio (the average of portfolios 2 to 10), the flagship fund portfolio outperforms by 2.28 percent per annum (*t*-statistic = 5.37) after adjusting for risk.

These results indicate that hedge fund families may be preserving the performance of their flagship funds. To dig deeper, we compare the average assets under management (AUM) of the flagships versus the average AUM of the funds in the other portfolios. We find that flagships are significantly smaller than non-flagships by US$24.95 million despite having been launched earlier than the non-flagships. This is consistent with the view that hedge fund families limit the capital raising activities of their flagship and divert capital to non-flagships as to preserve performance of the former.

[2] When more than one fund is launched in a single month, we average the returns of those funds to form a single fund and then place them into the relevant fund portfolio. The underlying assumption is they are duplicate share classes of essentially the same fund.

Figure 2: Risk-adjusted Returns of Flagship Fund versus non-Flagship Funds



Are there spillover effects from flagship funds to the other funds within the same fund family? Do hedge fund families have strong incentives to preserve the performance of their flagship funds? We examine the relationship between the performance of the flagship and the characteristics of other funds launched by the same family. The regression estimates in Table 1 indicate that funds launched by families with successful flagships tend to charge higher performance fees, set lengthier redemption periods, and require longer notification periods. The dependent variables in Panel A are monthly fund returns averaged over the past 2 years. Those in Panel B are monthly returns averaged over the past year. The estimates indicate that a 1 percent increase in fund returns per month over the last 2 years increases the performance fee of any new fund launched by 0.25 percent and the redemption period by 3.24 business days. Good flagship performance appears to engender positive spillover effects on other funds within the same family.

Table 1: Determinants of Non-Flagship Fund Fees and Redemption Terms

	Management fee	Performance fee	Redemption period	Notification period
Panel A				
Monthly return of flagship fund	0.003	**0.254**	**3.240**	0.616
averaged over last 2 yrs	(0.36)	(3.11)	(3.58)	(1.88)
Monthly return of other non-flag	0.016	0.002	2.232	-0.144
ship funds averaged over last 2 yrs	(1.06)	(0.02)	(1.47)	(-0.29)

Panel B				
Monthly return of flagship fund averaged over last yr	-0.008 (-1.39)	0.098 (1.71)	**1.782** (2.75)	**0.502** (2.19)
Monthly return of other non-flag ship averaged over last yr	0.012 (1.25)	0.058 (0.68)	0.566 (0.51)	-0.597 (-1.67)

To further investigate the impact of flagship performance on hedge fund families, we estimate regressions on fund flow for non-flagship funds. We explain the flow into these non-flagships with own fund performance, flagship performance, and the performance of other non-flagships within the same family. The results reported in Table 2 suggest that positive spillover effects on fund flows occur within a hedge fund family. Controlling for own fund returns and the returns of other non-flagships, the return of the flagship fund significantly impacts fund flows into non-flagships. A 1% increase in flagship average monthly returns over the last 12 months increases non-flagship fund flow by 0.8% in the next month (t-statistic = 2.44).

Table 2: Determinants of Fund Flow into Non-Flagship Funds

	Monthly fund flow into non-flagship fund
Month return of non-flagship fund averaged over last 12 months	**1.090** (32.64)
Monthly return of flagship fund averaged over last 12 months	**0.083** (2.44)
Month return averaged across other funds within the same family over last 12 months	-0.021 (-0.52)

Summary

The results thus far provide some initial insights into the industrial organization of the hedge fund business. We show that flagship funds outperform non-flagships by about 2.28 percent per year after adjusting for risk. Moreover fund families with stellar flagships are better placed to raise capital for their non-flagships and to launch funds that charge higher fees and set more onerous redemption terms. These findings suggest that hedge fund families protect the performance of their flagships as they have strong incentives for doing so.

Our findings echo those of Nanda, Wang, and Zheng (2004) who show that mutual fund star performance results in greater cash inflow to the fund and other funds in the family and those of Gaspar, Massa, and Matos (2006) who argue that mutual funds have incentives to cross-subsidize high value funds (i.e., those that charge high fees, performed well in the past, or were recently launched). We plan to expand on this line of research on hedge fund families in future work.

Reference

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Nanda, V., Wang, Z., Zheng, L., 2004. Family values and the star phenomenon: strategies of mutual fund families. Review of Financial Studies 17, 667-698.

Update on the Centre's Activities

Education

Our annual 2 and 1/2 day hedge fund executive education program will take place on 19-21 October 2011. It will be taught by renowned hedge fund expert Professor Bill Fung, visiting Research Professor in Finance from the London Business School who will share, among other things, his latest research findings on institutional quality hedge funds. To ground knowledge, real world Harvard Business School case studies will be discussed. The course will also feature, as guest speakers, prominent industry leaders, including Bart Broadman from Alphadyne, Stephen Diggle from Vulpes, Tan Chin Hwee from Apollo, and James Liu from OAKs family office. This is the third year that we are mounting the program and the comments from past participants have been exceptionally positive. In addition to round up the program, we will be organizing a half day conference on October 21 with speakers from several prominent macro funds in the region including Dymon Asia Capital, Fortress Asia Macro Fund, and Ortus Capital. To reserve a slot in this year's program, please email Ms Karyn Tai at hfc@smu.edu.sg.

Research

The centre director presented his research on the geography of hedge funds at the inaugural asset management conference at SMU on September 30.

Working versions of centre sponsored papers are available for download from our research webpage at http://www.smu.edu.sg/centres/hfc/research.asp

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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.