Riffled AI

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Yearning for warmer weather and closer proximity to her parents, Kasey Coook had taken a position as the chief investment officer with the Southern California Fire and Police Pension (SCFPP) almost five years ago. It was the perfect position for Kasey. Previously, she had spent over ten years at Cypress Tech, a successful hedge fund located in Greenwich, Connecticut. During her time at Cypress, Kasey had worked her way up from equity analyst to the head of global equity strategies. Her success had allowed for the move. That both of her parents had been police officers, made the position particularly special.

Since taking over in January of 2004, Kasey, with approval from the board, had implemented several strategic initiatives to alter the composition of the fund's asset portfolio, as well as its trading behavior. As a result, the fund had consistently outperformed its benchmarks and by a wide margin. The fund's growth made her and the sizable assets she managed a target for numerous investment pitches. In November of 2008, one pitch stood out, that from Riffled AI and its charming founder, Manfred "Manny" Forbad.

Southern California Fire and Police Pension

Founded in 1907, the SCFPP was one of the oldest public pension funds in the country. Their mandate was to administer the defined benefit retirement plan for all sworn (Fire, Police and certain Port Police and Airport Police) employees in the Southern California Counties of Los Angeles, Orange, and Ventura. Figure 1 provides map of these counties.

Figure 1. Southern California Counties

Table 1 provides 2007 pension fund membership information and population counts for the counties to give a sense of relative scale. In total, the fund was responsible for the retirement benefits almost

Table 1. SCFPP Membership and Service Regions

County	Population	Active Police	Active Fire	Total Members
Los Angeles	9,820,000	9,500	1,146	26,557
Ventura	800,000	1,352	601	3,549
Orange	3,000,000	1,512	1,023	3,852

34,000 members comprised of both active-duty officers and firefighters, as well as service and disabled pensioners, and qualified survivors.

SCFPP investment policy was codified in their total fund investment policy, a dry 60-page document that codified

> "…a framework for the management of SCFPP assets. The Policies outline objectives, benchmarks, restrictions and responsibilities so that the Committee, staff, consultants, managers, members, and beneficiaries, and all other SCFPP stakeholders, clearly understand the objectives and policies of the SCFPP investment program."

In a nutshell, the strategic objective for the pension fund was "to generate returns at an appropriate level of risk to provide members and beneficiaries with benefits as required by law."

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The size of the fund and regulatory requirements resulted in a broadly diversified portfolio. Table 2 presents information on SCFPP's asset allocation and strategy.

Table 2. SCFPP Asset Allocation

Asset class	Market value ($bil)	Current Allocation	Target	Historical Target
Cash equivalents	$ 0.5	0.8%	0.0%	0.0%
Global debt securities	$ 14.7	23.0%	20.0%	31.0%
Equity				
Domestic	$ 20.5	32.0%	34.0%	25.0%
International	$ 14.1	22.0%	24.0%	25.0%
Alternative investments/Private equity	$ 6.5	10.2%	10.0%	6.0%
Total equity	$ 41.1	64.2%	68.0%	56.0%
Real estate	$ 7.7	12.0%	12.0%	13.0%
Total fund	$ 64.0	100.0%	100.0%	100.0%

Source: SCFPP 2003 Annual Report.

As of June 2007, the fund was worth $64 billion, with much of that growth coming since Kasey's arrival. Though most of its assets were in equity investments, Kasey was determined to further increase the equity component of the fund. Her goal was 68% equity allocation – a sharp change from the historical target set by her predecessor. Since arriving, Kasey's decision to move more aggressively into domestic equity and alternative investments had paid off handsomely, as Figure 2 shows.

Figure 2. SCFPP Annual Investment Returns
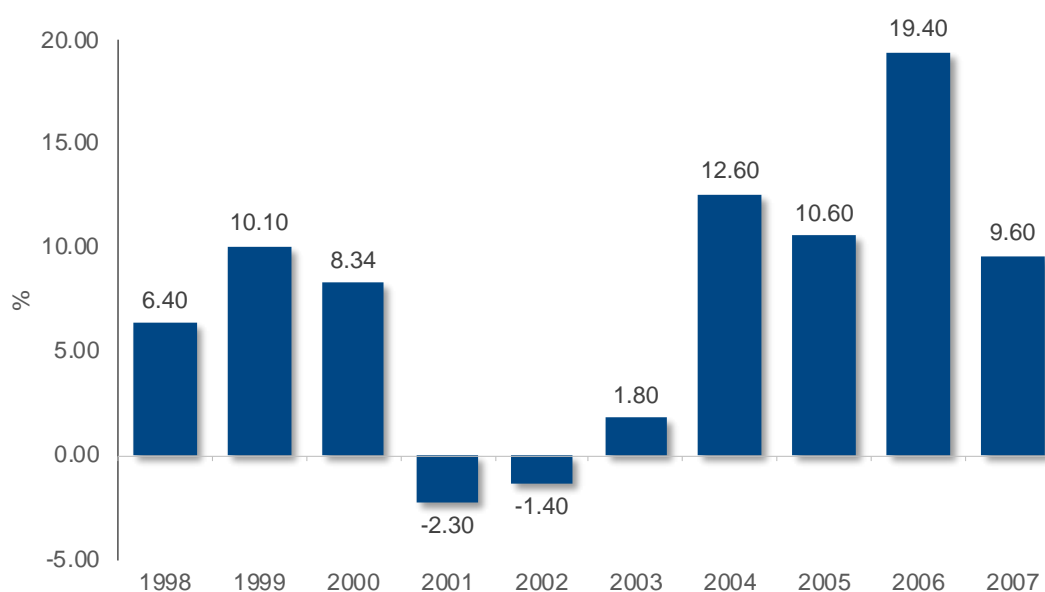
Source: SCFPP Annual Reports, 2000 – 2007.

The Pitch

Kasey was determined to achieve her allocation targets, particularly in the domestic equity space. With this agenda and the growing size of her fund, investment pitches were taking up a fair amount of her time. Having been on the other side for many years during her time at Cypress Tech, Kasey knew the drill inside and out. Consequently, the SCFPP process was standardized and efficient.

Fund managers had 10 to 15 minutes to impress Kasey and her team. Those that did received another 10 to 15 minutes to answer questions. Pitching Kasey was frequently a short and unpleasant experience for most fund managers. Kasey's record showed that she was among the most successful equity investors of the last two decades. Impressing her with equity investments was no small feat. As one hedge fund manager noted, pitching Kasey was like "like a mental hunger games in which she was Katniss."

When Manfred Forbad of Riffled AI stepped in front of the investment committee on the morning of February 8th, 2008, the vibe in the room was noticeably different, as was the pitch. Manny came alone – no colleagues – and was casually dressed – loafers and no jacket or tie. He had no slides or handouts. After introducing himself, he asked if he could sit instead of stand because he felt it was more conducive for a discussion and he preferred sitting to standing at his age. (He was 64.)

Manny knew Kasey's strategic vision for SCFPP and tailored his ten-minute presentation to emphasize how Riffled AI's FuMark fund was a perfect fit for her goals. The fund was focused on large-cap, domestic equites. In addition, the fund executed a strategy of rolling collars for "return enhancement and risk mitigation."[1] Direct leverage use was minimal, which further helped reduce volatility.

Kasey and her team pressed Manny for more information on his investment philosophy and future outlook, which Manny happily shared along with several entertaining anecdotes. Before leaving, Kasey asked if Manny would be willing to share historical fund performance data with her team. He was happy to oblige, in large part because he knew that Kasey could reverse engineer the information from

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[1] A collar is a derivative strategy is created by: (1) buying an out of the money put option, (2) selling a an out of the money call option, and (3) holding the underlying asset. The call and put options are referred to as a covered call and protective put, respectively. Because Mannie's asset holdings were large cap stocks, Kasey assumed that he was using S&P 100 index options to construct the collar. Because these options have a limited maturity, the strategy would require the purchase of new options as the existing options came due; hence the "rolling" nature of the strategy.

her contacts, many of whom were long-time investors in Manny's funds. Indeed, five minutes after the meeting broke, Kasey received an email from Riffled AI with a secure link to the data.

Riffled AI and Manny

Manfred Forbad grew up in Hoboken, New Jersey and came from a working-class background. Despite his humble beginnings, Manny had grand plans for a career in finance, which began in 1972 as trader with Shearson. In 1981, he started his own company, MF Capital, with offices in midtown Manhattan. Initially, money came from family and friends, some of it in the form of loans. Subsequent capital came from individuals, mostly through word of mouth, and institutions at which Manny had cultivated contacts over the years. Success was modest.

In 1990, he rebranded his company Riffled AI to reflect what he saw as the growing importance of information technology in the investment management space. He also put in place a strong fund-raising campaign that he spearheaded with seeming endless travel and phone calls. Over the next several years, Manny's efforts, coupled with the fund's strong performance, led to significant growth of the company and Manny's reputation.

By the time he pitched Kasey and her team, Riffled AI had over $30 billion in assets under management and Manny was well established in the investment management community. His client roster was something of an open secret, consisting of an impressive list of institutions and high net worth individuals. Indeed, Kasey knew of Manny well before he stepped into SCFPP's offices that February. Kasey and Manny were competitors while she was at Cypress Tech. They would occasionally interact at common social gatherings or industry events, but otherwise were not close.

Due Diligence

Before investing any money with third parties, SCFPPs investment team performed its own due diligence. This involved both formal and informal checks on the company, its employees, and its investment performance. While Kasey had a team of analysts, her real strength lied in her analytical origins. She enjoyed working with data and was good at it. Given Riffled AI's success and somewhat storied history, she was curious about its flagship fund's historical performance. So, she downloaded

the FuMark fund performance data, merged it with other financial series, and set off exploring to see if SCFPP should invest with Manny.[2]

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[2] Table 3 in the Appendix contains the data dictionary for the data.

Appendix

Table 3. Data Dictionary

Data filename: 20-riffled-ai.csv

Position	Variable	Data Type	Description	Source
0	date	date	Calendar date - end of month	Riffled AI
1	fsret	float	Monthly return to FuMark	Riffled AI
2	rm	float	Value-weighted return to all NYSE, NASDAQ, and AMEX listed stocks.	Ken French
3	rf	float	Yield on 30-day treasury bill	Ken French
4	smb	float	Small minus big factor portfolio return.	Ken French
5	hml	float	High minus low factor portfolio return.	Ken French
6	spidx	float	S&P 100 index level	Yahoo! Finance
7	rf_cts	float	Continuously compounded risk-free return	Lab
8	vol	float	CBOE S&P 100 Volatility Index: VXO	FRED
9	div_yld	float	S&P 500 annual dividend yield	Quandl
10	spretd	float	S&P 100 total return	Lab
11	spretx	float	S&P 100 price return	Yahoo! Finance

*Data sources: Ken French's Data Library, Yahoo! Finance, FRED, and Quandl. "Lab" refers to variables constructed from one or more of the aforementioned sources.
**See Eugene F. Fama and Kenneth R. French, 1992, The Cross-Section of Expected Stock Returns, *Journal of Finance* 67(2), 427-465 for more details concerning the construction of the *smb* and *hml* factor returns.