Institutional Investor's
alpha

Alpha Hedge Fund Hall of Fame

Interviews by Amanda Cantrell, Michael Peltz, Imogen Rose-Smith and Stephen Taub

THE SEVEN NEWEST MEMBERS OF THE HEDGE FUND HALL OF FAME — THE FIRST TO BE INDUCTED IN FIVE YEARS — HAVE INDELIBLY SHAPED THE INDUSTRY THEY HELPED TO BUILD.

"We couldn't be sure until we actually started trading whether our system would work as well as we expected. But it did."

DAVID SHAW

David Shaw has always considered himself a scientist first and foremost. When he decided in 1986 to leave his position teaching computer science at Columbia University to join the automated proprietary trading group at Morgan Stanley, he was attracted by the opportunity to try something different and the chance to significantly increase his net worth. Two years later Shaw left Wall Street, but he didn't return to academia. Instead, he hooked up with fellow Hall of Famer S. Donald Sussman, whose firm, Paloma Partners, staked him $28 million to start D.E. Shaw & Co., a quantitative-based hedge fund firm. Known as much for its secretiveness as for its consistently strong risk-adjusted returns (13.6 percent annualized after fees from 1989 through July 2013), D.E. Shaw made it cool to be a quant, recruiting top Ph.D.s in math, physics and other sciences to work on its sophisticated investment models and teaching them finance. Although D.E. Shaw endured its share of adversity, losing $200 million in proprietary capital in 1998 after the near-collapse of hedge fund firm Long-Term Capital Management, it has persevered by adhering to its founder's core values, putting integrity ahead of profits. Shaw has solved what is arguably the hedge fund industry's most challenging problem: management succession. By 2001, Shaw had transitioned himself out of the day-to-day management of the firm. Today it is run by a five-person executive committee, which oversees $31 billion in assets across a variety of quantitative and qualitative investment strategies. The 62-year-old Shaw has returned to his first love as chief scientist at D.E. Shaw Research, a 100-person lab he founded that is designing special-purpose supercomputers to simulate the motions of biologically relevant molecules.

Alpha: How did you persuade investors to give you money to start a quantitatively based hedge fund firm after just two years at Morgan Stanley?

Shaw: I was introduced to Donald Sussman, and he really understood this sort of thing. He believed in the power of quantitative methods, and he was willing to invest in developing techniques rather than just saying: "Here's money. Start managing it from day one." He said, "You know, I understand this is a research thing, and if you want to do this, you can have a year to hire people and do the research, and then start trading."

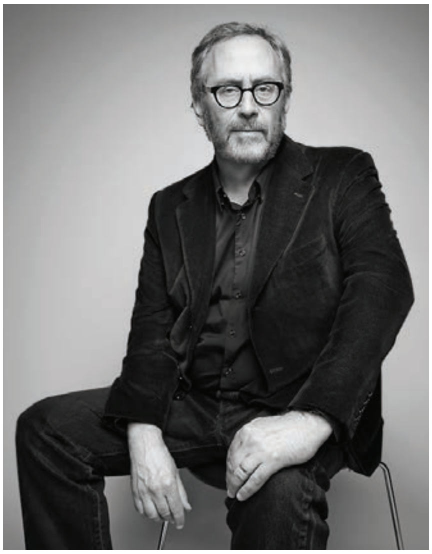
How did you know you were ready to start trading?

Well, we'd done a lot of work with historical data. We were working with a big database, and when we came up with a hypothesis for a model, we were very careful and made sure to test it on different data and not fall into the trap of overfitting the data, thinking that we had something real when it was in fact purely random. We had also done some live trading tests by that point just to make sure that if you placed an order, you'd get it at that price and not move the market too much. Still, we couldn't be sure until we actually started trading whether our system would work as well as we expected. But it did.

• Photographed by Mike McGregor on July 12, 2013, in New York, NY

What have been the main drivers of the D.E. Shaw group's success?
The people are by far the most important thing. The most obvious thing is that the firm is extremely selective in its hiring. The ratio of applications received to offers made is incredibly high. But there are also some very specific things that we cultivate in our people once they get here. One of them is a very rigorous way of thinking. This applies to all of our people — not just the quants but also the ones who are involved in qualitative strategies. There's also a very strong emphasis on clear, unambiguous communication. And then the other big one, which may sound like a cliché but which really is important around here, is a deep commitment to doing the right thing: staying away from gray areas when it comes to legal or ethical issues, treating each other in a way that's respectful, that sort of thing.

How would you describe the culture at D.E. Shaw?
One key thing is that it tends to be very cooperative. People who spend all their time lobbying for power and trying to advance their own interests find out pretty quickly that they don't fit in very well here. The people who do best here are the ones who are inclined toward cooperation and collaboration and who focus on the company as a whole, and that helps to shape the overall culture of the firm. One way this shows up is that people often share responsibilities. The most visible example is that the firm is run jointly by a five-person executive committee, not by a single individual. They're used to thinking first about what's best for the firm and not for themselves individually. It's a very unusual type of environment and culture. It really is.



DAVID SHAW
D.E. SHAW & CO.
FOUNDED IN 1988
$22.9 MILLION
(what $1 million invested on day one would be worth now)

Did the idea for the executive committee happen organically, or did you envision it when you were looking at how to transition yourself out of the firm?
We already had an executive committee during the days when I was directly involved in the operations of the firm, and we tended to reach decisions more or less by consensus most of the time even then. It wasn't the sort of thing where I'd say: "Thanks for the briefing. I'll tell you tomorrow what my decision is." So when I transitioned out of active management, it was a very natural thing to simply pass the baton to the executive committee. It's still kind of amazing to me that a company can run so well with this sort of shared leadership structure, but at least in our case, it really does.

Is that a reflection of the people in the roles?
Yes. All five members of the executive committee have been here for more than 20 years, and they have a shared vision of what the firm is all about. They trust each other, and they work really well together.

Do you think making money is less important at D.E. Shaw than it might be at other firms?
Certainly not in terms of the results we try to produce for our investors. But I think there may be a bit less of a focus among our employees on doing whatever it takes to get the largest share of the bonus pool so you can buy the largest yacht.

D.E. Shaw was once deemed one of the most secretive hedge fund firms. Do you think the firm was somewhat misunderstood because you didn't reveal a whole lot about what you did?
In the early days we really were unusually secretive. Back then we were just a quant shop, and the value was in our computational models and in the minds of the people who made them. If stuff had leaked out, that would have been really bad. Even small things could give people clues in the aggregate if a bunch of things leaked out. So I used to say to our people: "This is like you're in the CIA. You can't talk about any of this."

Did you get pressure from investors to give some insight into what you did?
Sometimes. In the early days, though, Donald was our main investor, so we didn't have to say much to anybody else for a while. Some years later, when we started accepting other investments, there were some investors who were used to getting more information about how different trading strategies worked than we could share with them. We ultimately figured out a way to give our investors enough transparency to make them comfortable while still protecting the integrity of our proprietary sources of alpha. Investors generally understood the reasons we couldn't tell them everything, and the feedback they gave us helped us figure out how we could provide them with the sort of information that was most important to them without killing the geese that were laying their golden eggs. As the firm grew we also added a number of investment activities that we could say a lot more about, like macro and distressed credit.

Do you miss the investment side of D.E. Shaw's business?
It was a great experience, but I'm really enjoying what I'm doing now, and I'm happy leaving the investing to other people. Every once in a while, I'll stumble on a new mathematical or computational technique in the academic world that seems like it might be applicable to quantitative investment management, and sometimes I'll say, "Hey, have you looked into this general area?" And usually the answer is something like, "We're already on it" or "We're not actively pursuing that for the following reason," so I don't wind up adding much value. But if our quants are always a step ahead of me, I guess that's a good sign.

The firm has a lot of cool things that it does, and I enjoy asking questions about them at our board meetings. But if I wanted to go back into investment management at this point, it would probably take me a year or two just to get back up to speed. And I don't feel any temptation to do that.

— Interview by Michael Peltz