

## Risk control central to hedging success

### Profile

**Cantab Capital Partners is not only proud of its returns, but also of meeting its volatility targets, says Sophia Grene**

Ewan Kirk looks extremely pleased with life, as well he might since his hedge fund, Cantab Capital Partners, based in Cambridge, England, returned nearly 50 per cent last year.

But this is not the source of his satisfaction: "Rather than the returns being what I'm proud of, it is that throughout the entirety of 2008, we controlled our risk," he says. The fund does not just target a volatility of 20 per cent, it meets that target.

Former Goldman Sachs partner Mr Kirk set up Cantab in 2006 and the hedge fund was launched in March 2007. "What we're trying to do at Cantab is make an environment where bright, smart mathematicians are working at the coalface," he says. To that end, he has some 14 PhDs working for him and says he is often given CVs by mathematicians on the verge of leaving academia. The Cambridge location is well chosen for recruitment purposes, as the university has an established tradition of encouraging its maths and science alumni to use it as an entrepreneurial launchpad. These

mathematicians spend their days developing and refining models of the financial markets designed to exploit the sources of alpha – profits over and above those due to the general growth of the market – using computer systems.

Mr Kirk, himself a PhD and former head of Goldman's quantitative strategies group in Europe, is not wedded to any particular model.

"We have a big diversified bucket of more than 20 models, each attempting to harvest a particular source of return," he explains. "Our job is to allocate capital between them. By having more than 20 models, we're reducing risk."

'The great thing about our models is they don't have an ego'

**Ewan Kirk  
Cantab**

His team starts with the assumption there are just three basic ways to dig out alpha. The first, holding illiquid assets such as private equity, is not for Cantab, which works only in very liquid markets.

Then there are momentum and reversion to mean strategies, the first using the principle that the likeliest price movement today is what happened yesterday and the second (which is applicable over longer periods), that eventually prices return to their historical trend levels.

Finally, there is the "carry" principle, says Mr Kirk. Using a term appropriated by currency traders, he defines "carry" as any strategy in which an investor buys and holds a security in the expectation of a higher return than the risk-free rate. In quant terms, this is likely to involve some form of arbitrage.

All the models written by Mr Kirk's team of mathematicians are based on these concepts. Although the fund is always invested in all of the models, the allocation can vary hugely as the market changes to favour one over another.

"The great thing about our models is they don't have an ego," says Mr Kirk, adding thoughtfully that "they also don't turn up to work drunk". It is unclear whether this is a comment on the usual working practices of mathematicians or investment bankers.

The lack of ego also serves as a buffer to prevent Cantab's hedgies from falling into some of the traps identified by behavioural finance. These include the asymmetry of attribution, Mr Kirk says: "If people lose, they attribute it to luck. If they win, it's skill."

As a quant, he is careful not to over-attribute his success to his own brilliance. "I am terrified of that form of triumphalism, where you have a good run and think you're a god of finance."

This is a self-flattering kind of modesty, similar to that which led him to establish the company in a small office at the unfashionable end of Cambridge, instead of

Mayfair, the usual haunt of hedge fund managers.

The decision puzzled some people, who warned him potential clients would never visit, but this has not proved a problem. So many visitors have treated the due diligence trip as an excuse for a day's sightseeing among the Cambridge colleges that Cantab has put together a pack of maps and leaflets, mostly pointing out famous mathematical and scientific spots.

The visitors were not only after a bit of culture, however. From a launch with \$30m (£21m, €23m), Cantab's assets under management have grown to \$600m, coming mainly from family offices and rich people. There is some way to go before it hits what Mr Kirk has identified as the capacity limit for the company in its current state, about \$2bn, but well above the level required to meet its fixed costs. Because of the choice of location and an emphasis on straight-through processing relying on software developed inhouse, Mr Kirk says \$150m would "keep the lights on", that is, pay for the running of the office with just the annual management charge. "It's the fixed costs that kill any business."

That level of assets may seem a long way away – in December, the fund saw \$40m of redemptions more than offset by \$100m in new money – but Mr Kirk is taking nothing for granted. "A few black months and we could lose quite a lot of assets."