

DRAFT ESSAY FOR LONDON REVIEW OF BOOKS

Hedge Funds

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You could walk around Mayfair all day, eyeing up the elegant town houses, the antique shops, boutiques and galleries – while you're strolling in Berkeley Square perhaps dropping in to the world's longest-established Bentley dealership – and not notice them. Hedge funds don't – can't – advertise. The most you'll see is a discrete nameplate or two.

An address in Mayfair counts in the world of hedge funds. It shows you're serious, and have the money and confidence to pay the world's most expensive commercial rents. A nondescript office no larger than a small flat can cost you £150,000 a year. Something that's bigger and that's in the contemporary style that hedge funds like (lots of glass rather than opaque walls, elegant contemporary furniture) can set you back a lot more. From that viewpoint, it's fortunate that hedge funds don't need a lot of space. Two rooms may be all they require: one for meetings, for example with potential investors; one for trading and doing the associated bookkeeping. Some funds consist of only four or five people. Even a fairly large fund can operate with no more than about twenty.

These small organisations control substantial amounts of capital. If a hedge fund manages less than \$100 million it's not seen as a big player; \$1 billion or so is

reasonably commonplace. The capital managed by the world's ten thousand or so hedge funds totals around \$2,000 billion. (Hedge funds don't have to divulge the details of their finances and operations, so no-one knows the exact numbers.) About a fifth of this money is managed by funds based in London, and two fifths by those based in the US, mostly in New York and its upmarket suburbs, especially Greenwich, Connecticut.

Physical and legal locations often differ. For tax reasons, the funds themselves are normally registered offshore, most usually in the Cayman Islands. What's located in the offices in Mayfair or Greenwich are the hedge-fund managers, the legally distinct firms or partnerships that control them. Hedge funds are often described as unregulated, but that's not quite right. For example, hedge-fund managers based in the UK have to register with the Financial Services Authority, and are bound by the latter's codes of market conduct. It is, for instance, just as illegal for an employee of or partner in a hedge fund based in London or New York to spread false rumours or indulge in insider trading as it is for someone working for a more conventional investment firm. Nevertheless, hedge funds still enjoy lighter regulation and considerably greater freedom of action than the investment companies that advertise in the financial pages of the newspapers.

The category of 'hedge fund' is the inadvertent creation of the wave of financial-market regulation that followed the 1929 crash and Great Depression. To avoid a repeat of the excesses of the 1920s, legislators in the US enacted a series of measures – the 1933 Securities Act, the 1934 Securities Exchange Act and the 1940 Investment Company Act – that amongst other things laid down what investment

companies that took money from the general public had to do and couldn't do. Two practices in particular were limited and/or prohibited: leverage (buying securities using borrowed money) and short selling (selling securities that the investment company does not own, for instance in the expectation their prices would fall. A short seller might, for example, borrow securities from their owner in exchange for a fee, sell them, and only later buy them in the market and return them.)

If you wanted to employ leverage or to short sell – which are characteristic features of what hedge funds do – you therefore had to make sure that legally you weren't classed as an investment company that was open to the public at large. That's, for example, the reason hedge funds can't advertise, and why they generally can take money from individuals only if they are 'accredited investors'. The US Securities and Exchange Commission's regulations define these as people with net assets of at least \$1 million and an annual income of \$200,000 or more. Indeed, in practice most hedge funds would have little interest in investors who only just meet those now fairly modest thresholds (they haven't been raised since 1982). While a new fund might accept a minimum investment of as little as \$250,000, established funds will usually demand much more than this – perhaps \$1 million, sometimes even \$10 million – thus limiting their clientele to the very wealthy.

Over time, the restrictions on what regulated investment companies can do have gradually become looser, but hedge funds remain distinct from them in other ways. The most noteworthy is the fee structure. In addition to a management fee typically set at 2 per cent – which is a bit higher than the fees of most conventional investment firms – hedge funds also charge a performance fee, usually 20 per cent of

profits, which has no real analogue in the mainstream investment world. (The performance fee is generally subject to a ‘high water mark’: if the fund has lost money in previous years, it must recoup those losses before it is able to impose the fee.) Indeed, a handful of especially favoured funds are able to charge even more. For example, Renaissance Technologies, founded by mathematician James Simon and based in East Setauket on Long Island’s affluent north shore, is reported to charge investors in its Medallion Fund a 5 per cent management fee and a 44 per cent performance fee, though I haven’t been able to confirm those figures.

To stop the performance fee being an incentive to take wild punts, hedge-fund investors generally want to be sure that the people who manage the fund themselves have hefty investments in it – half of a manager’s net worth was traditionally a typical requirement, though that seems recently to have eased – so that they suffer from losses as well as benefiting from gains. The combination of high fees and substantial personal investments means that the most successful hedge fund managers can make huge sums. Each year, the investment magazine *Alpha* publishes estimates of individual top earnings. Its most recent list, covering 2007, was headed by John Paulson of Paulson & Co., who earned \$3.7 billion by betting that the value of securities backed by US subprime mortgages would collapse. He was followed by George Soros, who made \$2.9 billion, and Renaissance Technologies’ James Simons at \$2.8 billion. These are figures far beyond even the most generous remuneration packages offered by banks or other public companies.

How do you get to run a hedge fund? Nearly all of those I’ve met who do this made their names as traders or managers in the big investment banks. Some simply

want to make more money, but often the motivations are more complex. A couple of years ago, one professional investor in hedge funds told me that ‘a lot of the people who are setting up the best hedge funds are ... doing this for perhaps slightly ego-driven and political reasons as much as anything else. They’re not doing it for the money: they’ve got their Bentley Continentals and their yachts ... so they’re going into it because they want to run something because they’re never, ever going to be the guy that sits right at the top [of an investment bank] because they can’t be bothered with the politics [i.e. organisational conflicts and jostling for promotion].’

Their previous careers in banks are often crucial to those trying to set up hedge funds. The accumulated bonuses they’ve received give them their initial stake, and they’ve built networks of contacts. Financial markets aren’t the atomistic, anonymous places portrayed in conventional economic models. Asked how he set up his fund, one manager told me: ‘you call your friends and, you know, just talk through your ideas’. If they are persuaded by the latter, those contacts may decide themselves to invest in the fund (if they have been successful, they too are likely to have substantial assets), and they also pass you on to other potential investors: ‘eventually you kind of pitch to people who allocate capital and if they like the idea they put money in; if they don’t then they send you on your way’. These investors will want to assess the personal characteristics of those pitching to them: asked how he actually knew what proportion of managers’ personal wealth was invested in their funds, one investor told me ‘it’s a look-in-the-eye part of it’. Professional allocators of capital will often phone people they trust who have worked with the aspirant founders of hedge funds. You’ll get phoned up, said a well-established hedge fund manager, and asked “do you know so-and so?” And if you say, “oh actually he’s a smart guy”,

that's good; if you say "I'd rather not comment" ... That's one of the ways it works, and because it's people ... coming from those five or six big companies [the leading investment banks] the funds of funds have a fairly easy job of checking up'.

As the name implies, funds of funds aggregate investors' capital and select hedge funds to which to allocate it. Investors who use them pay a further layer of fees – typically a 1 per cent management fee and 10 per cent performance fee – but avoid the onerous process of themselves deciding which funds to put their money in and having time-consuming face-to-face meetings with funds' managers. Direct investment by the rich and their family offices has been falling as a proportion of hedge funds' capital. It formed more than half of it in the 1990s; now it's a little less than a third, according to research by International Financial Services London. (In case any *LRB* readers don't have family offices, I should explain that they help keep the rich rich, by managing investments and minimising tax, as well as dealing with matters such as hiring and firing staff.) Funds of funds now provide a third of hedge funds' capital, with the remainder coming from pension funds, endowments, foundations and so on.

Ultimately, of course, investors in hedge funds judge them and those who run them by their returns: 'eventually just the numbers matter. The relationships matter for a little while', was how one hedge-fund manager put it. Investors want returns that are high and that ideally don't fluctuate too much, and many of them – especially the institutional investors such as pension funds – are also looking for returns that aren't highly correlated with stock markets, because they're already heavily invested there. It makes for an excellent pitch if you can plausibly promise that your hedge

fund's strategy will still be profitable when markets fall.

How do hedge funds make their money? What is generally regarded as the original hedge fund was A.W. Jones & Co., set up in 1949. Jones had a PhD in sociology from Columbia University but then became a financial journalist rather than pursuing academic work. His investment idea was what has become known as 'equity long/short'. By adding modest borrowing to let's say \$100,000 of investors' money, Jones might buy \$110,000-worth of the shares of companies he liked, while simultaneously short selling \$40,000 of shares of which he had a negative view. He was thus partially insulated ('hedged', hence 'hedge fund') against overall market movements. If, for instance, the overall market fell, the shares he had bought (his 'long positions', in market terminology) would lose money, but his short positions would gain because buying back borrowed shares would now be cheaper.

Equity long/short remains probably the single most common hedge fund strategy, at least amongst newcomers to the industry: it's a straightforward extension of the 'stock picking' that many conventional investment managers do anyway. Instead of simply avoiding shares that seem to have poor prospects, as they do, you actively bet against them by short selling them. Another relatively straightforward strategy is what is known as the 'carry trade'. This involves borrowing in a currency with low interest rates, such as the Japanese yen, and investing the proceeds in countries where interest rates are higher (Iceland, Hungary and New Zealand are amongst those that have been especially popular in recent years). It sounds like a free lunch, but of course it isn't: a rise in the value of the yen or a fall in the Icelandic króna or Hungarian forint can wipe out your profit or turn it into a loss. So carry

traders have to be ready to liquidate their positions very quickly indeed when exchange rates start to move adversely, and their doing so can greatly amplify those movements. This autumn's financial crisis has been marked by large increases in the value of the yen, almost certainly caused in part by the liquidation of carry trades.

Other strategies are more specialised, and the alumni of the top investment banks are more likely to be found pursuing them than simply doing carry trades. One example is 'fixed-income arbitrage'. 'Fixed-income' refers to bonds, which usually pay set amounts to their holders, and to financial instruments similar to bonds; 'arbitrage' means the exploitation of price discrepancies. This, for example, was the field of operation of Long-Term Capital Management (LTCM), the hedge fund at the heart of a serious but short-lived global crisis in 1998. While equity long/short demands only limited borrowing, fixed-income arbitrage requires higher levels of leverage. The discrepancies being exploited are small (typically corresponding to a difference in rates of return of a fraction of a percentage point), so the profit rates from trades are attractive only if boosted by financing them primarily by borrowing.

LTCM aside, specialist hedge-fund strategies such as fixed-income arbitrage generally attract little public attention. What's more likely to get into the newspapers, especially in Germany (where what they do is often controversial), are activist hedge funds such as Nathaniel Rothschild's Atticus. They buy a company's shares and then press for changes in how it is structured or run that they believe will increase the value of those shares. Occasionally even more prominent are 'macro' funds such as George Soros's Quantum Fund. These seek to predict and profit from large-scale economic changes, such as a substantial rise or fall in the US dollar or other currency.

The most famous hedge-fund trade of them all was the Quantum Fund's huge and enormously profitable September 1992 bet that the pound would fall in value.

Soros's \$10 billion short position in sterling was a major source of pressure on the currency, and helped precipitate 'Black Wednesday', the pound's forced departure from the Exchange Rate Mechanism.

In their everyday operations, hedge funds rely heavily upon two other categories of organisation. One is hedge fund administrators. These firms are often based in Dublin; Ireland has been notably successful in its push to attract this business, in part by offering low tax rates. Administrators keep track of a fund's trades, handle its accountancy and matters such as the movement of investors' money into and out of the fund, and perform regular valuations of the fund's portfolio. This last is a particularly crucial task because many hedge funds take positions in financial instruments that aren't traded on organised financial exchanges such as the London Stock Exchange, and for which fully reliable market prices therefore are not always available. Administrators are supposed to serve as an independent check that funds aren't boosting their performance fees by recording inflated valuations, or using price estimates that 'smooth' profits, in other words make them apparently less volatile and thus more attractive.

Hedge funds' trading desks are usually now continuously linked electronically to their administrators. This helps make it possible for hedge funds to manage huge portfolios with small numbers of staff, and the economies this kind of arrangement permits are a major reason the hedge-fund sector has grown so fast: as recently as 1990, there were fewer than a thousand funds worldwide, managing what now seems

a trifling \$25 billion.

The second category of organisation on which hedge funds depend is prime brokers. These are usually big international banks, and they typically hold funds' money and act as custodians of their portfolios, transferring money or securities when funds' trading demands it. (Again, all this is now automated, with funds' computer systems directly linked to those of their prime brokers.) Prime brokers are a major source of hedge funds' leverage: they lend to funds, often using securities in the fund's portfolio as collateral. A fund's prime broker is also usually the first port of call when a fund has sold short and needs to borrow the securities in question. Indeed, a fund's prime broker or other investment banks will often in effect do some of its trading for it, via what's called a 'total return swap'. For example, hedge funds weren't initially able directly to trade the European carbon-dioxide allowances that I discussed in *LRB* on 5 April 2007: if they did, they would have risked no longer falling within the Investment Management Exemption in UK tax law. (Introduced in 1995, the exemption protects the profits of offshore funds with British-based managers from UK taxation.) So a bank would hold a position in carbon for a fund, passing the gains and losses to it and charging what is in effect a fee for doing so.

Prime brokerage has been in recent years a major source of income for the leading investment banks, and it and other linkages make their fates and those of hedge funds tightly interwoven. This autumn the focus of attention has been on the troubles of banks, but hedge funds also have their vulnerabilities. The most obvious threat is investors withdrawing their capital, which can happen after even short periods of poor performance: as one manager told me, 'you've had one or two bad

months and you've got a redemption notice in'. It takes time for investors to get their money out – a requirement for ninety days' notice is common, and some funds successfully insist on lengthier 'lock-up' periods in which no redemptions are permitted – but once redemptions begin it can be hard for a hedge-fund manager to stop them. The need to liquidate positions to release the money required to meet redemptions can cause further losses, sparking further redemptions and a spiral of decline. In the interconnected, gossipy world of the financial markets, a hedge fund known to have suffered or to be facing significant redemptions can quickly seem very unattractive. Speaking of the leading partner in one hedge fund, a fund-of-funds manager told me: 'he's in a Regus office'. (Regus rents office space in its business centres on a short-term basis.) My informant was emphatic that I wasn't to name the unfortunate man. The fact that his fund could no longer pay rent at Mayfair levels would be seen as too damning.

Hedge funds can be drained of capital in ways other than by redemptions by investors. If you're doing something more complicated than just buying shares or bonds – and few hedge funds restrict themselves to that – trades often take the form of a contract between two parties that typically demands that collateral (cash or securities) be transferred between them, often daily, as market prices fluctuate in favour of one party or the other. These collateral transfers are a sensible precaution because they reduce the risk that someone will default on their contract with you at a point at which they owe you a lot of money: if they do, you can at least keep the collateral they've had to deposit with you. The result of the procedure, however, is that if market prices move against a hedge fund's positions it faces increasing demands for collateral. It's far from rare for this process to force hedge fund

managers to abandon their positions and incur the consequent losses, even in cases such as fixed-income arbitrage in which it's pretty certain that the adverse price movements will be temporary.

Prime brokers, too, can help kill hedge funds by reducing or withdrawing the credit available to them. If you're leveraged, and your source of borrowing dries up, you've generally no alternative but to liquidate your positions, again often at a loss. Gillian Tett of the *Financial Times* reports recent quiet conversations in which central bankers have been seeking to persuade prime brokers not to take away hedge funds' access to credit. The concern, of course, is with risks not to individual funds and their investors but to the financial system. The hedge fund sector as a whole had already recorded disappointing financial results in the first half of 2008, and this autumn's crisis has led to sharp losses for many funds. The restrictions on short selling imposed during the crisis worsened matters for hedge funds by making many of their strategies difficult or impossible to implement, and their investors now seem often to have started to feel that cash or government bonds are the only safe havens.

So large-scale redemptions have begun. On 27 October, *Alpha* magazine suggested that over the previous month hedge funds might in aggregate have received redemption notices totalling \$500 billion. Again, it's not the sort of number about which one can have any certainty, but if it's roughly right it means that by the end of January a quarter of the sector's capital base will have drained away. In that context, it may not be over-alarmist for Emmanuel Roman, joint chief executive of hedge-fund managers GLG Partners, to have warned an industry meeting that almost a third of hedge funds faced collapse.

That would be serious enough if the resultant fire-sale liquidations of positions were spread evenly across the financial system, but they're unlikely to be. Trading by hedge funds tends to cluster: in part because those following the same general strategy will often light upon the same opportunities (the number of attractive fixed-income price discrepancies, for example, is finite); in part because there's lots of chatter in markets about potentially profitable trades. It might seem that if you've discovered such a trade you would want to keep it to yourself, but that's often not so. Prudence requires that a bank or hedge fund not devote too much of its capital to a single trade – and, unfashionable as it may be to assert it, most banks and funds do try to control the risks they take (of course, that doesn't mean they always manage to do so). So once you've devoted as much of your capital to a trade as is prudent, there's nothing to be lost by telling others about the opportunity, and often quite a bit to be gained. If you've bought an asset you believe to be undervalued and short sold a similar asset you believe to be overvalued (and much hedge fund trading boils down to that), you actively want others to do the same. If they do, that will help the price of the asset you've bought to rise and the price of the asset you've sold short to fall.

The resultant situations, in which many hedge funds have similar or identical positions, are called 'consensus trades' or 'crowded trades' by those involved. Every so often these trades cause sudden, huge movements in prices that have little or no basis in economic fundamentals such as the prospects for the firm, sector or country at issue. In the last week of October, for example, Volkswagen briefly became the world's most valuable company by market capitalisation, but not because investors were suddenly struck by how attractive its range of vehicles was or by optimism for

the prospects of the motor industry. Rather, a consensus trade had gone disastrously wrong. Volkswagen's ordinary shares had started 2008 half as expensive again as its preference shares, and the difference had soared during the year. The holders of preference shares cannot take part in shareholder votes, and they receive a fixed rate of interest rather than the fluctuating dividends offered by ordinary shares, but they're both stakes in the same firm, and it seemed reasonable to conclude that the growing difference between their prices was an anomaly that would correct itself. So large numbers of hedge funds – some say as many as a hundred – bought Volkswagen's preference shares and short sold its ordinary shares. These matched long and short positions meant that the funds were insulated from overall fluctuations in the company's fortunes: it 'was meant to be a low-risk trade', as one London hedge fund manager told the *Financial Times*.

Unfortunately, Porsche, which already owns 42.6 per cent of Volkswagen's ordinary shares, had quietly been increasing its stake by buying call options (a call option is a contract that gives you the right to buy an asset at a fixed price). If it turns all those options into Volkswagen shares, Porsche will own 74.1 per cent of them, and the government of Lower Saxony owns a further 20.2 per cent that it's very unlikely to sell. That would therefore leave only 5.7 per cent of Volkswagen's ordinary shares available to be traded on the market. However, hedge funds and other traders had in aggregate short sold shares equivalent to 12.9 per cent of the total, and in consequence had obligations to buy and return them. Knowing this, they understandably panicked, and the resultant frantic efforts to buy Volkswagen shares caused their price to quadruple.

The forced unwinding of a consensus trade is not a pleasant business. Initial losses cause increased demands for collateral and can lead to redemption notices and to prime brokers and others restricting lending to the hedge funds involved. Weaker funds have to liquidate their positions; the resultant price movements cause further losses; and a downward spiral sets in. Losses incurred in one trade can contaminate other trades, as funds begin to have to sell assets across the board, and in consequence the prices of seemingly unrelated assets start to move in lockstep, undermining the apparent safety that diversification provides. This was, for example, the process that led to the 1998 crisis. LTCM had only a small stake in the consensus trade that started the downward spiral (investment in rouble-denominated Russian government bonds, on which Russia defaulted on 17 August 1998), but as I described in *LRB* on 13 April 2000, LTCM was fatally damaged by the resultant highly-correlated adverse price movements that took place around the globe and across a wide range of assets.

No single hedge fund seems currently to be in as pivotal a situation as LTCM was in 1998, but if the hedge fund sector continues to shrink as fast as recent reports suggest, then the liquidation of trading positions is likely to lead to further violent price movements and market disruption, particularly where there are consensus trades. Paradoxically, though, the dramatic events of this autumn may lead, over the next few years, to an even greater role for those hedge funds that survive. With so many banks having been bailed out by the world's tax payers, they'll be under considerable pressure from governments and regulators to concentrate on their core functions (such as receiving deposits, making loans to individuals and businesses, and processing payments) and reduce proprietary trading, in other words the trading of financial instruments purely to make a profit for the bank, not to serve the needs of

external customers. Even banks that haven't needed bailed out are moving in this direction: on 4 November, J.P. Morgan announced it was closing its global proprietary trading unit. As banks retreat from trading risky financial instruments, a potentially very profitable space will open up for those still prepared to do this, and hedge funds will step in to fill it.

6 November