SECOND DRAFT

'More dumb money than at any point in modern history'

In the mid 1980s, the short seller James Chanos began to realise he was being investigated. People were 'going through my garbage', he says. They didn't find anything incriminating: Chanos 'lives a 'nice quiet yuppie existence', said one of the private investigators, whose report ended up in the hands of the *Wall Street Journal*. That didn't stop Chanos losing his job at an investment house owned by a German bank. The *WSJ*'s story fingered him as central to what it called 'an ad hoc network of short sellers' in the US, who 'pick a stock, then sow doubt in an effort to depress it'. As Chanos told me, he 'was shown the door by my German masters'.

'Short selling' is selling shares or other financial instruments that you don't own, or own only temporarily, such as shares that have been borrowed from another investor. There are a number of reasons to do it, but the one that arouses ire is what Chanos was – and still is – doing: short selling shares that seem demonstrably overvalued. Perhaps the corporation's way of doing business has run out of steam, or its managers have surreptitiously been overstating its revenues and profits. If other investors came to realise this, the short seller will be able to buy the shares at a lower price before returning them, pocketing the difference in price. (The short seller doesn't have to give back exactly the same shares to the lender: except for a few special categories, a corporation's shares are identical and interchangeable.)

It seems to have been the managers of corporations that Chanos was short selling who paid for the investigation of him. But others too often attack short sellers. In September 2008, Alex Salmond, then Scotland's First Minister, lashed out at the 'bunch of short-selling spivs' he blamed for the falling price of shares in HBOS. (Alas, the spivs were right: were it not for the take-over by Lloyd's and then the tax payer bail-out, Halifax Bank of Scotland would most likely have collapsed.) As in 2008, when financial crises hit, short selling is often banned, in the hope – normally

forlorn – of stemming price falls. There can also seem to be something inherently fishy about selling things you don't actually own, or morally dubious in profiting from misfortune. Both Christianity and Islam, for example, have traditionally disapproved of short selling. In 2008, Rowan Williams spoke out against it, and his fellow archbishop John Sentamu compared short sellers to 'bank robbers'. (As is the way of such things, it transpired that the Church of England's pension fund was earning fees for lending out its holdings of shares to short sellers.)

Being denounced by an archbishop isn't the worse danger faced by short sellers. In December 1998, what *Barron's* described as 'several terrified investors' told the magazine and the police that they had been threatened with violent retribution for their alleged short selling of the shares of a US cable TV company. A year later, one of those who had spoken to *Barron's*, broker Maier Lehmann, was found dead in Colt's Neck, New Jersey with multiple gunshots to the head. (The apparent professional killing remains unsolved, and it seems as if there were other possible reasons for people wanting Lehmann dead.) British short seller Fraser Perring told *Bloomberg Markets* that in 2016, when he was sitting in his parked car outside his daughter's school, two men suddenly got in, made it clear that they knew a lot about his family, and quizzed him threateningly.

In December 2011, Kun Huang, a Chinese-Canadian researcher for Jon Carnes, who specialises in short selling Chinese companies, was arrested at Beijing Airport. He was placed under house arrest, and – after a one-day trial, held behind closed doors, on a charge of criminal defamation – spent a year in a cramped, foul cell that held over two dozen other prisoners. (A year after his release and return to Canada, he told the Toronto *Globe and Mail* that he was still traumatised, suffering flashbacks and bad dreams.) Carson Block, another short seller who initially focused on Chinese companies, told me that if he hadn't moved back to the US, 'I would probably be in a prison in China', or worse: 'there are several not great things that very well could've happened to me by now.'

In the relative safety of the US, short sellers still seem security-conscious – for example, it's sometimes hard to find the street addresses of their offices – but their more pressing concerns are economic. A pervasive issue is whether they can borrow shares to short sell, and if so at what cost. Although a firm called Equilend has developed a new electronic marketplace for stock borrowing, much lending still goes on 'over-the-counter', as market participants put it: by direct negotiation between institutions. This often involves deals between people who know each other well, but no-one lends out shares on a simple promise to return them: the borrower has to leave cash (or government bonds, or sometimes other assets) with the lender as surety. Cash is the most common form of collateral, and the norm in the US is to hand over 102 percent of the market value of the shares. Until the short seller returns them, the lender can earn interest on that cash. In the past, all the interest was kept by the lender, but in recent decades borrowers have usually been able to negotiate what's called a 'rebate': a share of the interest payments.

The fee that the lender earns (the 'borrow fee') is thus the interest on the collateral, minus the rebate. If the shares being borrowed are those of a big, heavily traded US or UK corporation, and not too many people are trying to short sell its shares, borrowing is easy and cheap: currently, the borrow fee is unlikely to exceed around 0.25-0.3 percent per year. A fee larger than that often indicates that, as market participants put it, a borrow is becoming 'warm', usually because demand from short sellers is growing. Warm, furthermore, can rapidly become very hot indeed, as borrow fees soar to 50 percent per year or more. In those cases, borrowers are having to make large, explicit payments to lenders, and the shares are said to be 'hard to borrow' or 'on special'. Short sellers also have to be wary of 'recall'. The lender of the shares has the right to demand them back at any point (with very limited notice). If their price has risen in the interim, even temporarily, a recall can inflict a nasty loss on the short seller. Their right of recall also enables lenders to increase the fee as a borrow becomes warmer: the short seller may get a phone call gently suggesting a higher fee.

To be a successful short seller you need therefore to understand what Chanos calls 'the plumbing' of lending. One of the partners in his firm, Kynikos Associates, has 'been on [Wall] Street for almost fifty years, and he has taught me all that I know about borrow, rebates, sourcing [finding shares to borrow] … he has a good sixth sense: even if something looks to be quite available and very liquid, that there's trouble down the pike. He's kept us out of a lot of situations where that's happened.' Short sellers also need to be wary of 'squeezes', in which a targeted corporation's managers, or other investors, deliberately push share prices upwards, in the hope of forcing short sellers to liquidate their positions at a loss. One good way of engineering a squeeze is for a corporation to announce a programme of buying back its own shares.

The basic skill a short seller must have is being able to identify shares that aren't simply overvalued but that can credibly be shown to be overvalued: you'll not succeed simply by having a hunch that the high prices of Apple's shares ($180 at the time of writing) or Facebook's ($185) can't possibly be justified. Chanos, for example, teaches his analysts to think of the information about a corporation as an onion: 'The outer layer is Wall Street stories and rumours. The next layer in is Wall Street research. The next … is company presentations … [then] company press releases. Then the final core of the onion [is] the mandated financial statements. Most investors work from the outside of the onion in; they never get to the core. I always stress to my people: start from the core, then work your way out'.

The numbers in firms' financial statements, though, aren't thought of by short sellers as being hard facts. They know only too well that there are many ways in which a corporation can tweak how it does its accounting so as to present a flattering view of its finances. More than any other skill, short sellers need a 'nose' for situations in which these tweaks add up to something worse than minor embellishment. Chanos's most famous 'short' was the energy company Enron, which eventually went bankrupt in spectacular fashion in December 2001.[1] The crucial moment was

[1] Donald MacKenzie wrote about Enron in the *LRB* of 22 May 2003.

in September 2000, when a contact in Dallas phoned to ask Chanos whether he had read an article in the *Wall Street Journal* by a journalist, Jonathan Weil, who specialises in accounting. Much of the profits being recorded by energy companies such as Enron, Weil reported, came from their estimates of the current market value of contracts to supply oil, gas or electricity that could stretch many years into the future. The companies, however, were supplying few details of how they were making these estimates. Chanos hadn't read Weil's article (with the companies in question based mainly in Houston, it appeared only in the Texas edition of the *WSJ*) so his contact faxed it to him. Chanos's nose twitched. As he later told the *Yale Alumni Magazine*, he spent much of that weekend poring over the details of Enron's financial statements, becoming increasingly convinced that an apparently highly profitable company with an enviable reputation for innovation was actually steadily losing money.

Often, though, there's a limit to how much you can learn by sitting at your desk reading the footnotes to corporations' income statements and balance sheets. Sometimes, a short seller has to become a field worker, 'talking to people at the loading dock', as Chanos puts it. Photographs, videos, sometimes even recordings of telephone calls can form part of the case that short sellers seek to build against corporations. Scour, for example, the website of Carson Block's firm, Muddy Waters Research, and you'll find lots of attention to the physical world: precipitous, hairpin mountain roads down which huge volumes of timber would have needed to be hauled; satellite images of the possibly crumbling walls of a giant opencast mine; a solitary lorry idling outside what one might have expected to be a busy factory.

The need credibly to demonstrate that a corporation's shares are overvalued creates similarities between short selling and investigative journalism. Indeed, Chanos's Kynikos Associates has hired several ex-journalists, including Jonathan Weil, the reporter whose story directed his attention to Enron. At the start of the 1980s, Chanos led the Forbes reporter Dick Stern through the tangled finances of Baldwin-United, which was Chanos's first short; the company was a piano-maker

which, at that point, had – somewhat bizarrely – diversified into insurance services. Twenty years later, a tip-off from Chanos helped *Fortune*'s Bethany McLean uncover Enron's growing troubles and in so doing become one of America's premier investigative reporters.

Two decades of decline of print media have, however, not been kind to investigative journalism. Short sellers in 2018 would count themselves lucky if they can find a Stern or a McLean, backed by a high-profile publication and able to spend months probing the affairs of a corporation that will most likely prove to be both opaque and litigious. Many short sellers have, therefore, abandoned Chanos's more discreet approach in favour of simply short selling a corporation's shares and then posting on their websites a detailed account of why they think its shares to be overpriced. The first short sellers to do this were Manuel Asensio's New York-based Asensio & Co. and Andrew Left's Citron Research, based in Los Angeles. ('Citron' is a joke, based on the US slang meaning of 'lemon', but Left is a deadly serious short seller.) Since 2008, Asensio and Left have been joined by around fifteen other firms, including Block's Muddy Waters, that operate in a similar way.

It might seem as if a short seller who uses the web to publish negative reports would be tempted to try to make quick profits by making flimsy or exaggerated accusations, but that seems in general not to be the case. For a 2014 National Bureau of Economic Research paper, economists Alexander Ljungqvist and Wenlan Qian painstakingly examined every report – on any corporation traded on US exchanges – published in a five-year period by any of the firms active in this kind of short selling. (They used the Internet Archive's Wayback Machine to check whether the firms had subsequently deleted reports from their websites; they hadn't.) On the day of a report's publication, the target corporation's shares fell by 8.2 percent on average. If the accusations were flimsy, one would expect a rapid reversal of the price fall, but that wasn't what the two economists found. Three months after the release of a report, the shares in question were down by an average 21.9 percent; a year on, by 56.8 percent. (Only reports that presented new fieldwork or accounting data had this kind of effect; re-interpretation of existing data seemed to be ignored. The short sellers'

reputations also mattered. Only those whose previous accusations had been confirmed seemed to be being listened to.)

These share-price declines, Ljungqvist and Qian found, were not the result of short sellers ganging up on target corporations. After the publication of a negative report from a reputable short seller, the fees for borrowing shares typically rise too much, too fast for this to be attractive. Rather, suggest Ljungqvist and Qian, short sellers' reports sparked price falls by causing mainstream institutional investors to revise their opinions of corporations and reduce or eliminate their holdings of their shares.

It's a remarkable finding. A set of fewer than twenty web-enabled short selling firms, all of them very small (as far as I can tell, the typical firm consists of a founder and a handful of assistants) were successfully puncturing the facades of major corporations, and sometimes even having them held to account: a quarter of the corporations covered by Ljungqvist and Qian's paper ended up under investigation by the US Department of Justice or the Securities and Exchange Commission. Indeed, if you are British, it's hard not to feel envious of the US when reading Ljungqvist and Qian's study. 'Angry directors … could go for you', says a UK-based short seller, and publishing in the UK reports of the kind posted by the US firms would risk catastrophic libel damages. ('We are snow leopards', he says, suggesting both the near-invisibility of specialists in short selling in the UK and their rarity. In the UK, short selling is usually just a side-line of those who make most of their money by buying shares they expect to go up in price.) In the US, the freedom-of-speech safeguards in libel law protect short sellers. It's not that US corporations don't sue, but, as Chanos told me, these suits are 'more a cost and hassle than a real legal risk'.

For all short sellers' successes in detecting fraud and having corporations held to account, the activity is of course no panacea. You can't, for example, hope to use it to curb the activities of companies that are big but legal polluters, have poor labour practices, or make their money from gambling or by selling cigarettes, pornography or guns. (If they're genuinely making

money, you'll just lose yours.) Nor is short selling effective against capitalism's big bubbles, such as the huge, indiscriminate surge in the prices of dotcom shares at the end of the 1990s. Even if you are certain it is a bubble, and you are right, you can't know when it will burst, and until it does you simply rack up stomach-churning losses. If you are managing other people's money, they'll want it back, and you'll have to abandon your short positions.

It's worth noting that Ljungqvist and Qian's data come from 2006-11. Since then, US share prices have doubled, driven not just by economic recovery but also by the cheap money resulting from low interest rates and the Federal Reserve's quantitative easing programme. Short sellers can relatively straightforwardly hedge themselves against an overall rise in stock prices, but they need other investors to take note of their findings about the corporations they are shorting, and an increasing proportion of the stock market is now made up of mechanistic buyers such as index funds, which simply buy the shares of all the corporations in an index. Furthermore, short sellers have on occasion suffered badly when the price of a stock they have short sold rises sharply because the company in question has become the subject of a takeover by a corporation that has failed to notice its problems. That 'is a big thing that could go wrong', says Carson Block: 'There is probably more dumb money out there than at any point in … modern history'.

A short seller in a world awash with dumb money can pay a psychological as well as an economic price. 'When I wake up in the morning', says Chanos, 'I know of eighty stocks that we're involved with, and at least twenty of them will be [being given a] "buy" rating [by stock market analysts], estimates [of profits] raised, CEOs on Bloomberg [TV], takeover rumours. It's mostly all noise, but it's there, it's every day and … it's the muzak of the investment business in the elevator: it's always on. … You're constantly being told you're wrong. … [M]ost people have a problem with that: life is too short; I want … positive reinforcement.' Sometimes, too, short sellers are drawn into draining, years-long public feuds, not just with corporate executives but with investors who take a

different view of the prospects of a corporation: that happened most recently with Herbalife, the controversial US distributor of nutritional supplements.

Indeed, it's hard sometimes not to think that most short sellers would have become richer, worked less hard, and suffered less psychological pressure, if they had chosen a career in conventional investment management. They would, however, have missed out on what Chanos calls the 'psychic income' of short selling. Recalling his first major 'short', Baldwin-United, Chanos says he 'loved the puzzle aspect of it', trying to figure out what exactly was wrong. Block, too, talks of solving a puzzle: 'There is the surface business, but then there is what's really going on. … Really trying to understand what they're doing, why they're doing it, how they're doing it: that's often the puzzle. My favourite thing … is [to] lie down and just really try to think about these things pretty deeply.' As any researcher knows, psychic income of that sort is priceless. It's good for the health of financial markets that short sellers can earn it.

Donald MacKenzie