Why Hedge Funds Matter: An interview with Jan Fichtner

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Jan Fichtner is Senior Research Fellow at CORPNET, University of Amsterdam, the Netherlands.[1] The CORPNET project set out to trace global networks of corporate control and their influence. Jan ran the subproject on the growth of passive asset managers. This focused on the growing influence of groups such as BlackRock, Vanguard and State Street on corporate governance and issues such as climate change mitigation. This project ran from 2015 to 2021. In early 2023 Jan joined the research project "Climate change and global finance at the crossroads" at the University of Witten/Herdecke, Germany, where he focuses on the role of private actors in shaping sustainable finance. Like several other recent interviewees, Jan's name is perhaps not that familiar to the economists among our readership, but that in itself tells you something about the significant absences in the field. Jan is one of the more interesting scholars working on finance, corporations, investment and power.

Jan's research interests are quite diverse, ranging over various aspects of financialization, as well as the claims of sustainable finance investment (which claims to use environmental, social and governance (ESG) factors in its evaluations), the role of offshore finance centres etc.[2] However, my primary motivation in organizing this interview was to discuss with Jan the role hedge funds play in the modern world. In mainstream economics, hedge funds fall under the remit of quantitative finance and, as will become clear later, most of the work done focuses on a narrow set of issues, typically some combination of the status of hedge funds from the point of view of prospective investors in "alternative investment management" and/or testing some standard economic concept – notably efficiency. This tells one little about the power of hedge funds in the world. There is, of course, work on this in "critical finance", political economy and global or international political economy, but it is remarkable how little interest economists take in hedge funds.[3] So, a major reason for conducting this interview has been to discuss for a general academic reader, what a hedge fund "is", what they "do" and what "impact" they have. As

[1] Visit: https://orcid.org/0000-0001-7675-400X and
https://scholar.google.com/citations?user=e0I38IYAAAAJ&hl=en

[2] For example: Babic, Fichtner and Heemskerk (2017, 2022); Fichtner (2013a, 2013b, 2014, 2015, 2016, 2017, 2020); Fichtner and Heemskerk (2020); Fichtner, Heemskerk and Garcia-Bernardo (2017a); Galaz, Crona, Dauriach, Jouffray, Österblom and Fichtner (2018); Garcia-Bernardo, Fichtner, Takes and Heemskerk (2017a); Mueller, Paulick, Fichtner and Wittenmayer (2016); Petry, Fichtner and Heemskerk (2021); Fichtner, Jaspert and Petry (2023).

[3] For a range of sources on hedge funds over the years see: Cumming, Johan and Wood (2021); Edwards (1999); Fung and Hsieh (1999, 2006); Ibbotson, Chen and Zhu (2011); Kellard, Millo, Simon and Engel (2017); Lack (2012); Lo (2010); Lowenstein (2002); Lysandrou (2011); Neely (2022); Stulz (2007).

such, this interview complements those undertaken with Rosemary Batt on private equity finance and Andrew P. Baker on the form and limits of post-GFC changes in financial regulation.[4]

Jan graduated BA in International Relations from the University of Sussex in 2004, received an MA in International Relations jointly from Free University Berlin, Humboldt University Berlin and University of Potsdam in 2007, and was awarded a PhD for a thesis titled "The Anglo-Americanization of Global Finance: The Case of Hedge Funds" from Goethe University Frankfurt in 2014. He has worked as Research Fellow at various universities and since 2015 he has combined this with work at Deutsche Bundesbank, Frankfurt, as a Collateral and Securities Markets Specialist. Over the years Jan has published various papers on hedge funds and, in addition to a series of papers in academic journals such as *Review of International Political Economy, Competition & Change* and *Economy and Society*, Jan and his collaborators work has appeared in *The Conversation* and similar media outlets.[5]

His work can be accessed at: https://www.jfichtner.net

He is interviewed by Jamie Morgan for *RWER*.

Jamie: Before we begin in earnest, following on from the introduction, it might be worth providing a little scene-setting to give readers a sense of why hedge funds are so important…

Jan: Well, until the 1990s, hedge funds were niche financial players known only to a small group of specialists and professionals in the industry. During the whole 1990s their assets under management remained below $200 billion globally – a small fraction of total global financial markets. By 2007 this had changed. Right before the global financial crisis, their assets under management had reached a new all-time high of well over $2,000 billion. According to some sources, it took until 2016 – another nine years – for the industry to exceed this high. Again, according to some measures, the global hedge fund industry currently (2022 to early 2023) has about $5,000 billion of assets under management. However, it is not the size of the assets under management that makes hedge funds so interesting and influential in today's global financial markets but rather their unique ability to invest anywhere and in anything. But perhaps we can talk about this after discussing the basic characteristics of these financial actors.

Jamie: I will just pick out a couple of things here to give readers some further context. The Alternative Investment Management Association (AIMA) maintains an education page which provides selected statistics from the Preqin database.[6] According to the page in early 2023, there were 8,084 hedge fund managers and 24,769 funds in the database. Most of the managers (5306) are located in North America, with the rest distributed between Europe (1383), Asia (1007) and elsewhere.

Jan: The AIMA website also reports global assets under management at $4,336 billion split mainly between North America ($3,453 billion) and Europe ($673 billion). Hence, North America accounts for almost 80% of all hedge fund assets – quite a remarkable concentration in one single region. The

[4] Baker and Morgan (2021); Batt and Morgan (2020).

[5] Babic, Fichtner and Heemskerk (2018); Fichtner (2018); Fichtner, Heemskerk and Garcia-Bernardo (2017b); Fichtner, Heemskerk and Petry (2020a, 2020b); Garcia-Bernardo, Fichtner, Takes and Heemskerk (2017b).

[6] Visit: https://www.aima.org/educate/hedge-fund-industry-data.html

difference in AUM figures to my previous comment is a reminder that hedge fund reporting to databases is voluntary and no database is comprehensive. In the US, however, hedge funds have to report some basic data to the SEC since 2012.[7] According to these "Private Funds Statistics", in mid-2022 there were around 9,600 hedge funds with $5,150 billion in assets under management.[8] So, while the individual databases differ slightly, we have a fairly good general overview of the global hedge fund industry.

Jamie: At least for some purposes… We should probably also point out that while there are many hedge funds, most of the investment and assets under management are concentrated with a few hedge fund managers. According to a report by Preqin in 2017, 701 of the hedge fund managers reporting to their database had assets under management greater than $1 billion and this accounted for 88% of total recorded assets at that time.[9] Within this total, 21 hedge fund managers reported assets under management exceeding $20 billion. The general trends since then tend to indicate the concentration of investment and assets with a few managers has continued and amplified.

Jan: Yes, according to the SEC data, the top 500 hedge funds accounted for about 56% of all assets in 2022.[10] You can get a sense of the size of the largest funds from the *Pension & Investments* website. They publish an annual top-100 (sometimes a few more) hedge fund managers by AUM. In June 2022 Bridgewater Associates was the largest at $126.4 billion.[11] But while the assets under management of the largest hedge funds seem objectively large, this also needs proper context. The global giant of index-tracking exchange traded funds (ETFs) BlackRock managed about $10 trillion in 2021. The value of the entire stock markets worldwide is roughly $120 trillion, the total value of international bond markets is in the same ballpark. Compared to these huge numbers the assets that hedge funds manage seem relatively small. That can be misleading though. It is not just the balance sheet value of the assets that hedge funds manage that matters but more how they manage them and what impact this can have on publicly listed companies or even financial markets as a whole.

Jamie: Yes, this is something we should come back to later. But for the moment we might note that research over the years tends to indicate that hedge funds are the most active traders on most financial markets in the world, and that activity constitutes a significant proportion of daily trading in public equity markets (shares), securities markets (sovereign, municipal and corporate bonds), debt instruments and derivatives.

Jan: That's right, in standard "finance speak" they play a major role in generating liquidity in financial markets and in the determination of prices. This is not new. I've already mentioned hedge funds approached a first peak in the years prior to the global financial crisis. This provoked the interest of economics journals, and the *Journal of Economic Perspectives* published a piece on hedge funds in 2007.

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[7] Note from Jamie, for a contemporary comment on this see the SEC speech by Norm Champ: https://www.sec.gov/news/speech/2012-spch051112nchtm

[8] Note from Jan: visit: https://www.sec.gov/divisions/investment/private-funds-statistics. The latest data at time of writing was published January 2023 and refers to mid-2022: https://www.sec.gov/divisions/investment/private-funds-statistics/private-funds-statistics-2022-q2.pdf

[9] Visit: Preqin-Hedge-Fund-Spotlight-May-2017

[10] Note from Jan: However, some aspects of hedge fund activity are much more concentrated. For instance, the top ten funds accounted for 34% of all hedge fund borrowings.

[11] Visit: Largest Hedge Fund Managers 2022 | Pensions & Investments (pionline.com)

Jamie: This is an American Economics Association journal that typically commissions essays, often to provide overviews on some new or significant phenomenon or issue…

Jan: In the essay René Stulz writes, citing existing research, "The importance of hedge funds in the daily life of financial markets does not make the same headlines, but hedge funds now account for close to half the trading on the New York and London stock exchanges (Anderson, 2006a)." (Stulz, 2007: 175).[12]

Jamie: There are numerous others that have noted similar things. In 2009 Tim Sangston, an analyst at the consultancy firm Greenwich Associates, estimated on the basis of a sampling process that hedge fund trading activity peaked in 2007 at 29% of all US fixed income asset trading, 80% of high yield credit derivatives, 20% of mortgage-backed securities and 29% of trade volumes in US government bonds.

Jan: That's right. The Financial Stability Forum also mentions Greenwich Associates research but makes the more fundamental point in 2007 that "Although their aggregate assets under management are small relative to those of more traditional institutional investors and to the total size of equity and debt markets, their share of trading volume in many market segments, particularly more complex ones, is much larger than their share of assets." (FSF, 2007: p. 8).[13]

Jamie: As readers probably know the Financial Stability Forum was reorganized in 2009 as the Financial Stability Board (FSB) – a multilateral international financial institution (hosted by the Bank for International Settlements) that provides advice on regulation of aspects of the finance system…

Jan: The point though is that hedge funds have become one of the most important financial actors. They are among the very few financial actors that are able to influence prices in financial markets – and occasionally they have been able to move markets significantly. Their various strategies and activities can have multiple controversial consequences, and this is also something we can go on to discuss.

Jamie: Ok, now that we've created some brief context…

Jan: There is one other thing we ought to mention here and that is the earnings of the top hedge fund managers. While there are many people working in or for hedge funds who don't earn vast amounts, there are a few who do, and their earnings far exceed those of top bankers that grab the headlines for annual "compensation".[14]

Jamie: That's right. The *Institutional Investor* publishes an annual league table of top hedge fund managers earnings. The latest data at time of interview was from March 2022 and reported that "Altogether, the 25 highest-earning hedge fund managers earned a combined $26.64 billion last year, the second-highest amount in the history of the Rich List… Over the past two years, the members of the Rich List's First Team have made more than $58 billion combined."[15]

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[12] Available: https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.21.2.175

[13] Available: https://www.fsb.org/wp-content/uploads/r_0705.pdf

[14] Note from Jamie, for an old but available example of the wide range of pay in hedge funds for different types of employment and status see: https://www.hfr.com/sites/default/files/pdf/2016HFCR_sample.pdf

[15] Visit: https://www.institutionalinvestor.com/article/b1x32qsnv8x91g/The-Rich-List-The-21st-Annual-Ranking-of-the-Highest-Earning-Hedge-Fund-Managers

Jan: For comparison: top Bank CEOs in the United States earn between $15-25 million a year – and Jamie Dimon of JPMorgan Chase made about $80 million in 2021 if options are included. However, top hedge fund managers earn far more, sometimes a few *billion* per year.

Jamie: If we tabulate the top ten for 2021 (reported 2022)…

Top 10 highest earning hedge fund managers 2021 (reported March 2022)		
	Hedge Fund	Earnings
1. Jim Simons	Renaissance Technologies	**$3.4bn**
2. Israel (Izzy) Englander	Millennium Management	**$3.1bn**
3. Kenneth Griffin	Citadel	**$2.5bn**
4. Christopher Hohn	TCI Fund Management	**$2.2bn**
5. Karthik Sarma	SRS Investment Management	**$2bn**
6. David Tepper	Appaloosa Management	**$1.6bn**
7. Steven Cohen	Point72 Asset Management	**$1.4bn**
8. Daniel Sundheim	D1 Capital Partners	**$1bn**
9. Daniel Loeb	Third Point	**$920m**
10. Ray Dalio	Bridgewater Associates	**$900m**

OK. Let's take a step back and start to explain some of the terminology. In your 2013 paper in *Momentum Quarterly* you provide a history of hedge funds and break this down into two periods, the 1940s to the 1970s and then the 1980s onwards. For our purposes though it is probably best to start with a simple explanation of what a hedge fund "is". There are various ways one might do this: a simple schematic breakdown, a comparison to private equity finance (the other main form of "alternative investment management") and by comparison to "mutual funds" (i.e. the standard investment management format in some well-known regulatory jurisdiction like the US)…

Jan: As you say there are lots of different ways one might try to define and introduce what a hedge fund "is". Part of the problem is that there is no globally accepted legal definition.[16] You mentioned the Alternative Investment Management Association previously. Together with private equity funds, hedge funds are often referred to as "alternative investment managers". This places them in opposition to "normal" investment managers or mutual funds. The basis of this opposition is that hedge funds try to position themselves in terms of available regulatory opportunity in order to give them the ability to charge higher fees, use more leverage and various financial instruments, and to undertake, with fewer restrictions or prohibitions, a wide range of investment strategies.

Jamie: Keeping in mind that most countries have regulations that (at least in principle) are designed to protect ordinary members of the public when they invest – so there is regulation to limit the fees an investment manager might charge, and then various requirements for transparency and accountability which affect the types of risk an investment manager can take with your money (in turn affecting what

[16] See, for example, Nabilou (2017).

they can invest in, how they invest and what they are required to report to some designated regulatory oversight organization)…

Jan: That's right. Hedge funds typically use exemptions (or "safe harbour" provisions as they are often called) to position themselves outside of standard regulation and, to reiterate, the contrast is with an ordinary investment management organization to which that regulation applies (mutual funds etc.) …

Jamie: So, it's not that they are in any simple sense "unregulated", it is that (neo-liberalised financial) regulation provides scope for hedge funds to position themselves in relation to that regulation and in some cases beyond its scope.

Jan: While this is correct, whenever a hedge fund undertakes some financial activity on a financial market it will usually be bound by the same requirements as any other financial organization when undertaking that activity.[17] It is also the case that regulatory positioning can involve careful selection of where to locate to take advantage of regulation (and to arbitrage between regulatory jurisdictions). One of the reasons why hedge funds are so difficult to define is that different hedge funds will use these opportunities in very different ways and to different degrees.[18] Hedge funds have a reputation for secrecy, but they also have to consider reputation and trust, otherwise soliciting capital from investors might be difficult. So, there are potential trade-offs.

Jamie: OK, that gives us a starting point and we can come back to both the types of strategies involved and the issue of how hedge funds position themselves in terms of regulation. It might be useful to first break down and clarify how hedge funds structure their activity in its simplest terms… As I understand it, and keeping in mind this is to generalise about something you have already suggested is diverse, hedge fund managers (who may be part of a larger group or partnership) solicit capital for a legally separate fund and use this, often in combination with leverage, to undertake an investment strategy, and that investment strategy forms part of the marketing for the solicitation of capital…

Jan: Yes, the setup as a legally separate private fund applies to most hedge funds – although the details can vary depending on the respective legal domicile that the fund has chosen. In many cases the hedge fund manager (often by using a limited liability company) becomes the general partner (GP) and the investors become limited partners (LPs). The GP is responsible for running the fund, which includes devising investment and trading strategies, choosing key service providers etc.

Jamie: So, if we refer to some of the statistics that we provided at the beginning, the recent Preqin data refers to 8,084 hedge fund managers and 24,769 funds. And (which I didn't mention) the earlier data from 2017 for the larger hedge funds notes that the 701 management firms between them operated 5007 funds. Moreover, research tends to indicate that funds are continually being opened and closed.

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[17] Note from Jamie: for example, historically in the US, hedge funds are not exempt from 13D filing, which requires an organization to notify the SEC within 10 days if it acquires more than 5% "beneficial holding" in the equity of a public corporation listed on a SEC regulated exchange (like the NYSE). And they are not exempt from 13F filing (reported quarterly), which requires any entity including HF with more than $100 million assets under management held "long" on US securities to disclose holdings (but not "short" positions).

[18] Note from Jamie: the archetype is in terms of US financial regulation. So, a hedge fund may choose to exploit exemptions that render it a non-advisor, non-trader, non-investment company, non-broker-dealer etc, since all of these invoke some statutory situation and regulation. For a useful summary of how hedge funds were regulated in terms of UK membership of the EU prior to Brexit (which nicely illustrates some of the issues) visit: https://uk.practicallaw.thomsonreuters.com/w-009-9984?contextData=(sc.Default)&transitionType=Default&firstPage=true

According to reports (quite old now) in the *Financial Times*, the average lifespan of a fund is 5 years and one third of funds fail or close within a 3 year period.[19] So, while there is trend growth in the number of funds, there is significant churn in the make-up of those funds.

Jan: If we run with that. Hedge fund managers may create multiple funds, either for different investment strategies or as a set of linked entities ("feeder funds") that separate out investors for tax purposes for one "master fund". Also, noting what we have said about regulation and location selection, the legal location of the hedge fund manager's firm and the funds very often differ from the actual location of management. Many funds are legally domiciled in the Cayman Islands or Delaware, while the hedge fund managers are concentrated in big financial centres such as New York and London.

It is a remarkable feature of the hedge fund industry that it is highly concentrated in English-speaking, or Anglophone, countries. Legally, as I have just mentioned, the majority of hedge funds are domiciled in the Cayman Islands, a small archipelago in the Caribbean that is under British sovereignty; other popular legal domiciles include Bermuda and the British Virgin Islands – both also under British sovereignty. Being a British Overseas Territory has provided Cayman with the necessary political stability while British common law has facilitated trust in the legal system. At the same time, offshore financial centres such as Cayman have provided hedge funds with zero taxes, secrecy, and lax standards – in 2011 the *Financial Times* reported that a small group of people were sitting on the boards of hundreds of hedge funds as supposedly 'independent' directors. One person was even a board member of over 500 Cayman hedge funds.[20]

The hedge fund managers that take all the strategic decisions are mainly concentrated in just two countries – the United States and the United Kingdom. (Again) within these two countries New York and London are the dominant centres for hedge fund managers. The extreme concentration of global hedge fund managers in these two agglomerations, with the possible exception of the investment banking industry, seems unparalleled. We might come back to the "economic geography" of hedge funds after talking about how they structure themselves.

We've mentioned exemptions. Because many hedge funds pursue very risky investment strategies not just any small retail investor (ordinary members of the public) can invest in a hedge fund. In general, LPs must be institutional investors or high-net-worth individuals (HNWI) that have $1 million or more in liquid financial assets. In the United States, hedge funds are normally by law restricted to "sophisticated investors", which despite the phrasing tends to mean they can afford losses associated with higher risk and less regulated activity, rather than (given the opaque nature of many investment strategies and the limited information disclosure) they fully understand what they have invested in. Quite often hedge fund managers also invest some of their own capital in the fund. I would also emphasise that the GP is exercising management control over the fund. LPs are typically "passive". The role of the LPs is just to invest in the fund, they have little or sometimes even no control over the management of the fund.

Jamie: That's quite a lot to take in. Let's pivot to compare to private equity to see if that provides some clarity. Hedge funds then, like private equity are structured into parts. If we run with the comparison to private equity, it, at least the most common and familiar variety which undertakes leveraged buyouts (LBOs) of whole companies, can be broken down into an originating private equity finance firm and separate solicited fund(s) of capital from investors. The private equity firm provides the general partner (GP) for the fund. The firm solicits capital from HNWI and institutional investors, which becomes the

[19] Visit: https://www.ft.com/content/826d5434-5785-3334-bb7a-0eb003770ebb

[20] Visit: https://www.ft.com/content/913e31b6-114a-11e1-a95c-00144feabdc0

equity in the legally separate fund and then this is used in conjunction with debt to LBO companies. These acquisitions become "portfolio companies" which are then operationally and financially restructured before being sold on, usually within 3 to 5 years. GPs manage the fund and make all investment decisions and the investors or limited partners (LPs) play no role other than to receive returns on investment (or suffer the losses). Similarly, hedge funds consist in specialist financial investment managers who solicit capital for separate funds, and these are then used for some designated investment strategy, and again there is a distinction between the GP and LPs…

Jan: While this comparison is often made, in reality, there is not an absolutely clear legal or operational distinction between private equity and hedge funds. There can be some degree of overlap in terms of what they do. Some big finance firms, such as Blackstone, the largest global alternative asset manager, operate both hedge funds and private equity (not to be confused with BlackRock, which I previously mentioned and which is the largest global asset manager, primarily due to its dominance in burgeoning passive index funds).

Jamie: The difference in status of the fund is probably worth highlighting here too. Private equity finance funds tend to be fixed period – often 10 years. Hedge funds are usually more flexible, and investors can and do withdraw their money subject to a notice period.

Jan: There is usually an initial lock in period when investing in a hedge fund and after that redemption can sometimes be a controversial subject, especially during periods of stress. If several large investors try to withdraw their money in quick succession this may materially affect the fund (since it may need to sell assets and unwind positions and in falling markets or illiquid investments this can crystalise losses). In these circumstances hedge funds have applied "freezes", preventing redemption (but there is an obvious conflict here, given they may have incentives to exercise this power in a failing fund…). This can end in court.

More importantly what many private equity and hedge funds have in common is use of the "two and twenty" fee model. The "two" means that the fund charges investors an annual fee of two percent of their invested assets to manage the fund. This annual fee can also be much higher for seemingly "elite" funds but can also be lower for funds that do not have this prestige.

Jamie: It's probably worth noting here just how lucrative that annual management fee can be. If an investor invests $1 million with a hedge fund and pays an annual fee of 2% ($20,000), then over ten years that would amount to $200,000 or 20% of the original investment. If the investment were $1 billion, then the equivalent is $200 million… The largest hedge funds are in the billions of dollars.

Jan: The figures are large, but the calculations are not necessarily that simple. It is also worth noting that some hedge funds, especially the most "active traders", incur significant trading costs (execution, brokerage etc.) and most hedge funds incur ancillary costs from administration and various services they require (IT, research, legal/compliance, custodianship, marketing, backroom staff etc.).

In any case, the annual management fee level is much higher than those of actively managed mutual funds (typically around one percent) or passively managed index funds (which can be one tenth of one percent or even lower). What really sets hedge funds apart is the second component of this fee model. The "twenty" (which again can be higher or lower in practice) refers to the performance fee of 20% of returns made by the hedge fund above a certain predefined benchmark.

Jamie: There are two additional terms we might mention here. First, "hurdle" is the term often used to refer to the predefined benchmark. This is the percentage return level the hedge fund must exceed

before the GP is entitled to a performance fee. It is usually set at some percentage that is a step higher than an investor might expect to get from a low-risk investment. Second, hedge funds typically use a "high-water mark" system. This just means the value of portfolio assets must exceed the previous high in order for a new performance fee to be applied. If $1 million is turned into $2 million and a performance fee is applied and then the investment falls back to $1 million, a new performance fee cannot be charged until the value exceeds $2 million again… This protects against double-charging.

Jan: That is correct, but the main point remains that the performance fee is exceptionally high in the two and twenty fee model. This unique performance fee is the reason why some very successful hedge fund managers have, as your table makes very clear, become billionaires themselves – which would be impossible for managers of mutual funds or the vast majority of CEOs for that matter. Critics of hedge funds thus often ask "where are the customers yachts?".[21] A study by Simon Lack (2012), for example, found that from 1998 to 2010 hedge fund managers pocketed a staggering 84% to 98% of all returns generated by the entire hedge fund industry.

Jamie: Lack as I recall has various explanations for why the total is such a high proportion (issues like investors not withdrawing their full share of returns as dividend payments prior to the collapse in value of any given fund and so on)…

Jan: In any case, I am not aware of a more recent study on this key aspect but would think that the managers still benefit much more from hedge funds than the investors.

Jamie: And presumably, in order to justify high fees, hedge funds must be claiming to make superior returns to standard investments in stock markets?

Jan: Yes, indeed. Proponents of the hedge fund industry argue that what sets these funds apart from most other kinds of funds is their ability to (always) generate higher returns than the broad stock markets. The stated goal of most hedge funds is to produce absolute noncorrelated returns or, in industry parlance, "alpha".

Jamie: Absolute (with the high-water mark in mind) in the sense that the claim is that returns are not merely relative, measurement of returns is of increases over past performance (the return is real rather than apparent – though clearly there are many accounting devices and manipulations that may apply). Non-correlated in the sense that hedge funds claim their returns are not simply tracking the average movement of public markets. They may be exploiting those market movements but claim to be generating returns irrespective of whether markets are rising or falling. And alpha?

Jan: Alpha basically is a coefficient that measures the excess return on an investment compared to the general market index or other relevant broad benchmark. In standard theory of finance, Beta refers to the general movement of the market. The implication is that there is some added value attributable to the hedge fund (the investment skills of its GP, the return generating power of its proprietary trading strategy etc.). There are lots of technical measures of this and a great deal of dispute regarding whether alpha really exists and what it is based on – and from a technical point of view a lot of this turns on what to take into account for "risk adjustment". More simply, Warren Buffett's well-known wager, for example, raises a lot of questions for hedge funds and alpha.

[21] Note from Jan: the term came into use from the title of Fred Schwed's book *Where are the Customers' Yachts?* in 1940.

Jamie: Warren Buffett, as most readers are likely aware, is the multi-billionaire founder of the Berkshire Hathaway conglomerate holding company. He's a well-known sceptic regarding the claims hedge funds make that they generate consistent outsize returns. And the wager was?

Jan: Buffett recounts the events in his 2017 annual letter to Hathaway shareholders (pp. 21-24). In his 2005 letter he criticised high fee active investing (of which hedge funds are an obvious example).[22] This turned into a challenge to anyone to choose five high fee active investing funds (hedge funds) and demonstrate that their returns would beat a passive index tracker over ten years. He chose the S&P 500 Index Fund as the comparator and placed a $500,000 wager on the LongBets.org platform. Eventually in 2008 Ted Seides of Protege Partners accepted Buffett's bet. Buffett originally expected that a hedge fund would accept the challenge and include their own funds. Seides, however, picked five funds-of-funds hedge funds, which are funds that themselves invest in a variety of different hedge funds (and that also add another small fee layer). In 2017 it became clear that all five funds-of-funds hedge funds underperformed the S&P 500 index funds by a large margin and the bet was conceded early.

Jamie: Buffett provides a telling table (p. 22):

Year	Fund of Funds A	Fund of Funds B	Fund of Funds C	Fund of Funds D	Fund of Funds E	S&P Index Fund
2008	-16.5%	-22.3%	-21.3%	-29.3%	-30.1%	-37.0%
2009	11.3%	14.5%	21.4%	16.5%	16.8%	26.6%
2010	5.9%	6.8%	13.3%	4.9%	11.9%	15.1%
2011	-6.3%	-1.3%	5.9%	-6.3%	-2.8%	2.1%
2012	3.4%	9.6%	5.7%	6.2%	9.1%	16.0%
2013	10.5%	15.2%	8.8%	14.2%	14.4%	32.3%
2014	4.7%	4.0%	18.9%	0.7%	-2.1%	13.6%
2015	1.6%	2.5%	5.4%	1.4%	-5.0%	1.4%
2016	-2.9%	1.7%	-1.4%	2.5%	4.4%	11.9%
Gain to Date	8.7%	28.3%	62.8%	2.9%	7.5%	85.4%

Footnote: Under my agreement with Protégé Partners, the names of these funds-of-funds have never been publicly disclosed. I, however, see their annual audits.

Jan: While not a comprehensive and carefully formulated test of alpha, Buffett's wager does pose an obvious challenge to hedge funds' claims.[23]

Jamie: And yet investors continue to invest… which does raise the issue of why?

Jan: I think there are lots of possible reasons – fear of missing out, as we will probably illustrate later some hedge funds do earn spectacular returns, if not necessarily consistently, and some investors probably do earn major returns especially over a few years (the bet was 10 years), hedge fund solicitation has professionalised via personal networks, organisations like AIMA put a lot of resources into persuading institutional investors and continue to provide different evidence and to dispute criticisms, and most large institutional investors treat hedge funds as a small but significant part of the

[22] Visit: https://www.berkshirehathaway.com/letters/2016ltr.pdf

[23] Note from Jamie, for Seides response see https://www.bloomberg.com/view/articles/2017-05-03/why-i-lost-my-bet-with-warren-buffett See also Wilson and Willis (2017).

risk diversity of a portfolio despite it not necessarily doing as well as claimed. In any case, the more hedge funds there are the less likely it becomes they can all be beating the market.

Jamie: Which was one of Buffett's main points. The issue of returns does, of course, also raise the more basic issue of tension in mainstream theory of finance. If financial markets really are "efficient" alpha ought to be impossible, but the failure to achieve alpha does not in and of itself imply markets are efficient (since the concept might be dubious to begin with). This bears some more discussion, but before we do that, let's turn to the range of investment strategies hedge funds undertake. Databases often categorise funds by their investment strategy. We've mentioned Preqin already, but there are others, as well as additional reporting platforms that draw on their data. While you note the first hedge funds began as early as the 1940s the first databases tracking reported performance and various other metrics came much later. The Credit Suisse Hedge Fund index, for example, has been through various incarnations (Tremont etc. and may be about to go through another in 2023) and started reporting in 1994 (presumably because of an increase in the number of hedge funds, availability of data and advances in computerisation).[24] Categorisation of strategies can vary from database to database, but several categories are common to all…

Jan: Yes, databases typically create categories and then report the number of hedge funds registered that fall into each category; their capital under management and returns by category. The main fund strategy categories are: equity; events based; global macro; fixed income; and then various exotic or catch-all categories (as well as, as previously mentioned, funds-of-funds).

Jamie: Let's start with equity…

Jan: Historically the very first hedge funds were equity funds, and the equity category is still what most people think of when they think of hedge funds. The term originates with Alfred W. Jones in the 1940s and came to wider attention through an article in Fortune magazine in 1966. [25] Jones referred to his approach as a "hedged fund".

An equity hedge fund, as the name suggests, invests in the shares of publicly listed companies. The strategy combines long positions and short positions. A long position is a selection of shares in companies chosen with the intention of making a return when its market price increases (so, the hedge fund is betting these shares will rise). A short position is a selection of shares in companies chosen with the intention of making a return when its market price decreases (so, the hedge fund is betting these shares will fall).

Shorting can be achieved in various ways. The simplest explanation (the one usually found when newspapers write about shorting) is that a hedge fund borrows the shares they want to short and contracts to return an equivalent number of those shares to the owner on a given future day (institutional investors hold large positions in shares and these are available to borrow for a small fee). The hedge fund then sells the shares and then at a future point in time buys an equivalent amount back. If the price of the shares has fallen the hedge fund profits by the difference between what they sold the shares for and what they bought them back at, less the fee. So, if a hedge fund borrowed 10 shares and sold them into the market at $10 each, they would have $100; if the market price then fell to $5 the hedge fund

[24] Note from Jamie: visit https://lab.credit-suisse.com/ - /en/home

[25] Note from Jamie: the article in Fortune magazine in 1966 which brought hedge funds to the attention of the world is archived: http://fortune.com/2015/12/29/hedge-funds-fortune-1966/. Also visit: https://www.preqin.com/academy/lesson-3-hedge-funds/history-of-the-hedge-fund-industry

buys back 10 shares for $50 and returns them to the original owner, creating a return of $50 minus the fee. One problem, of course, is that while there is a maximum return that can be made (since the price of the share cannot fall further than almost zero) there is no maximum loss that can be made (given the shares can in theory rise in value to any number above the original $10).

Jamie: Though hedge funds can (and in some places may be required by regulators) to avoid this kind of "naked short". They can, for example, try to achieve their aim using derivatives. Derivatives can also be used to place a limit on losses. In your example, the hedge fund could also buy a call option for 10 shares at $11 with a contract that can be exercised the day the original shares need to be returned to the owner. The call option (which they don't have to exercise) acts as an insurance policy and places an upper limit on the loss of $1 per share (plus fees).

Jan: That's right and there are various other ways the hedge fund might use derivatives to achieve their long and short positions at least cost. In general, equity hedge funds restrict themselves to small stakes in listed companies, below 5% of issued shares. Large short positions, for example, may have to be reported to regulators.

Hedge funds will likely also borrow money to amplify ("leverage") the returns on the strategy. The more debt used relative to the fund's own money, then the bigger the return that can be generated and the greater the mathematical effect on return on investment. Leverage varies a lot and tends to increase when credit is cheaper and easier to attain. Historically Alfred Jones was very risk-averse, but hedge funds are typically "aggressive" risk-takers today. But the point remains, an equity strategy hedge fund combines long and short positions and uses these to generate returns…

Jamie: And as I understand it, there are different ways to combine long and short positions and these too can be categorised. A balanced or "market neutral" equity strategy, for example, constructs a portfolio in which the initial value of all long positions is matched to the initial value of all short positions. So, if both sets of investments follow the general market trend (long positions change according to the trend and short positions change according to the trend) then the losses on one side will be matched by the gains on the other based on the total portfolio. The hedge fund is neither winning nor losing based on the market trend. The hedge fund, of course, plans to generate returns, so the implication is that it is the *selection* of stocks that don't follow the trend or *beat* the trend that creates returns for the hedge fund: profitable shorts, profitable longs**…** (the "alpha").

Jan: If we return to Alfred Jones, the idea is that one selects supposedly undervalued shares to invest long and supposedly overvalued shares to invest short and the goal was to develop a fund whose performance ("alpha") was protected (or "hedged") against the general movement of the market ("beta"). A market neutral hedge fund rebalances its portfolio periodically (resetting to neutral), but there are other strategies. Most of the time it makes sense to exploit the direction of travel of the market, and since markets are generally increasing, hedge funds will tend to overweight long compared to short.

Jamie: So, few hedge fund are, therefore, market neutral?

Jan: That's right, they tend to be long/short, but there are also hedge funds who specialise in short positions, and it is also important to keep in mind that hedging doesn't mean a hedge fund is immune from losses.

Jamie: But the general category of equity funds encompasses a wide variety of hedge funds?[26]

Jan: Yes, and not only this, the selection process applied to shares can be quite diverse. You mentioned right at the beginning that in my 2013 paper I broke the history of hedge funds down into two periods, the 1940s to the 1970s and then the 1980s onwards. In the first period many hedge funds were "stock pickers" and invested in a handful of stocks of companies they believed are undervalued or about to grow rapidly. From the 1940s to roughly the late 1970s these "hedged" funds dominated the global hedge fund industry. The technological potentials are now far greater, but some hedge funds will still be using "fundamentals", which means they engage in extensive research into the company, its business model, its plans, its place in its sector and its prospects.

Jamie: Which assumes there is a "true" value for a share, a highly contentious issue.

Jan: Irrespective, the aim is to forecast a share's likely future price trend. While some hedge funds still pursue traditional research on individual companies, others employ dozens of very smart PhDs (often recruited from maths, physics or evolutionary biology) to develop sophisticated models and trading strategies.

Jamie: So, while equity hedge funds were originally selecting shares by undertaking research in "fundamentals" (as it is termed in finance) today many are using some kind of quantitative system to forecast price movements. For example, statistical arbitrage by mean reversion identifies shares which tend to over and underreact around a moving average as new information emerges in markets, these are then paired as long and shorts – generating returns on the average via movements around averages.

Jan: This strategy still depends on data for individual shares and sector categories of stock markets. Still others will use some version of technical analysis which simply uses patterns in market movements to predict future movements. Obviously, the further one gets from "fundamentals" the less one can say the hedge fund is overly focused on whether a share is "overvalued or undervalued" in any meaningful sense (rather than is just differently valued), hence my use of "supposedly" earlier.

Jamie: I suppose high frequency trading is another step along the road away from any knowledge about the companies being traded… I guess an important point to make here is that if hedge fund strategies applied within the same general category of strategy (in this case equities) can be so diverse then the aggregated data provided for categories in databases is probably not very informative.

Jan: Yes, what the average hedge fund is "doing" in a category is probably not a very useful concept. It seems unlikely that many investors rely on this alone in selecting a fund. Moreover, hedge funds seem to respond to fashions in finance.

Jamie: In recent years that has been funds claiming to be using AI and machine learning based strategies and, of course, trading cryptocurrency assets.

[26] Note from Jamie: "bear raiders" create a short position in a company they think is vulnerable and then publish their own analysis of its weaknesses. If their market analysis is picked up, then the share price may fall… There are obvious issues here regarding how valid the analysis is, and issues can quickly shade into accusations of variants of privileged information problems… "Bear raiders" fall somewhere between equity hedge fund categories and events (activist) ones. See later and also Hosking (2019).

Jan: Keep in mind hedge funds have to compete for investment funds and this means there can be a motive to open and solicit new funds claiming to use the latest methods and focus on the latest strategies and area of finance. This takes hedge funds far from the original basis of Alfred Jones's approach. And very little of this involves "hedging" in the original meaning of that word.

If we return to my two periods distinction. After the abolition of capital controls by the United States and the United Kingdom in the 1970s and the liberalization and deregulation of their domestic financial systems in the 1980s, hedge funds expanded their activities significantly – both in geographical scope but also in terms of new segments of financial markets and new strategies.

Jamie: This seems an appropriate point at which to introduce events-based hedge funds. These are hedge funds whose strategy tries to profit from some specific corporate "event", and this typically means undertaking research and analysis in a particular company and identifying vulnerabilities and targeting these. Debt-distress funds buy up discounted debt of a company and then exploit the power this gives them, merger arbitrage funds look to identify companies (before anyone else) looking to take over other companies, and on the assumption that share price movements in the two will diverge once news of the acquisition emerges, they create a position (perhaps shorting one and going long on the other); but perhaps the highest profile events hedge fund are the activists…

Jan: Activism is not new, and not undertaken solely by hedge funds but it is certainly the segment that has attracted a lot of public attention in the past. The aim is to target a company, buy up its shares and build a position large enough for the hedge fund to put pressure on the current corporate management.[27] While, as I mentioned earlier, equity hedge funds restrict themselves to small stakes in listed companies, often below 5% of issued shares (and are not seeking any kind of profile) activists want publicity and controversy. Sometimes multiple activist hedge funds team up to form what are called "wolf packs" to take on larger "prey", so to speak.

Jamie: I've also heard this referred to as "swarming"…

Jan: The typical aim is to force the company to change its strategy, which can take several forms: to radically cut costs, to pay a big (special) dividend to the shareholders, to begin a large share buyback program (elevating the share price, after which the hedge fund exits its position) or to sell divisions not deemed to be part of the "core competency" of the firm (again generating cash to return to shareholders).

Jamie: So, they are looking for opportunities to pressurise management, suggesting current management are not representing shareholders best interests or are underperforming in some way…

Jan: Yes, indeed. The most common claim is that the target company has "excess cash" that should, in one way or another, be distributed to shareholders. If you allow me, I could share with readers an interesting anecdote from my research. In the early 2010s I interviewed a few companies that had been targeted by activist hedge funds. One target was a medium-sized German firm that was active in an industry that faced a technological paradigm shift at that time. The firm had saved a lot of money in order to develop new technologies and a radically new business model that was fit for the new era.

[27] Note from Jamie: there is a terminological ambiguity here that might lead to confusion. All hedge funds are in a sense "active investors" insofar as they pursue strategies, creating positions and intervening in markets. The language use attaches to their higher fees (see Buffett's wager). Activist hedge funds, meanwhile, is one of several categorisations of hedge funds (and as noted databases have a range of ways of ordering their categories and subcategories using such terms).

Jamie: So, they were creating scope to invest in research and restructuring…

Jan: Apparently, the hedge fund had identified the firm as a suitable target among thousands of publicly listed firms around the world solely based on the quantitative finding of "excess cash" on the balance sheet. The CEO of the firm told me that while he was in New York during a corporate "road show" to institutional investors, the hedge fund invited him to their office. During the meeting the hedge fund manager demanded that the CEO agree to a special dividend to investors. When the CEO disagreed, the fund manager reportedly took an ancient rifle from the wood-decorated wall and said: "CEOs that don't cooperate get shot in the knee."

Jamie: Not exactly textbook procedure…

Jan: I don't know if the CEO had exaggerated aspects of his conversation with the hedge fund manager in order to provide a memorable story; but it does convey an underlying insight. Activist hedge funds are relentless and ruthless once they spot an opportunity. Some hedge funds clearly constitute the most agile and the most aggressive investors out there. This can, however, raise interesting and quite surprising issues. For example, in 2021 the activist hedge fund Engine No. 1 forced the election of new board members with expertise in sustainability issues against the will of the top management of ExxonMobil (and notably with the support of major shareholders including BlackRock, Vanguard and State Street).[28]

Jamie: Organizations you have a particular research interest in…

Jan: Yes, indeed. It certainly was a bit surprising at the time to see large asset managers such as BlackRock and Vanguard supporting such a small and unknown activist hedge fund against an oil major such as ExxonMobil. While the episode increased the visibility of climate change and sustainability issues in corporate governance, in hindsight we can say that it remained a one-off action, probably with the aim to paint a public picture of caring about "green" issues.

Jamie: Activists though, as we've mentioned a couple of times, are the ones you are most likely to see in the business press on a regular basis (since this can be part of their tactics). In early 2023 *The Times* newspaper, for example, reported research from Lazard identifying the most active of activists in recent years and specifically for 2022. According to the article:

Annual activist global activity 2018-2022	Campaigns launched	Selected Top Activists 2022	Campaigns launched
2018	249	Elliot Management	13
2019	209	Starboard Value	7
2020	184	Ancora Advisors	6
2021	173	Third Point	5
2022	235	Icahn Associates	5

Source: Martin (2023)

The consequences for activists' targets are also much debated by researchers: do the firms they target become more effective investors (in R&D and so on), bigger employers, more valuable, profitable etc. afterwards (and what does this suggest in different contexts…).

[28] Note from Jamie: see for example, https://www.blackrock.com/corporate/literature/press-release/blk-vote-bulletin-exxon-may-2021.pdf

Jan: A lot of research indicates any gains are shareholder-centric and short-lived, while there are often long-term impacts on other stakeholders…[29]

Jamie: OK, let's move on to fixed income hedge fund strategies. These specialise in investing in bonds (sovereign, municipal or corporate). Would you say they are similar in their practices to equity hedge funds?

Jan: In some ways. Many fixed income hedge funds try to identify and exploit "mispricing" of securities. They use arbitrage and this takes two typical forms. First, arbitrage between high yield (high risk) and low yield (low risk) securities. For example, historically some countries' securities tend to be periodically slightly overvalued because they are deemed low risk (especially high-quality assets used throughout the finance system for liquidity management, such as long dated US Treasuries), while others tend to be periodically undervalued because they are deemed higher risk (such as Russian sovereign debt) – the details and justifications of this matter less than the observation that this happens. So, some hedge funds create portfolios designed to profit from "price corrections" in these two differently behaving sets of securities, often through interest rate swaps derivatives. Others look for mispricing in convertible bonds – these are securities that can be converted at a fixed price into shares in the company that issues them. For most readers the former is likely familiar from the collapse of the hedge fund Long Term Capital Management (LTCM) in the late 1990s, though arguably the problem with LTCM was that it was massively overleveraged.

Jamie: There are several good summaries of what happened (e.g., Edwards 1999; Lowenstein 2002).[30] LTCM was founded in 1994 with $1.25 billion in funding (and $100 million provided by the GPs) – original investors were required to put in at least $10 million with no withdrawals in the first three years. The fund had 16 general partners, including former Salomon Brothers bond trader John Meriwether, and "Nobel prize" (Swedish Bank prize) winning economists Myron Scholes and Robert Merton. Given what happened it is somewhat ironic that they were awarded the prize (in 1997) for their contributions to formalising derivatives pricing.[31]

The fund used a massively leveraged version of fixed income arbitrage and in 1998 had about $5 billion in equity, but borrowed more than $125 billion (a leverage ratio of more than 20:1). It came to grief because it had a long position on high yield (high risk) securities and a short position on low yield (low risk) securities (much of this constructed using derivatives whose notional value at the start of 1998 was over $1 trillion, including interest rate swaps). The East Asian financial crisis of 1997 and then Russian debt default in 1998 started a "flight to safety" which meant the value of low yield securities (US treasuries etc) continued to rise and high yield securities continued to fall (the opposite of LTCM's bet – yield spreads widened rather than narrowed). As with any massively leveraged position, the fund's equity base was too small to cover its rapidly changing financial position, and such a large failure would be a major impairment to banks that had financed the hedge fund. Moreover, since LTCM was a major

[29] For issues see Part III Cumming, Johan and Wood (2021). For examples of research see Cremers, Masconale and Sepe (2016); Desjardine and Durand (2020); Brav, Jiang and Kim (2010, 2015); Brav, Jiang, Ma and Tian (2018). Brav and collaborators are broadly supportive of HF activism. See also the Forbes profile on Carl Ichan https://www.forbes.com/profile/carl-icahn/ and perhaps also the long Bloomberg Interview with Carl Ichan on activist investing from February 2022: https://www.youtube.com/watch?v=z00y3aWYRKs

[30] See, https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.13.2.189 See also President's Working Group on Financial Markets (1999) https://home.treasury.gov/system/files/236/hedgfund.pdf

[31] See https://www.nobelprize.org/prizes/economic-sciences/1997/press-release/

holder of securities, uncontrolled sell offs would materially affect markets through a fire sale and defaults on its swaps would likely undermine the various investment banks who were its counterparties. With all this in mind LTCM approached the New York Fed in September 1998 and on September 22nd the Fed hosted a meeting of LTCM's creditors (a consortium of banks) and a deal was announced the next day – the creditors put in over $3.5 billion in capital in exchange for 90% of LTCM's equity. LTCM was gradually wound down and its GPs went on to manage other funds…

Jan: Timothy Geithner was President of the New York Fed at the time and held that position until 2009 when he was appointed Treasury Secretary by Obama. LTCM was one of the first signs that the financial system had evolved, becoming more complex, connected and vulnerable to contagions… and this, of course, became very obvious during the global financial crisis. Geithner joined private equity firm Warburg Pincus in 2014 and this is also indicative of the revolving door between the top echelons of government and high finance.

Jamie: There's a lot more we could say here regarding revolving doors and the formal and informal connectivity in government, regulation and finance and between alternative investment management organizations, banking and shadow banking… But we don't want to get ahead of ourselves, and we are still setting out the main categories of hedge fund strategy.[32] In any case, this seems a convenient point to introduce "global macro" strategies.

Jan: I mentioned previously that in the 1980s hedge funds expanded both in terms of segments of financial markets they operated in and geographically. Global macro hedge funds undertake macroeconomic analysis and look for trends in the world that might lead to some major event and then they seek some way to build an investment position that will profit from that event happening. So, there is no hedging involved in the traditional sense…

Jamie: And seemingly there is no limit to what a global macro hedge fund might be anticipating…

Jan: Perhaps. But the main focus tends to be things like a currency devaluation, a movement in interest rates, an economic downturn and collapse in valuations of targeted assets, big changes in commodity markets (that the hedge fund is anticipating via forecasting of shortages etc.)… often things one can create a position on using derivatives…

Jamie: And historically this has been an evolving set of opportunities, since new financial instruments are sometimes developed, creating the scope for positions to be created and bets taken… Collateralised debt obligations (CDOs – a structured debt security), credit default swaps (where someone pays a premium to a counterparty who agrees to make a pay-out if some triggering "credit event" defined in the contract happens in the world – CDS are a quasi-insurance instrument, since one doesn't have to own the asset the contract is drawn on) and so on.

Jan: You are obviously referring here to the global financial crisis. But an earlier well-known example is George Soros's Quantum Fund bet that the UK could not maintain its exchange rate within the European Exchange Rate Mechanism. As older readers may recall, the ERM was introduced as a step in reducing currency volatility between member states of the European Economic Community as part of the development of conditions for the introduction of a single currency. Since the German economy was the strongest in Europe all other currencies were fixed to the Deutsche Mark with allowance for some deviation. The UK was experiencing far higher inflation than Germany at the end of the 1980s

[32] For general issues see, for example, Seabrooke and Henrikson (2017); Seabrooke and Tsingou (2021).

and early 1990s. Differences in inflation lead to different interest rate policies by central banks and this tends to make the value of currencies diverge, an obvious problem for the ERM.

Jamie: The problem though wasn't just for the UK, Germany was also undergoing unification and Soros and other market analysts though this made its economy a poor benchmark for the rest of Europe…

Jan: The Bank of England had an additional problem because its very high interest rates were recessionary. Interest rates would have to fall, but this and economic weakness placed downward pressure on Sterling. The Bank of England was forced to buy Sterling in order to maintain its fixed rate and was doing this throughout 1990 to 1992. Soros like many others thought the Bank of England couldn't continue to do this and Soros (as several others did) effectively shorted Sterling… According to reports in Forbes, in one month in September 1992 Soros made $1.5 billion and AUM of Quantum Fund increased from $3.3 billion in August to $7 billion in October (recall what I said earlier about occasional "spectacular" returns).[33]

Jamie: Readers are probably not clear what we mean by shorting here and how it is done. It just means betting on a fall in value and speculators can position themselves to profit from this in various ways. The Forbes article from the time uses several simple examples to illustrate the potentials. The simplest system is just to borrow in the currency you expect to fall in value (e.g. the £) and then immediately convert it to the stronger currency and wait. For example, if I borrow £100 and then convert to the Deutsche Mark at the current rate (e.g. £1=2DM) I'd have 200DM. If Sterling were to fall in value against the Deutsche Mark (which is what I am betting will happen) (e.g. £1=1DM) I can buy £100 for just 100DM to repay to the bank and pocket 100DM. I can further amplify my return by use of leverage. This use of the term "leverage" may seem odd since the initial example is already based on borrowing from a bank. But the amplification just means trading on margin – some hedge funds have good credit lines with banks and can trade on thin margins. As the Forbes article notes, if I place collateral of $50 million a hedge fund might undertake Forex trades of $1 billion (a 5% margin). The final step here is that a central bank is trying to defend its fixed exchange rate so is buying in the market. Speculative attackers, however, are (trading on margin) to sell the currency (converting to the stronger one). If a speculative process takes hold, it then becomes a question of relative proportions and who can or will carry on doing this longest. And, of course, as with so many other hedge fund strategies, similar effects can be achieved using derivatives… The hedge funds though are hoping they can turn the market.

Jan: The whole depends on regulation that allows the flow of capital and then a banking system that will finance this kind of trading… and, of course, identification of vulnerabilities in systems…

Jamie: Derivatives and the complexity of modern finance and its opportunities brings us to the other well-known example that we might describe as global macro and which I started to introduce before the Soros example… As books and films like the Big Short have made famous, various hedge funds made a fortune during the global financial crisis. Perhaps the most famous of these was John Paulson's (not to be confused with Hank Paulson, Secretary of the US Treasury, prior to Timothy Geithner) bet on the GFC. Paulson & Co runs multiple funds and describes itself as a global merger, events arbitrage and credit strategy specialist, but is most famous for effectively shorting the US housing market in the run up to the GFC, and this arguably is global macro.

Jan: Indeed, Paulson played a striking role in the GFC. The hedge fund ran by Paulson cooperated with investment banks, such as Goldman Sachs and Deutsche Bank, to create CDOs (collateralized

[33] Note from Jamie see: https://www.forbes.com/sites/steveschaefer/2015/07/07/forbes-flashback-george-soros-british-pound-euro-ecb/

debt obligations).[34] CDOs are complex structured finance products that are backed by a pool of debt instruments. Subsequently, Paulson & Co placed large bets on the collapse of these CDOs. Years later Goldman Sachs agreed with the SEC to pay a record-breaking $550 million fine to settle the case.[35] Keen observers, such as Zuckerman (2009) have argued that this behaviour by Paulson & Co led to more dangerous CDO investments and ultimately created big losses for those investors who held the CDOs. According to estimates, the hedge fund ran by Paulson made a staggering profit of $15 billion with such bets on a crash of the housing market in the United States. John Paulson himself earned roughly $4 billion in performance fees from this "greatest trade ever" (Zuckerman 2009).

Jamie: Most of the major regulators, though, went on to suggest that hedge funds were not a major cause of the GFC and hedge funds put a lot of resources at the time into making themselves fall off the regulatory radar then…[36]

Jan: Which was odd since, while the SEC and the FSB suggested that hedge funds were not a major cause of the GFC, their demand certainly was a key component in the production of CDOs and their investment strategies also created central nodes for contagion. Photis Lysandrou, for example, states:

> Had it not been for hedge funds' intermediary position between the investors seeking yield on the one hand and the banks that created the high yielding securities on the other, the supply of these securities, known as collateralised debt obligations, would never have reached the proportions that were critical in precipitating the near collapse of the whole financial system… On the eve of the crisis at end-2006, hedge funds held about 47 per cent of the $3tn worth of CDOs while the banks held 25 per cent and insurance companies and asset managers held the remaining 28 per cent.[37]

Jamie: It is though more than a decade since the GFC…

Jan: Despite the "Volcker rule" and other initiatives, there has, however, been no fundamental change to the regulation of alternative asset management, including hedge funds. And shadow banking remains a widely recognised problem…[38]

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[34] Note from Jan: The close connection between hedge funds and their "prime brokers" (large investment banks) is a key issue that needs more research; one study by Kellard, Millo, Simon and Engel (2017) has found indications that this elite nexus facilitates the emergence of "consensus trades" (i.e. herding) in the hedge fund community.

[35] Note from Jamie: for example, the SEC case in 2010 involving Goldman and Paulson focused on the synthetic CDO Abacus 2007-A1. The case raised numerous legal and ethical issues and Goldman vigorously defended its role.

[36] Note from Jamie: for a useful summary of prominent published works on the GFC from around the time see Lo (2012).

[37] This is from his *Financial Times* article: https://www.ft.com/content/e83f9c52-6910-11e1-9931-00144feabdc0 See also Lysandrou (2011).

[38] Note from Jamie: on the Volcker rule see Morgan and Sheehan (2015). A prominent mainstream voice on financial regulation who consistently highlights issues regarding shadow banking is Daniel Tarullo. See, for example, Tarullo (2019) and the recent blog discussion of regulatory issues for non-bank financial intermediaries: https://www.brookings.edu/blog/up-front/2021/05/13/the-sec-should-and-can-pay-more-attention-to-financial-stability/. Note also Daniela Gabor and various others have taken considerable interest in shadow banking and other key issues for "financialisation". See: https://criticalfinance.org/about/ and more generally: https://www.youtube.com/watch?v=ojaF40M-bH0

As our discussion highlights, hedge funds are not like most other types of investors in contemporary financial markets; they are among the few kinds of actors that are able to move and shake markets from time to time. BlackRock and Vanguard, for instance, are giant asset managers – each, as I mentioned earlier, having more AUM than the entire hedge fund industry – but they do not seek to move markets, since the vast majority of their funds are index trackers. They could be likened to huge oil tankers that slowly cruise with the market. Many hedge funds, on the other hand, are more like agile and aggressive speed boats that race towards openings and opportunities – even if that means that other slower boats get into trouble. Occasionally, hedge funds have even been able to threaten the navigability of entire waterways with their trading strategies (i.e., impairing financial stability). Of course, every analogy has its limits, but what I would like to highlight with this is that hedge funds should be an important issue for researchers. Moreover, whenever a domestic financial regulator or international organization such as the IMF writes about financial stability risks, they invariably find themselves highlighting a potential role hedge funds might play. This does tend to indicate there is an issue with how they are regulated.

Jamie: In any case, before we go on to a concluding discussion of how theory affects how the need to regulate hedge funds is framed, it might be worth just briefly summarising where we have got to…

Hedge funds are a variant of "alternative investment management", and typically consist of separate management firms (often partnerships) who solicit capital from institutional investors and HNWI for legally separate funds (of which they may manage several). The managers act as general partners (GPs) and the other investors become the limited partners (LPs) and are "passive". Assets under management (AUM) has grown over the years, most of the investment is concentrated at a few multi-billion-dollar firms (presided over by extremely wealthy management) and some research suggests there is quite rapid churn of funds (3 to 5 years). Hedge funds typically make use of regulatory exemptions ("safe harbour") to avoid restrictions on the fees they can charge, the leverage they can apply, and the financial instruments they can use or invest in. Databases typically categorise hedge funds according to investment strategy, but these categories vary between databases – we have discussed or mentioned the common strategies found in all the main databases under one heading or another: equity (market neutral and long/short weighted), fixed income (bond trading), events-focused (which look for specific corporate events to exploit: debt-distress, mergers and acquisition, and activists that build a position in order to induce a payment to shareholders), global macro (which try to forecast some major macroeconomic event), funds-of-funds (which invest in a diversified portfolio of other hedge funds) and then more exotic categories, often responding to and chasing the latest financial or economic trend (AI, crypto etc).[39]

Overall, the scope for variation in legal positioning, strategy and method applied by the hedge fund (the research undertaken, the quants used, the scope to make use of derivatives to build positions and to reduce the costs of taking that position, often involving profit from adverse events and thus extending the terminology of shorting well beyond simple equity trades etc.) makes it difficult to define what a hedge fund is. While most jurisdictions regulate hedge funds to some degree, and any activity they undertake on markets usually involves the same requirements for reporting as any other financial actor, hedge funds tend to limit the degree to which they report both their strategies and financial information, blending claims regarding necessary restriction on proprietary information and simple secrecy. Towards these ends there is often a difference between where a hedge fund is managed from and where it is

[39] Note from Jamie: if interested in something more comprehensive see Cumming, Wood and Johan (2021: pp. 4-5 Table 1.1). The table includes CTAs/Managed Futures (Commodity Trading Advisors, the historic term used for derivatives specialists); and distinguishes Events (debt and mergers and acquisition) from Value funds (closer to activists as we have termed them).

legally located (most are managed from the main anglophone financial centres, but many are otherwise located in tax havens). Hedge funds follow the "two and twenty" fee model (a 2% annual management fee on invested fund capital and a 20% performance fee – "carried interest" as it is sometimes called); but also apply a "hurdle" (a minimum return the fund must achieve before the performance fee is due) and a "high-water mark" (the performance fee only applies to returns that exceed the previous level of the fund, which is eligible for returns). Hedge funds market themselves as sources of absolute, non-correlated returns based on "alpha" (supposedly a measure of the skill of the GP or special strategy of the fund) which leads to claims that hedge fund returns consistently beat the market average and in principle are always positive (justifying the high fees).

Jan: Before the concluding discussion on theory, we should also mention here something about the data, since this has also involved some dispute and is indirectly relevant to understanding the systemic problems that hedge funds might pose. We've already mentioned that the main way hedge funds are researched and discussed in economics and finance focuses on the investor point of view, often asking "are they worth it?".

Jamie: And behind this has been two related issues. First, reporting to databases by hedge funds is mainly voluntary, so there is a question mark over the quality of this data…

Jan: It is widely reported that investors, when making decisions, tend to adjust downwards claims made about their returns by hedge funds. There has also been a lot of discussion over the years about "selection bias" in databases, since obviously it is the most successful hedge funds that have the most incentive to report to databases and therefore the database may not be representative of the "universe" of hedge funds.

Jamie: Historically this has also involved controversy over practices such as "back-fill". When a hedge fund starts to report to a database its previous 3 months (or some period) of good reporting is also "filled" into the database, and conversely when the fund closes it is stripped out ("dead funds" are removed). Both tend to inflate the average return reported by the database – though, to be fair, many databases say they no longer follow these practices, but databases do in general continue to acknowledge that "survivor bias" is a problem that affects the representative nature of their statistics. This brings us to the second issue…

Jan: There has over the years been some discussion of whether standard statistical measures often used in financial economics are appropriate for hedge funds.

Jamie: We don't want to over complicate here. So, probably the best way to introduce this is intuitively. Hedge funds are seeking higher than average returns (always trying to exceed what a market offers) and continually trying to exploit situations based on bets about what might happen (and while they try to do this in low-cost ways they are not necessarily "hedged"). They are highly active traders on most financial markets and often use leverage. Now, if you keep doing something over and over, eventually something that you don't want to happen happens (your position – the bet – fails badly). If your position is leveraged, then it is easy for the equity base of the fund to be reduced and/or the fund to fall well below its high-water mark. In which case a hedge fund might be unable to continue (margin calls, asset sales, losses etc.) or find it convenient (since the managers have to return the fund to the high-water mark before they can start charging new performance fees) to either close the fund or transfer their attention to another (and this may be a reason why churn and a high attrition rate is sometimes reported for funds)… The implication is that "risk" may not follow a standard normal distribution as assumed in most financial models, it may involve "low probability high impact events" (which one is cumulatively exposed to) or simply misdiagnosed higher probability of something going wrong.

Jan: Put another way, in statistical terms hedge fund activity might be represented more appropriately by distributions that are "skewed" or involve "kurtosis", rather than a normal distribution…. This is a point made a long time ago by, among others, Professor Harry Kat. See, for example, points 4, 5 and 9 of his "10 Things That Investors Should Know About Hedge Funds" (Kat 2003).[40] As you'd expect, hedge fund groups dispute these types of claims about statistical properties.

Jamie: But the hidden risk issue might help to explain Buffett's wager outcome…

Jan: The more general point is that "fundamental uncertainty" as understood by Keynes may eventually apply – if the world changes sufficiently, then in some circumstances no frequency-based probability of the kind used for quantitative "risk" can be depended on.

Jamie: So, the "Masters of the Universe" notion of very smart people using incredibly complicated models and sophisticated insights cannot, after all, mitigate some basic features of social reality…

Jan: Perhaps even the opposite. Hedge funds continuously push risk in search of high returns, and often apply statistical models for quantitative trading systems. They are, therefore, always vulnerable to being undone by uncertainty, since in these cases the relationships between variables and the constants the models use break down. For instance, global climate change and regulations that seek to mitigate it could turn coal, oil & gas investments currently worth hundreds of billions of dollars into "stranded assets" that lose most or even all their value. It is simply impossible to use any kind of historical data to calculate these kinds of risks.

Jamie: For our purposes though, the underlying issue is whether hedge fund activity is a continual source of vulnerability in the finance system. This takes us beyond an investor point of view to issues of financial stability and brings us finally to our concluding discussion of how theory affects how the need to regulate hedge funds is framed.

Jan: We've mentioned efficiency and other terms often used in finance, such as liquidity, a few times now. So maybe the best way to approach this concisely is for you to summarise the standard theory case for hedge funds and for me to then respond and close with the alternative.

Jamie: OK. Over the years hedge funds and their professional organizations have worked hard to normalise themselves within the finance system. A main way in which this has been achieved is by invoking (implicitly and explicitly) "efficiency". Hedge funds claim to contribute to efficient markets in various ways. The simplest way to explain the underlying argument is to begin from a short explanation of Eugene Fama's efficient market hypothesis (EMH), while noting this will produce a few inconsistencies later…

The easiest way to begin an explanation of the EMH is from the idea that there are no "free lunches" in an efficient market. The assumption is that a market is an arena of (financially relevant) information processing. In an efficient market all information is freely available and all existent information is *already* processed and thus reflected in current choices and hence prices of whatever the financial assets in the market are. Only new information can affect prices because, by definition, existent information is already incorporated. Since future information could be either good or bad, then the introduction of new information (as time passes) occurs in a fashion similar to a coin toss (and a 50:50 process leads to a

[40] See also: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=310227

"random walk" situation that exhibits normal distribution). In this situation, no investor has an information advantage and an investor is no more likely than any other to be able to guess what will happen. Moreover, given that information is the basis of price signals, through competition price signalling flags the best use of capital at the same time as markets clear and equilibrium is achieved. So, in the EMH (though it is not entirely clear that Fama consistently claimed this) an efficient market is Pareto efficient, allocatively efficient and dynamically efficient. Efficient markets make best use of capital. For Fama, however, a market may be more or less efficient and thus exhibit strong, semi-strong or weak efficiency (depending on how freely available information is and how long it takes to be assimilated by "the market").[41]

Now, if we return to hedge funds, we can summarise the case proponents make with efficiency as context. Hedge funds are the most active traders on many markets. They are, therefore, sources of liquidity (which means there is always a ready buyer or seller of the financial asset). Since price signals are information (in response to information) then a liquid market involves more information and more rapid "price discovery", which, in turn, implies accelerated clearing and equilibrium convergence. Hedge funds seek out weaknesses to exploit and this can provide more granular information: focused on mispricing, underperforming stocks, failed business models, poor corporate strategy or macroeconomic policy. Hedge funds are sources of discipline to other market actors and even when destructive this is "creative destruction" freeing capital for alternative uses. The implication is that it doesn't matter if you approve of hedge funds or think of them as ethical actors, they serve a beneficial purpose in competitive capitalism (though advocates tend also to argue that accusations of excessive risk, secrecy and unethical behaviour are "myths"; see Wilson and Willis 2017). In a sense, invoking "efficiency" (whether explicit reference is made to the EMH or not) is an act of pre-persuasion, since debate regarding regulatory intervention and oversight is being positioned within a framework of concepts that is favourable to advocates of hedge funds.[42]

Jan: There are numerous objections one might make regarding the use and abuse of the concept of efficiency. Whether markets can be "efficient" in the sense the EMH implies turns in part on whether the assumptions are realistic and/or their lack of realism is irrelevant to the theory. There is, of course,

[41] Note from Jamie: this is necessarily a simplified and reduced form of a life's work. Eugene Fama completed a PhD in 1964 at University of Chicago titled "The behaviour of stock-market prices" (published 1965). His main claim was that stock market prices are impossible to predict in the short run since they follow a random walk. Fama shared concerns with short term returns prediction with Louis Bachelier's work in 1900 and in the 1960s with Benoit Mandelbrot and Paul Samuelson. Fama's main distinguishing contribution was to suggest that in order to test that stock prices are in fact impossible to predict in the short run, you needed a comparison. Put another way, a measure of deviations from expected returns needs something to be a measure of deviation (which raises the question, what are expected returns?). For Fama, this was a market equilibrium position, which in turn needed a measure of expected stock returns i.e. an "asset-pricing model" (he called this his "joint hypothesis"). Once you have this modelling approach, the standard empirical test becomes a regression to look for deviations that cannot be accounted for. If there are none, then this is taken to be a confirmation that behaviour is rational and markets are efficient. Put slightly differently, differences are randomly distributed around 0 (hence one cannot predict short term returns and use this to consistently beat the market). As stated above, in his famous 1970 paper he introduced 3 types of efficiency: weak (current prices reflect all historical information of past stock prices); semi-strong (current prices contain all publicly available information, so in addition to historic prices they incorporate fundamentals of companies from reports and also metrics and reports on general economic conditions); strong (current prices reflect all public and relevant private information, such as that available to company employees etc). The first two entail different scope for returns to the last since they do not contain all potentially profitable information.

[42] Note from Jamie: and as the Engine No. 1 example illustrates, there is also a movement to position a softer more socially conscious side of hedge funds – (and it is worth noting that hedge fund managers are high-profile philanthropists, and low-profile prolific political funders…).

also a debate in economics between advocates of the EMH and "behavioural finance" and famously Eugene Fama and Robert Shiller won the Nobel (Swedish Bank) prize for economics in the same year (2013) for essentially different theories.[43] But as the academic and hedge fund manager Andrew Lo points out, in an essay making the case for an alternative "adaptive markets" theory, the EMH cannot be refuted because its underlying logic allows some explanation to be provided that always fits the evidence (put another way it is unfalsifiable).[44] At its core though the EMH assumes economic rationality and a common agent processing information as though it were a homogeneous universal unit. Clearly, this is unrealistic. Information is produced from structures of relations and used differently to different purposes by different financial actors. There is a big difference between saying that markets work most of the time in some sense, and suggesting they are (because of this) more or less "efficient" in Fama's sense. Equally, the failure to continually make excess returns (i.e., consistently beat the market) is not necessarily evidence of "efficiency" (i.e., that available information has been appropriately internalised or well-used). It seems far more realistic to suggest markets are complex and continually changing, which makes adequate prediction for outsize profit an exception that is difficult to repeat.

In any case, while hedge funds invoke "efficiency" they claim to be sources of alpha and this seems an obvious tension. If alpha exists, is a market efficient? It is a stretch to suggest hedge funds are merely responding faster than others to "shocks" and are thus earning excess returns while promoting efficiency. There are today many hedge funds, and as we have discussed their trading is a significant proportion of financial markets, and many of their strategies involve no research on "fundamentals". And, of course, hedge funds are happy to continually make use of behavioural biases, as they are called, in designing strategies.

[43] Note from Jamie: the prize also included Lars Hansen and strictly speaking was awarded for "empirical analysis" rather than theory or findings and this tactfully avoided the issue of difference (albeit it seems ridiculous for a prize that purports to be for "science" to award recipients for doing research when the findings may turn out to be contradictory). See Shabani and Toporowski (2015); compare, for example, Fama (1970) and Shiller (1981); and visit: https://www.nobelprize.org/prizes/economic-sciences/2013/fama/facts/ and https://www.nobelprize.org/prizes/economic-sciences/2013/shiller/facts/

[44] Note from Jamie: for a discussion of treatments of efficiency see Andrew Lo: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=991509. Overall, this requires some background: Fama's work is a moving target. While Fama began by using a simple capital asset pricing model (CAPM) approach of the kind developed by Sharpe, over his career he developed more sophisticated calculations of asset pricing. The CAPM focuses on betas (the average stock price, encapsulating its "normal" response to changes in the market), but he later developed with Kenneth French the "three-factor" model (which added a market value factor i.e., the difference in returns between small and big stocks; and a book-to-market value factor i.e., the difference between returns for high and low book-to-market stocks). Finally, French and Fama also argued that expected returns vary with economic conditions, with the intention of establishing that this background difference was also rational. This was used to explained some of what Robert Shiller and others were claiming established markets were irrational. Shiller's main focus was that efficient market theory implies that the price of a stock is equal to the expected present value of its future dividends (so an efficient market is in effect one whose optimal forecast is the same as actual stock prices and changes in stock prices are overwhelmingly related to new information on future dividends). Shiller's famous work identifies that volatility in stocks over time is far greater than a calculated ex post rational price so there is too much volatility for the market to be behaving in an underlying efficient way. He went on to draw on psychology to suggest that stock price movements are influenced by attitudes and fashions – as such, stock prices (and other financial assets) will respond to investor demand and this itself leads to another self-fulfilling round of increase and so on (generating a speculative bubble) – this was the subject of his book *Irrational Exuberance* (the first edition focused on the dotcom bubble and the second on the housing bubble in the US). Shabani and Toporowski (2015).

Jamie: So, there is something of a problem in claiming to be contributing to something that can never be the case (if efficiency requires assumptions about the building blocks of information processing that are not features of financial agents or the structures through which they act) and in making a claim to legitimacy that seems to implicitly entail that everything other than hedge funds can be a source pushing a market away from an efficient outcome?[45]

Jan: Well, hedge funds obviously make mistakes and will recognize that…It should also be kept in mind that hedge funds are probably quite comfortable with the various inconsistencies an academic might identify. The purpose of a hedge fund is not to fulfil an abstract concept, but to achieve financial goals. In alternative terms, it makes a lot more sense to view this as the activity of actors with positioned power and then to look at various aspects of that system and the power it affords.

More generally, if we look at the idea of liquidity. One crucial problem with the belief in "efficient" (financial) markets and the importance or benefit of liquidity is that historically we have seen that financial markets can work relatively well in good times (they seem liquid) but are prone to occasional deep crises, in which the state has to intervene to save the system (liquidity disappears).

Jamie: In any case, endogenous crisis does not fit well with a theory of efficient markets…

Jan: There is an old saying attributed to Michael Milken, the "junk bond king" of the 1980s: "Liquidity is an illusion. It's always there when you don't need it, and rarely there when you do."[46] According to very sophisticated models by Goldman Sachs, the chances of the global financial crisis happening the way it did in 2007 and 2008 were so low that such events were thought to only occur once every 100,000 years.[47] Quite obviously, the historical data and the models used were just not appropriate to forecast the future. So arguably one main pillar of "efficient" markets in finance is in reality way more fragile than assumed by most proponents.

Jamie: And one might note here that "liquidity" implies there is always a ready buyer and seller in a market. Hedge funds do not necessarily supply that kind of service to a market. Their liquidity provision can be asymmetric.

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[45] Note from Jamie: there is a great deal more nuance to this debate than can be represented here, and the issues extend further than Fama and Shiller. See, for example, Guerrian and Gun (2011); Malkiel (2003); Samuelson (1965) and Mandelbrot and Hudson (2008). Shabani and Toporowski (2015), for example, note that neither Fama or Shiller are directly testing the hypothesis, they are testing and giving different reasons for the mean reversion of prices and the ability of stock prices to predict prices (in terms of the negative that stock prices or returns are difficult to predict). They identify two fundamental flaws with this. First, the assumption is that financial investors are holding a preferred portfolio and continually trading in response to information in which prices reflect changes in portfolios in response to calculation of expected returns. But if the calculated *future* yield on stocks is continually changing in response to new information then a rational investor would not have any incentive to respond to the next change because they know it will not last and cannot be relied upon. As such, they would plan portfolios differently in terms of how they approach returns. In any case, most asset portfolios are held by institutional investors not individuals. Second, it is inconsistent to assert that portfolios are adjusted on the basis of new information while neglecting the interdependency with primary markets for issuance of shares and for financing of the real economy. Fixed capital investment draws capital away from financial trading of existing assets. There is, moreover, a broader context of liquidity and financing long-term liabilities.

[46] Note from Jamie: for background issues see, for example, Chan, Dimitrijevic, Perez-Gorozpe, Tesher, and Waters (2019).

[47] Note from Jamie: for an analysis of how hedge funds exited markets during the global financial crisis see: https://www.tandfonline.com/doi/full/10.1080/1331677X.2020.1782245

Jan: Liquidity is also a contestable term since hedge funds like any other financial agent (and perhaps more so in some cases) can become sources of forced selling of assets when positions fail, and this can lead to contagion in a highly interconnected finance system. Conversely, sometimes hedge funds can act as sources of "information" that has effects that might not have happened without them.[48] For example, many hedge funds have recently been holding short positions on regional and medium sized US banks. Is this highlighting a problem or adding an additional source of fear to a system prone to fear effects? At time of writing regulators were considering a shorting ban…

Even if we accept, for the purposes of argument, that financial markets are fairly good mechanisms to aggregate information in the short term, they are much less so concerning developments that have a small impact in the very near future but potentially a very large impact a few decades from now. Put differently, big negative externalities (especially ones that develop relatively slowly) are likely outside of what financial markets are able to perceive and process.

The most important development for the global political economy in the long term is climate change. The scientific findings about the impact of climate change are reasonably clear – if greenhouse gas emissions are not brought down significantly in the next few decades the chances of disastrous consequences in the second half of this century are pretty high. Financial markets play an important role for climate change mitigation – they can either greatly help or they can greatly hinder efforts by states and corporations.

Jamie: And hedge funds?

Jan: Hedge funds do matter here, because as we have discussed they are the most active traders in many key segments of financial markets and are thus influencing the "price discovery" process (if we mean by that what people will pay rather than some fundamental sense of what they ought to pay). In turn, the prices of oil & gas or the value of fossil fuel reserves on corporate balance sheets strongly influence the expectations and the capital flows of many other actors on financial markets. I would argue that climate change is a prime example of "fundamental uncertainty" as understood by Keynes. Neither the analysis of historical price data nor the use of real-time "big data" will be well suited to predict the impact of climate change.

The increasingly robust findings of climate science suggest that much of the fossil fuel reserves have to remain in the ground if humanity wants to limit global warming to an extent that is still manageable. Obviously most financial market actors, including hedge funds, do not base their investment decisions on such a long-term perspective. Instead, producing and selling oil and gas is a highly profitable business, and the current market valuations of the publicly listed oil majors reflect this short-term profitability. In the words of the controversial hedge fund manager Crispin Odey: "They [big institutional investors] are all so keen to get rid of oil assets, they're leaving fantastic returns on the table."[49]

Jamie: This willingness to facilitate a pathological aspect of a pathological system is not market failure in the sense an economist understands that term (an externality issue, to use terminology you previously introduced), it is a failure induced by leaving a key aspect of the fate of the species to markets

[48] Note from Jamie: for general issues regarding performativity in economics and finance see, for example, Callon (2007).

[49] Note from Jan, see: https://www.ft.com/content/ed11c971-be02-47dc-875b-90762b35080e

in the first place… or at least of not creating an institutional framework for finance that is appropriate… something I expect you have considerable interest in…

Jan: There is a long tradition in ecological economics of critique of the limitations of the concept of externalities.[50] But in this case, it is possible that the massive divergence in assessing climate change may lead to what has been called a "climate Minsky moment" – a sudden change of expectations by financial market actors and a concomitant collapse in carbon-intensive asset values. Hedge funds (and private equity funds) do matter for such a scenario because they are especially able to use high financial leverage to bet on what they perceive as a massive mispricing. Moreover, many hedge fund managers have acquired such great wealth that they simply might not care about the disastrous effects of climate change because they think they will be able to protect their families and themselves. In fact, it is estimated that currently there are 47 hedge fund billionaires with combined net worth of $312 billion.[51]

This leads me to reflect on the fundamental role and purpose of financial markets for our economies and societies. Financial markets can be a valuable mechanism to aggregate information (whatever issues we have discussed regarding the nature of information); they can work relatively well in processing short-term information and the prices they provide are important for corporations and investors. Whatever their faults, they are coordination systems. However, one of the crucial questions of our times is whether financial markets could fulfil this useful function while consuming far fewer resources.

Jamie: And there are, it should be noted, more and less radical approaches to the future of finance with climate emergency in mind…[52]

Jan: Since our subject is hedge funds it does matter if many of the brightest minds of every student cohort choose to work for hedge funds (or other lucrative Wall Street firms) instead of researching ground-breaking energy storage solutions or other technologies that are essential to mitigate climate change.

Jamie: This general point is associated with the idea of the "Finance Curse", discussed by many in critical political economy of finance.[53]

Jan: This seems a good place to conclude. In the documentary "Inside Job" Andrew Sheng, Chief advisor of the China Banking Regulatory Commission says: "A real engineer builds bridges, a financial engineer builds dreams. And when those dreams turn out to be nightmares other people pay for it." Arguably financial markets are able to be very useful but at the same time very harmful to society. This

[50] Note from Jamie: for context see, for example, Spash (2002).

[51] Note from Jan, see: https://www.forbes.com/sites/hanktucker/2023/04/04/the-richest-hedge-fund-managers-2023/. Note from Jamie: for a discussion of her book *Hedged Out* (which covers what we might call an anthropology of hedge funds, inequality etc.) see Neely: https://www.youtube.com/watch?v=1ecSMrLn0Vc For an earlier work on hedge fund elite power see Mallaby (2010). More recently see Brett Christophers on hedge funds and private equity in an "asset manager society". Visit: https://www.theguardian.com/commentisfree/2023/may/25/hedge-funds-capitalism-risk-asset-managers-tax

[52] Note from Jamie: see, for example, the interview discussion of Carney etc. in Baker and Morgan (2021); Alves, Santos and Penha Lopes (2022); Dafermos, Gabor, and Michell (2021). Debate extends all the way to abolishing money rather than repurposing it, see Nelson (2022).

[53] Note from Jamie: see, for example, Christensen, Shaxson and Wigan (2016); Shaxson (2018); Seabrooke and Wigan (2022); Cecchetti and Kharroubi (2015).

is captured by the term financialization. Financialization focuses on power and its consequences and has led to much fruitful research in recent years.[54] There are indications that in fact smaller financial markets would be better for society. Hedge fund managers are the apex financial engineers. To refer to the title you suggested for this interview, while we haven't got around to fully discussing all of the issues we raised regarding research and regulation, hedge funds certainly do matter.[55]

References

Alves, F. Santos, R. and Penha Lopes, G. (2022) "Revisiting the Missing Link: An Ecological Theory of Money for a Regenerative Economy." *Sustainability,* 14(7): 4309: https://doi.org/10.3390/su14074309

Babic, M. Fichtner, J. and Heemskerk, E. (2017) "States versus Corporations: Rethinking the Power of Business in International Politics." *The International Spectator*, 52(4): 20-43. https://doi.org/10.1080/03932729.2017.1389151

Babic, M. Fichtner, J. and Heemskerk, E. (2018) "Who is more powerful – states or corporations?" *TheConversation.com*. 10th July. https://theconversation.com/who-is-more-powerful-states-or-corporations-99616

Babic, M. Fichtner, J. and Heemskerk, E. (2022) "Corporate Networks." In Pevehouse, J. C. W. and Seabrooke, L. (eds.) *The Oxford Handbook of International Political Economy*. Oxford University Press, forthcoming.

Baker, A. P. and Morgan, J. (2021) "From the Political Economy of Financial Regulation and Economic Governance to Climate Change: An interview with Andrew P. Baker." *Real-World Economics Review*, 98: 170-203. http://www.paecon.net/PAEReview/issue98/BakerMorgan98.pdf

Batt, R. and Morgan, J. (2020) "Private equity and public problems in a financialized world: an interview with Rosemary Batt." *Real-World Economics Review*, 94: 83-108, http://www.paecon.net/PAEReview/issue94/Batt-Morgan94.pdf.

Best, J. Hay, C. LeBaron, G. and Mügge, D. (2021) "Seeing and Not-seeing Like a Political Economist: The Historicity of Contemporary Political Economy and its Blind Spots." *New Political Economy*, 26(2): 217-228.

Brav, A. Jiang, W. and Kim, H. (2010) "Hedge Fund Activism: A Review." *Foundations and Trends in Finance*, 4(3): 185-346.

Brav, A. Jiang W. and Kim H. (2015) "The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes." *Review of Financial Studies*, 28(10): 2723-2769.

Brav, A. Jiang, W. Ma, S. and Tian, X. (2018) "How does hedge fund activism reshape corporate innovation?" *Journal of Financial Economics*, 130(2): 237-264.

Callon, M. (2007) "What does it mean to say that economics is performative?" In, MacKenzie, D., Muniesa, F., & Siu, L. (eds), *Do economists make markets?* Princeton University Press, 311–357.

Cecchetti, S. G. and Kharroubi, E. (2015) "Why does financial sector growth crowd out real economic growth?" BIS Working Paper, no.490. https://www.bis.org/publ/work490.pdf

[54] Note from Jan: see Mader, Mertens and Van der Zwan (2020); Epstein (2005).

[55] Note from Jamie: see Part IV, Cumming, Johan and Wood (2021); for general issues regarding gaps in research in political economy see Best, Hay, LeBaron and Mugge (2021); LeBaron, Mugge, Best and Hay (2021). See also Finance and Society Network: https://financeandsocietynetwork.org/ We also did not get around to discussing the role of hedge funds, as explored by critical macro-finance, in speculative attacks on "periphery" countries; their role in shadow banking and shadow money, and we did not discuss some of the recent high profile examples of financial controversy, such as the "short squeeze" applied to GameStop in January 2021 and how hedge funds responded to this.

Champ, N. (2012) "Speech by SEC Staff: What SEC Registration Means for Hedge Fund Advisers." 11th May. https://www.sec.gov/news/speech/2012-spch051112nchtm

Chan, T. Dimitrijevic, A. Perez-Gorozpe, J. Tesher, D. and Waters, P. (2019) *Next Debt Crisis: Will Liquidity Hold?* S&P Global Ratings, 12th March. https://www.spglobal.com/_assets/documents/corporate/global-debt_will-liquidity-hold-v11mar2019.pdf

Christensen, J. Shaxson, N. and Wigan, D. (2016) "The finance curse: Britain and the world economy." *British Journal of Politics and International Relations*, 18(1): 255–269.

Cremers, M. Masconale, S. and Sepe, S. M. (2016). "Activist hedge funds and the corporation." *Washington University Law Review*, 94(2): 261.

Cumming, D. Johan, S. and Wood, G. (eds.) (2021) *The Oxford Handbook of Hedge Funds.* Oxford: Oxford University Press.

Dafermos, Y. Gabor, D. and Michell, J. (2021) "The Wall Street Consensus in pandemic times: what does it mean for climate-aligned development?" *Canadian Journal of Development Studies,* 42(1-2): 238-251.

Desjardine, M. R. and Durand, R. (2020) "Disentangling the effects of hedge fund activism on firm financial and social performance." *Strategic Management Journal*, 41(6): 1054-1082.

Edwards, F. (1999) "Hedge Funds and the Collapse of Long-Term Capital Management." *Journal of Economic Perspectives,* 13(2): 189-201.

Epstein G (Ed.) (2005) *Financialization and the World Economy*. Cheltenham: Edward Elgar.

Fama, E. (1970) "Efficient Capital Markets: A Review Of Theory And Empirical Work." *The Journal of Finance*, 25(2): 383-417.

Fung. W. and Hsieh, D. (1999) "A primer on hedge funds." *Journal of Empirical Finance,* 6(3): 309-331.

Fung. W. and Hsieh, D. (2006) **"**Hedge Funds: An Industry in Its Adolescence." *Federal Reserve Bank of Atlanta Economic Review*, Q4: 1-34.

Fichtner, J. (2013a). "The Rise of Hedge Funds: A Story of Inequality." *Momentum Quarterly*, 2(1): 3-20. https://www.momentum-quarterly.org/ojs2/index.php/momentum/article/view/1711

Fichtner, J. (2013b) "Hedge Funds: Agents of Change for Financialization." *Critical Perspectives on International Business*, 9(4): 358-376. http://dx.doi.org/10.1108/cpoib-06-2013-0017

Fichtner, J. (2014) "Privateers of the Caribbean: The Hedge Funds-US-UK-Offshore Nexus." *Competition & Change*, 18(1): 37-53. https://doi.org/10.1179/1024529413Z.00000000047

Fichtner, J. (2015) "Rhenish Capitalism Meets Activist Hedge Funds: Blockholders and the Impact of Impatient Capital." *Competition & Change*, 19(4): 336-352. https://doi.org/10.1177/1024529415586324

Fichtner, J. (2016) "The Anatomy of the Cayman Islands Offshore Financial Center: Anglo-America, Japan, and the Role of Hedge Funds." *Review of International Political Economy*, 23(6): 1034-1063. http://dx.doi.org/10.1080/09692290.2016.1243143

Fichtner, J. (2017) "Perpetual Decline or Persistent Dominance? Uncovering Anglo-America's True Structural Power in Global Finance." *Review of International Studies*, 43(1): 3-28. https://doi.org/10.1017/S0260210516000206

Fichtner, J. (2018) "Meet the New Owners of Corporate America." *Cambridge Core blog*. 23rd May. https://www.cambridge.org/core/blog/2018/05/23/meet-the-new-owners-of-corporate-america/

Fichtner, J. (2020) "The Rise of Institutional Investors." In Mader, P. Mertens, D. and Van der Zwan, N. (eds.) *The Routledge International Handbook of Financialization*. London: Routledge, 265-275.

Fichtner, J. and Heemskerk, E. (2020) "The new permanent universal owners: index funds, patient capital, and the distinction between feeble and forceful stewardship." *Economy and Society*, 49(4): 493-515. https://doi.org/10.1080/03085147.2020.1781417

Fichtner, J. Heemskerk, E. and Garcia-Bernardo, J. (2017a) "Hidden power of the Big Three? Passive index funds, re-concentration of corporate ownership, and new financial risk." *Business and Politics*, 19(2): 298-326. https://doi.org/10.1017/bap.2017.6

Fichtner, J. Heemskerk, E. and Garcia-Bernardo, J. (2017b) "These three firms own corporate America." *TheConversation.com*. 10th May. https://theconversation.com/these-three-firms-own-corporate-america-77072

Fichtner, J. Heemskerk, E. and Petry, J. (2020a) "Index funds might sound boring. But who decides which countries and companies to include?" *The Washington Post*, 8th January. https://www.washingtonpost.com/politics/2020/01/08/index-funds-might-sound-boring-who-decides-which-countries-companies-include/

Fichtner, J. Heemskerk, E. and Petry, J. (2020b) "Three financial firms could change the direction of the climate crisis – and few people have any idea." *TheConversation.com*. 24th February. https://theconversation.com/three-financial-firms-could-change-the-direction-of-the-climate-crisis-and- few-people-have-any-idea-131869

Fichtner, J. Jaspert, R. and Petry, J. (2023). "Mind the ESG gaps: transmission mechanisms and the governance of and by sustainable finance." *DIIS Working Paper 2023: 04*. https://www.diis.dk/en/research/most-green-funds-do-not-a-sustainability-impact

FSF (2007) "Update of the FSF Report on Highly Leveraged Institutions." 19th May. https://www.fsb.org/wp-content/uploads/r_0705.pdf

Galaz, V. Crona, B. Dauriach, A. Jouffray, J. B. Österblom, H. and Fichtner, J. (2018) "Tax havens and global environmental degradation." *Nature Ecology & Evolution*, 2: 1352- 1357. https://doi.org/10.1038/s41559-018-0497-3

Garcia-Bernardo, J. Fichtner, J. Takes, F. and Heemskerk, E. (2017a). "Uncovering Offshore Financial Centers: Conduits and Sinks in the Global Corporate Ownership Network." *Nature Scientific Reports*, 7: Article 6246. https://doi.org/10.1038/s41598-017-06322-9

Garcia-Bernardo, J. Fichtner, J. Takes, F. and Heemskerk, E. (2017b) "These five countries are conduits for the world's biggest tax havens." *TheConversation.com*. 24th July. https://theconversation.com/these-five-countries-are-conduits-for-the-worlds-biggest-tax-havens-79555

Guerrien, B. and Gun, O. (2011) "Efficient Market Hypothesis: What are we talking about?" *Real-World Economics Review*, 56: 19-30. http://www.paecon.net/PAEReview/issue56/GuerrienGun56.pdf

Hosking, P. (2019) "Three cheers for the dung beetles that expose the stock market's mess." *The Times,* 13th August.

Ibbotson, R. Chen, P. and Zhu, K. (2011) "The ABCs of Hedge Funds: Alphas, Betas, and Costs." *Financial Analysts Journal,* 67(1): 15-25.

Kat, H. (2003) "10 Things That Investors Should Know About Hedge Funds." *The Journal of Wealth Management,* 5(4): 72-81. DOI:10.3905/jwm.2003.320466 https://www.pm-research.com/content/iijwealthmgmt/5/4/72

Kellard, N. Millo, Y. Simon, J. and Engel, O. (2017) "Close Communications: Hedge Funds, Brokers and the Emergence of Herding." *British Journal of Management*, 28(1): 84-101.

Lack, S. (2012) *The Hedge Fund Mirage: The Illusion of Big Money and Why it is too Good to be True.* London: John Wiley.

LeBaron, G. Mügge, D. Best, J. and Hay, C. (2021) "Blind spots in IPE: marginalized perspectives and neglected trends in contemporary capitalism." *Review of International Political Economy*, 28(2): 283-294.

Lo, A. (2010) *Hedge Funds: An Analytic Perspective.* Princeton: Princeton University Press, (Revised edition).

Lo, A. (2012) "Reading about the financial crisis: A twenty-one book review." *Journal of Economic Literature,* 50(1): 151-178.

Lowenstein, R. (2002) *When Genius Failed: The Rise and Fall of Long-Term Capital Management.* London: Harper Collins.

Lysandrou, P. (2011) "The primacy of hedge funds in the subprime crisis." *Journal of Post Keynesian Economics,* 34(2): 225-254.

Mader, P. Mertens, D. and Van der Zwan, N. (eds.) (2020) *The Routledge International Handbook of Financialization*. London: Routledge.

Malkiel, B. (2003) "The efficient market hypothesis and its critics." *Journal of Economic Perspectives*, 17(1): 59-82. https://www.aeaweb.org/articles?id=10.1257/089533003321164958

Mallaby, S. (2010) *More Money Than God: Hedge Funds and the Making of a New Elite*. London: Penguin.

Mandelbrot, B. and Hudson, R. (2008) *The Misbehaviour of Markets.* London: Profile Books.

Martin, B. (2023) "Activists set for new wave of attacks on companies." *The Times,* 19th January.

Morgan, J. and Sheehan, B. (2015) "Has Reform of Global Finance been Misconceived? Policy Documents and the Volcker Rule." *Globalizations*, 12(5): 695-709 https://doi.org/10.1080/14747731.2014.994914

Mueller, A. Paulick, J. Fichtner, J. and Wittenmayer, H. (2016) "Mobilization of collateral in Germany as a reflection of monetary policy and financial market developments." *Journal of Financial Market Infrastructures*, 5(1): 49-63. https://doi.org/10.21314/JFMI.2016.067

Nabilou, H. (2017) "The conundrum of hedge fund definition." *European Company and Financial Law Review*, 14(1): 149-186.

Neely, M. T. (2022) *Hedged Out: Inequality and Insecurity on Wall Street*. Oakland: University of California Press.

Nelson, A. (2022) *Beyond Money: A postcapitalist strategy.* London: Pluto.

Petry, J. Fichtner, J. and Heemskerk, E. (2021) "Steering Capital: The Growing Private Authority of Index Providers in the Age of Passive Investing." *Review of International Political Economy*, 21(1): 152-176. https://doi.org/10.1080/09692290.2019.1699147

President's Working Group on Financial Markets. (1999) *Hedge funds, leverage, and the lessons of Long-Term Capital Management*. Department of the Treasury, Board of Governors of the Federal Reserve System, Securities and Exchange Commission, Commodity Futures Trading Commission. April. https://home.treasury.gov/system/files/236/hedgfund.pdf

Samuelson, P. (1965) "Proof that properly anticipated prices fluctuate randomly." *Industrial Management Review*, 6: 41-50.

Seabrooke, L. and Henriksen, L. (Eds.) (2017) *Professionals and organizations in transnational governance*. Cambridge: Cambridge University Press.

Seabrooke, L. and Tsingou, E. (2021) "Revolving doors in international financial governance." *Global Networks*, 21(2): 294-319.

Seabrooke, L. and Wigan, D. (eds.) (2022) *Global Wealth Chains: Asset Strategies in the World Economy.* Oxford: Oxford University Press.

Shabani, M. and Toporowski, J. (2015) "A Nobel Prize for the Empirical Analysis of Asset Prices." *Review of Political Economy*, 27(1): 62-85.

Shaxson, N. (2018) *The finance curse: How global finance is making us all poorer*. London: Random House.

Shiller, R. (1981) "Do stock markets move so much to be justified by subsequent changes in dividends?" *American Economic Review*, 71(3): 421-436.

Spash, C. (2002) *Greenhouse Economics.* London: Routledge.

Stulz, R. (2007) "Hedge Funds, past, present and future." *Journal of Economic Perspectives,* 21(2): 175-194.

Tarullo, D. (2019) "Financial Regulation: Still Unsettled a Decade after the crisis." *Journal of Economic Perspectives,* 33(1): 61-80.

Wilson, N. and Willis, W. (2017) "Separating fiction from reality: The most common and persistent hedge fund myths." https://www.aima.org/article/separating-fiction-from-reality.html

Zuckerman, G. (2009): *The Greatest Trade Ever: The Behind-the-Scenes Story of How John Paulson Defied Wall Street and Made Financial History*. New York: Broadway Books.

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SUGGESTED CITATION:
Jan Fichtner and Jamie Morgan, "Why Hedge Funds Matter: An interview with Jan Fichtner", *real-world economics review*, issue no. 104, 3 July 2023, pp. 17–48, http://www.paecon.net/PAEReview/issue104/Fichtner_Morgan