Financial markets are markets in stories: Some Emotional Finance realities revealed through interviews.

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For much of its history mainstream economics has been debating the conditions under which markets *could* work. The underlying and highly political aim has been alternately to show or to refute the idea that unfettered self-seeking competitive behaviour can co-ordinate an economy and achieve optimal wealth creation and welfare. In other words the argument is whether markets are or are not self-equilibrating. If they are, then inhibiting the behaviour of those in them or interfering with them in any other way than to encourage competition can only produce sub-optimal outcomes.

Of course, during this period, situations where markets did not work were noted. They attracted some interest but only as anomalies and had little impact on the general theory. Policy advice focused on using any insights gained – for example from information or behavioural economics - to try to make markets work more like they "should". As a result, the catastrophic economic and social events unleashed by the financial crisis of 2008 caught most economists unawares. Insofar as coherent explanations have gradually been put forward subsequently they tend to have a general form – observed events were the product of human errors. In effect they were failures to make markets work according to the rational decision-making principles economics has established.

During 2007 I conducted 52 interviews with senior money managers working in different locations in the world's major markets. Between then they controlled over $700

billon. As I will show these interviews provide information about the conditions of action facing key decision-makers, describing the reality of their experience. That reality is dominated by (Knightian) uncertainty (Knight 1921) and information ambiguity. It presented them with a dynamic human social and psychological situation which was highly challenging and severely limited the scope for the kind of decision-making envisaged in standard equilibrium finance. Interviews revealed rather easily that what agents in financial markets have to do in the situations they find themselves is to trade stories about fundamentals rather than fundamentals themselves. They thus pave the way to envisaging how what I have elsewhere called *phantastic objects*, *divided states* and *groupfeel* (Tuckett and Taffler 2008; Tuckett 2009; Tuckett 2011) can come to dominate financial markets and make them inherently unstable. The findings suggest economists have been mistaken to ignore this data source, which has much more potential than has usually been thought, and could have warned them about the severe dangers resulting from their general policy advice.

To support these points I will begin by presenting some data from one representative interview from the series and elaborate the implications based on the sample as a whole. I will then discuss my reasons for believing this kind of data is valid for the purpose it is being used. The data obtained from these interviews suggest economics and civil society have suffered from the over-restrictive theoretical approach that came to dominate the discipline and from the associated attitude to empirical data. Direct study of financial participants, including through research interviews, has a valuable if not vital role to play among the sources of data available for economic study and there is a need to revise ill-considered prejudices against the usefulness of talking to individual economic agents about what they actually do.

Interview Methodology

Although only rather rarely applied to the study of finance[1], interview methods have been developed as a standard methodology in sociology, social anthropology and social epidemiology and nowadays also form part of the de-briefing and context clarification that occurs after psychological or neuroscience experiments.

Research interviews can be of different types. They may be highly structured like questionnaires, in which every respondent receives exactly the same questions and answers are constrained to fall in pre-defined categories. Or they can be informal and unstructured. They can take place where people are normally or elsewhere.

Entirely unstructured interviews obviously raise serious questions about whether each respondent has been given the same opportunity to provide their viewpoint on the issues and whether data analysis and presentation is sufficiently systematic to avoid problematic bias. Results, for instance, might reflect the method of questioning rather than any underlying truth. Highly structured questionnaire interviews (in which answers are pre-coded and there is very little scope for interviewer bias) have the comparative advantage that they appear to deal with that problem. Every respondent receives exactly the same stimulus, there are no biases introduced in coding responses and the analysis and presentation of data is much more straightforward and can quite easily be statistical. They are also relatively cheap. However, against this approach are many of the same arguments

[1] *S*everal aspects of what happens in financial markets have been investigated by sociologists.They have used their traditional more or less informal methods to draw conclusions and supplemented them by various types of observation as market actors went about their business. Smith, for example, held a series of informal conversations with a handful of stockbrokers in New York City and described how the situation they encountered when trying to give advice or make their own investments was full of ambiguous, uncertain and sometimes anxiety-provoking explanations from among which it was very hard to chose one in which to be confident Smith, C. W. (1999). Success and Survival on Wall Street: Understanding the Mind of the Market. 2nd edition. Lanham,. Maryland, Rowman and Littlefield.. He talked about socially created stories and became interested in the complex social nature of what counted as knowledge in finance linking his work to broader sociological theories of how knowledge is taken to be true or otherwise in social groups. His work certainly did not seem to be describing financial agents operating inside the kind of knowledge framework of efficient market theory.
Other sociological studies include those by Abolafia, who examined the official minutes of the Federal Reserve Abolafia, M. Y. (2005). Interpretive Politics at the Federal Reserve. The Sociology of Financial Markets. K. jKnorr Certina and A. Preda. Oxford, Oxford University Press., Pixley, who interviewed central bankers and financial journalists about trust in financial markets Pixley, J. (2004). Emotions in finance : distrust and uncertainty in global markets. Cambridge, Cambridge University Press., Hardie and Mackenzie's who conducted participant observation in a hedge fund Hardie, I. and D. MacKenzie (2007). "Assembling an economic actor: the *agencement* of a Hedge Fund." The Sociological Review **55**(57–80). and Godechot, who used interviews after the event to describe how salary negotiations among French bond traders were based on strategic negotiations and effective blackmail Godechot, O. (2008). "Hold-up" in finance: the conditions of possibility for high bonuses in the financial industry." Revue Française de Sociologie. **49**(Supplement Annual English edn): 95–123.. More studies of a wide range of issues and sociological approaches to them, including behavior in financial bubbles, are also reported Smelser, N. (1962). Theory of Collective Behaviour. New York, Free Press of Glencoe, Knorr-Cetina, K. and A. Preda (2005). The sociology of financial markets. Oxford, Oxford University Press, Preda, A. (2009). Information, knowledge, and economic life : an introduction to the sociology of markets. Oxford, Oxford University Press.. The overall outcome is a series of illuminating ideas about how beliefs and practices in financial institutions are determined by a range of normative institutional and structural forces. It particularly stresses how beliefs and emotions are not random but socially patterned and how facts are not given but "made" and financial roles "performed" Mackenzie, D., F. Muniesa, et al. (2007). Do Economists Make Markets? On the Performativity of Economics. Priceton, Princeton University Press..

sometimes levelled at experimental methods in the social sciences: the research itself might be creating a social situation with a meaning of its own which then creates artificial behaviour from which inferences may be misleading. Perhaps the investigator does not actually know how the respondent understood the questioner's intent and so whether the answer is really informative regarding the question the investigator wants to ask.

Unstructured (or even semi-structured) interviews are difficult to rely on or analyse. Questionnaire type interviews are difficult to interpret. I elected to use a "standardised non-schedule interview" (SNSI) format. It is an approach first developed by social epidemiologists precisely to address the problems of interpretation and analysis just mentioned as well as to create less intrusive conditions for high quality interviewee engagement (Richardson, Dohrenwend et al. 1965). It creates a situation for respondents to talk in a conversational way while providing a rigorous opportunity to explore how they understand the questions being asked and how interviewers understand their answers.

In an SNSI the interviewer has a list of questions to him or herself and a number of assessments to make in the form of rating scales. Questions to respondents are asked in a flexible sequence to allow interviewers to establish that the respondent has understood the question as it was intended and the interviewer has also understood the respondent's answer in relation to what he wants to know. To be rigorously systematic an interviewer has a check list and a set of issues to report about and to code after the interview. S/he can respond to what s/he is told by detailed probing to get underneath the assumptions respondents always make about what the interviewer means or wants to know. Eventually, once ratings are made, they generate both numerical data and more detailed qualitative data in the form of excerpts. So that two independent interviewers hearing the same material can make reliable judgments requires them to be aware precisely what the different coding options mean. For this reason an SNSI study requires both significant development effort before the final round of fieldwork and interviews must be recorded or transcribed. If this is

all done high levels of inter-rater agreement are then possible (for example,(Brown and Rutter 1966; Brown and Harris 1978) (Tuckett, Boulton et al. 1985)).

The advantage of SNSI interviews is that any uncertainties or doubts about what respondents are saying or thinking that the interviewer senses in them can be picked up. More crucially, rather than inventing artificial activities for experimental subjects to undertake or answer questions about, SNSI interviews also provide considerable scope to let participants bring an interviewer inside their activities. As they told me about how they looked at market data, met companies, boarded aeroplanes to far-away places, talked to analysts and colleagues and so on, I could seek elaboration, cross-question, test and explore their accounts in a naturalistic conversational setting. Also, by indicating I wanted lots of details, I could encourage them to live the moments they were describing. Rather than batter them with a series of questions I could use antecedents in their answers as a handle to seek elaboration or to move to the next topic. The approach facilitates what is likely to be the key to success in interviews with people who might not co-operate with very routine methods. It can engage and interest them in the project of describing what they did and also convince them that they could trust the interviewer. To assist the latter managers were also told how confidentiality is maintained in clinical work with patients, who require discretion.

The main focus of the interview was on decisions actually taken in the last year. They were all invited to think of some specific decisions they had made in the previous twelve months about which they were satisfied and not satisfied. After deciding which ones to discuss together, we went over them in detail. To collect data on their wider situation managers were also asked to describe how they understood their task, how things were organised and their general strategy.

The kinds of decisions asset managers told me they had to make and their accounts of how they made them will be illustrated with one example in a moment. All the interviews were fully transcribed for later analysis and coding, which was done with the help of several

third parties, and the transcript of this interview (with all identifying names modified to protect confidentiality) can be found online[2].

Mark Devreaux

Keynes (Keynes 1936) famously pointed out that stock market prices depend at least in part on what other people think. His observation, based on personal experience, is pertinent. Although the managers I interviewed all considered that stock prices depend on knowing about the underlying entity, they also thought a great deal about how to judge other people's assessments.

In economic and finance theory all known and relevant information stretching to infinity is "in the price". But to the fund managers I spoke to this was always an open question. We try "to pierce through the smoke and emotion and be contrary to the consensus notion of let's wait for the smoke to clear", said Mark Devreaux. "I mean the problem with that philosophy, I think, is you can make money but if you wait for everything to be clear you will miss most of the money to be made. In that case the market is pretty efficient and where we value investors make money is when it's smoky and there is a lot of panic and controversy. Once everything's clear, its easy, right?"

I saw Mark Devreaux in the US in late June 2007. His "mission" was to look for and purchase securities that other people did not see were undervalued. He had been in fund management for 11 years but with some time out pursuing other interests at his own choice. He has degrees in humanities and science as well as accounting and law from the most prestigious universities. He told me that for the last two years he had directed a team of 20 portfolio managers, several analysts and traders as well as a significant back office staff. The overall value of the main fund he was directly responsible for was $35b and his company is part of a still larger group.

[2] www

The mission strategy Devreaux described was that of the classic “value manager”. He tried to find companies at low valuation which he judged to have considerable upside potential. He was prepared to invest in “distressed situations”; companies at or near the edge of bankruptcy but with a viable strategy for turning things round. He was also prepared to be interventionist with management in such situations. It is an open fund with performance data publicly available in real time marketed to clients from individuals to institutions to intermediaries.

“We operate as a team... the process is “bottom up””, he said, meaning Devreaux is not making top level macro decisions to inform his investment decisions but making a security by security selection process. “We're trying to buy securities that we think are trading today at significant discounts to intrinsic value.” Like any classical “value” investor, he often looks at out of favour names, industries and companies that have “some element of blemish or controversy”; trying to buy assets at a discount to what he thinks they're worth in today's marketplace. In other words he is avowedly contrarian but looking for steady consistent long-term returns as opposed to “very volatile great year, bad year and great year, bad year timing of markets”.

How is all the possible information distilled? They look at what is flagged as “cheap” by commercial data feeds. “We will use some screens as a starting point - what looks cheap on price to cash flow, or what's trading at high free cash flow yields, things like that.” But their speciality is to “dig deeper”. Devreaux and his team have built up considerable institutional knowledge of lots of names and it is the responsibility of the analysts to know what is going on in their sector. “We have an analyst group, who do our own work internally and hopefully we have an institutional knowledge of lots of names. We start with a portfolio with stock we own and it’s the responsibility of each analyst to know what's going on in their sectors - industries. We have group meetings to compare notes about one area versus another and people generally have an idea about what's going on in the entire portfolio. We are very reactive to news and developments”. Portfolios are also determined after team

meetings. Every stock has price targets and holding periods can be very long – over many years. There are about 200 names in the portfolio.

In his interview Devreaux chose to tell me about three decisions in the last year with which he felt satisfied. They all had similar features and I will discuss what he said about buying, selling and then re-buying *Car.*

Seeing through the smog.

Devreaux's team bought *Car* just over a year before my interview when "all the news" about the company was "extremely negative". He said it was having issues with one of its biggest suppliers (which seemed to be at risk for bankruptcy) and this was creating doubt. What would happen? They investigated. They "kicked the tyres and did a lot of work" to understand the "true" situation before taking a very large stake in the company which then rose more than 50% in a few weeks. Having doubled their money "we made a decision to exit". A little later, when there was another series of negative "newsflow items", involving the decision of a very large share holder to sell stock in the company which caused apprehension and uncertainty in the market and provoked a decline in price, they looked at it again and "re-established the position". "It was somewhat controversial", Devreaux emphasised. "*It was not easy going against consensus sentiment"* but that's, you know, when we do it right that's what distinguishes us."

The example illustrated how Devreaux aims to assess where sentiment is wrong and will change. He described how such decisions start with reading lots of financial information. With *Car* it was lots of "supplemental documentation about pension plan liabilities etc. etc., healthcare benefits." To evaluate the situation one of his team made a number of trips "meeting with management out there, some conferences, some conversations with the people at senior level; whomever we can talk to – maybe board members etc. to try to get as good a feel as we can a to what's going on." When that's done and it's "pretty intensive"

there is a team discussion. “What makes for a good value investor is being able to, sort of, separate out the emotion (not that I don't get emotional) about things that stocks do.”

The view Devreaux expressed that the market is driven by emotion and that a calm and “rational” investor can profit from it, is very similar to the view of some behavioural economists in fact (Hilton 2003) and as the “story” many respondents told me. The idea is that stocks do not always trade efficiently because people get scared and stocks get stigmatized. People feel “I don’t want to own this”, said Devreaux. “It doesn’t really matter what the price is I don’t want it!” That, he thinks, is Devreaux’s opportunity. “We come in and ask what that is really worth?” It is always a risky strategy however. When there is bad news or real doubt and people are not wanting to own certain names, Devreaux knows that they may be right and an alternate view wrong – “things can go wrong and it’s never 100%.” But he feels conviction can be built: “you know pieces out there” – meaning that he thinks he has a grasp of relevant facts - and on that basis can work out some kind of “true value”.

A key aspect of his approach to gaining conviction is that he believes he can calculate the potential downside that could follow from a potential purchase “and limit his investment” to situations where he thinks it is no more than 10 or 15% and balanced by a much bigger “upside potential”. This is the approach which will “generate alpha for us”; quantify the downside so “it’s a great risk-reward for us”. So much for the general approach, what about detail?

Your head spins

In the *Car* case, Devreaux thought “the stock was undervalued” because investors “got frightened and could not manage the complexity” of the information available; could not use it carefully to quantify the various complex risks that were applicable. Devreaux said it was partly because that’s not that easy to do. “You know, your head spins when you're trying to quantify healthcare liabilities...pension liabilities…discount rates and what the sensitivities are and what the management options might be”, he said. A central point was *Car*’s ability to

negotiate with their unions and to try to assess what kinds of concessions they might or might not be able to get. “You try to put all those pieces together”, he said, adding that he thought “a lot of people don't get to that level of analysis”. On Devreaux’ assessment the likelihood of *Car* actually going bankrupt was very limited. That meant the downside risk was capped off so that the risk - reward calculus when buying the shares at their then very low price was good; “a lot of potential upside and a very limited downside. There was a margin of safety.”

Fighting the pain and its difficulties

Of course, not all such decisions work out. Devreaux described times when his investments caused him a lot of anxiety because they did not perform as he hoped and other times when he became anxious and cautious to the extent he then missed out. Two specific examples involved *Computer* and *Energy.*

He had begun buying *Computer* shares just over a year before when the share price was falling. His explanation was interesting. With hindsight he thought, he said, that the decision to buy not as wrong but as made “too early”. Apparently *Computer* had begun to show signs of operating weakness and its sales volumes were down. One of the analysts had the task of knowing what was happening. After team discussion they decided the market was much too gloomy about the future (too emotional) and started buying the stock. However, quarterly results and news about the whole computer sector produced adverse expectations. There were also new competitive threats to the company. The stock price kept sliding. Then *Computer* revealed it had accounting issues. It was down by a third since they had purchased. “That’s pretty painful”, said Devreaux. “Ten percent downside is OK, I can manage that” but this was too much.

When a holding falls as much as 25% Devreaux requires the team to do an automatic review. They reconsider the whole situation with the idea that they need to make a judgement and then and act with – buying a lot more stock (“double up”) because it has

become even better value or accepting they were wrong, accepting loss and getting out. “If stocks are coming down, if we've done our work, we should be adequately positioned. If we don't have the confidence to be positive then we’ve probably done something wrong.” His dissatisfaction was that in this case they did not do what they were supposed to do. They neither cut their losses nor doubled up. After the review, which had supported the original case, Devreaux decided to add a little bit to the position. But he said he lacked the conviction to add enough. He was indecisive. So, when eventually the stock did have the tremendous recovery they had expected, he did not benefit enough to make up the loss suffered. He was unhappy: “Even though I have risked a pretty significant position it hasn’t given me much upside.” What he was describing, essentially, was that with the share price falling he could not sustain his confidence in his thesis despite all the analytic work. “I was concerned about the accuracy of our analysis, whether we really had our arms around how bad the business could get.” “I wasn't ready to throw in the towel and say forget it but I was concerned about how bad things could go.” Using hindsight we really should have doubled the position at 20”, he said. “But because I was early it has cost me significant dollars (on a benchmark basis) and a lot of risk with no significant return.”

What Devreaux then elaborated is very important for understanding why he was anxious and what was the context in which he made decisions. He was worrying about how he was being seen. “It's not good,” he said, “because we are compared to the benchmark every day… We are judged on a daily, weekly, quarterly, monthly and yearly basis…it’s a permanent loss of capital (to the benchmark there) with no chance to recover it. That's a bad thing. If we do that too many times we will not succeed.”

Why had it happened? Like most managers Devreaux had an explanation; “It is a company that had gone from being a growth stock which we don’t tend to own, to being a good company at an attractive valuation – a value stock. But when that happens “there is a dislocation of the shareholder base and for a while it’s neither one nor the other”. The comment and the ability to develop an explanation it reveals, seemed to be an important part

of coping capacity asset managers need. Having ready explanations allowed them to feel potent and confident even when success eludes them.

They did everything possible but...

Devreaux's second example of a decision that did not satisfy him was *Energy* - a US based Coal Company. He told me that what was dissatisfying was that management had let his thesis down. As usual, he had bought their shares when there was negative news. The price was falling and other shareholders were selling. His team had done their usual research work and valuations. However, soon after the purchase "the company proceeded to basically do everything wrong it possibly could; from operational issues to safety issues, to a bunch of things. Management destroyed value and also wasted opportunities or were not quick enough to execute them and the stock got clobbered." As well as criticising those who had let him down by way of explanation Devreaux said he was again dissatisfied with the valuation work; "It was not as robust as it should have been…" No doubt he had a point; at the same time was obviously not his view at the moment of decision. What seems to matter, , therefore, is not the accuracy of the explanation for failure but that one has "an" explanation.

Getting buffaloed or not!

Most managers spend a lot of time assessing management and so did Devreaux. "You listen to what they say, what's their strategic plan. You know, how do they sound? I mean, do they sound like they know what the hell they're talking about, or do they sound like idiots? Do they sound like they're working for the shareholders, or if they're working for another agenda? I mean, the notion of, you know, maximising shareholder value, whatever that means, there's, sort of, this generic concept, but, you know, is it returning free cash to shareholders? Is it…is it positioning the balance sheet to, you know, to optimise returns to shareholders, or is it more in the nature of, you know, empire building, or just, you know, wanting to own, you know, the biggest business, or…or just being obstinate about, well, you

know, we've been here all along, and this is who we are, and we're not going to change? Or, is it more a sense of, look, you know, we've got these assets, and we've…our job is to work for the shareholders, which is what we like to hear, and position ourselves to get the best value out of these assets that we possibly can, for shareholders?" I have quoted these remarks at length. They are typical of what others said and seemed to be part of a complex emotional relationship and inherent suspiciousness between asset managers and company managers. When making a relationship, that is when purchasing assets, company executives are praised and favoured like marriage partners. If they fail it turns to recrimination as in divorce. Listening to money managers' talk about company managers and broken trust was a bit like eavesdropping on a group of men or women talking about the unreliability and deviousness of the other sex.

Like many other respondents Devreaux sounded assertive and rather "masculine" at this point in the interview – as he responded to questions about how one could really assess company executives. "There are no sacred cows, you know, basically, everything's on the table, we have a vision, we have a strategy, we have a good team, it's deep, here are other people, you know, here's how we articulate it. I mean, all those things…you can get buffaloed... you know, getting snowed, I mean, getting, you know, George Bush looking at Vladimir Putin, you know, I…I took the measure of the man, right, and then it turns out, you know, what does that mean? So, yeah, I mean, that can happen, so I think it's…it's not as much, you know, looking the guy in the eye, and saying, you know, do I trust you, as hearing the person out, and…and then, sort of, comparing what they say with what they do. "

The interview, which took place in late June 2007, ended with Devreaux discussing what he called "the current period of high values" and "how that might end". He did not mention anxieties about subprime, although that sequence of events had begun and the credit crunch was to start a few weeks after. But he did think asset values inflated. "I think there's some risk in, you know, how it all unfolds, and what the event will be, whether it's, you know, China, or it's, you know, some economic data in the States, or it's war in the

Middle East, who the hell knows, but, you know, things happen…when you're at a (high) level of…of optimism, in a sense, and froth, success in the marketplace, you know, you're…you're that much more at risk for those events to have this…this, you know, ripple effect, of…of really damaging the market. So, you know, having said that, I'm not predicting that we have some catastrophe, but I think the better things are, you know, in some senses, you know, looking at the last (period), the better things are, the more the risk that things are going to get bad. Because there is, you know…I mean, things don't just go straight up. There are movements up and down, bad things happen, and…and they will." Like the others who spoke about it, he was thinking of ordinary ups and downs, not the catastrophic developments which were to occur.

Context and Narrative

What do these brief extracts from Devreaux's interview tell us and what conclusions is it reasonable to draw?

If we wanted to use Devreaux's interview (or any of the others) to infer that we have discovered how and why he "really" takes decisions then in my view we would be in complex and very uncertain epistemological territory. The traditional economist's objection to interviews is that although they may correctly capture what people say they do, that does not necessarily tell us much about what we want to know. For instance, although individual enterprise managers may say they seek to maximise revenue, larger scale statistical enquiry may show that in fact they have to maximise profits - otherwise they would not survive.

It needs to be clear, therefore, that I am not using my interview data to draw inferences about what my respondents really did and its causes, still less to "psychoanalyse" or explain Mark Devreaux and the others. Rather what the data shows, I think convincingly, is different. Devreaux was describing to me the invariant facts of his situation: the context or "conditions" of action facing him whatever decisions he actually took.

Two such features of that context stand out. Decisions had to be made despite high degrees of inherent uncertainty and ambiguity and in a social and group defined situation.

First, it is clear that in the situation he finds himself Devreaux has limited data. His decisions can only be boundedly rational - in the sense Simon originally developed that phrase. His comment about the "smoke" reveals that. His job is to make decisions that successfully predict future events when the information to do is incomplete. He could use rational calculation to model the possibilities at *Car* or *Computer* but the assumptions fed into the model would also require judgment. He can try to build a picture of the future value of such assets using all the information and statistical tools known to man, and aim to construct his overall portfolio to try to diversify risk using the most sophisticated techniques, but the fact is that it is only when outcomes are inherently uncertain so that he cannot know how other people who will influence future price are going to behave and think that he investment is worthwhile. The essence of the context therefore is inherent uncertainty and ambiguous information. The more data he collects and analyses the more issues he has about how to weight it and which bits of "newsflow" to use and which to ignore. He may be misled at any time. Has he paid attention to the right data and ignored the wrong? Data by definition tells him about the past. But is it any use for the future, especially remembering that he is not just trying to predict company and economic fundamentals going forward but other human beings' reactions to them? Also what he is describing is how he and others manage subjective emotional experience through time. The decision he makes one moment can be reviewed and modified, He can and is thrown off course by events and responses he had not anticipated. News (which might be news or just noise) and everything that is happening creates emotional experience – he had to "fight the pain", he said!

Second, the context Devreaux described was social. The financial sector is not a "pass through" of no significance (perhaps apart from some agency relationships) in traditional finance, but a complex human social institution with role relationships in which individual actors are oriented towards each other and take account of each other. Devreaux

is not an atomistic economic agent but an economic actor caught up in a profoundly social situation – the definition of his job, value systems, identities and norms, the context of his performance being public and his anticipation of his client's responses all coming out clearly. He heads a team and describes team decisions and discussions.

Devreaux dealt with this uncertain, ambiguous and social context by telling stories. He had to commit to action and take risk in a situation where others were watching and he was watching them where outcomes were uncertain. Narrative is one of the important devices humans use to give meaning to life's activities, to sense truth and to create the commitment to act in such circumstances. Although its procedural logic is different to that in logico-deductive reasoning (as in probability theory) it is not necessarily inferior to it - particularly in contexts where data is incomplete and outcomes are uncertain (Bruner 1991). It works by filling in gaps and weaving together reason and emotion to create a convincing picture of reality with which people feel comfortable. It allows individuals to make sense and act. Devreaux's story-telling, therefore, will be unsurprising to many psychologists and cognitive scientists, let alone to social scientists or psychoanalysts. Telling stories is a fundamental human activity so automatic and so much part of human life that the "ways of telling and the ways of conceptualizing that go with them are so habitual that they finally become recipes for structuring experience itself" (Bruner 2004).

Internal and external validity

The essence of science is not a slavish adherence to preconceived and simplistic methodological solutions but a rigorous and free peer reviewed debate and subsequent exploration of the issues which might threaten the validity of inference. Threats may be of two types: "internal" and "external".

In an experimental discipline internal validity concerns such matters as how the "treatments" in an experiment are defined and set up and how far effects are reliably and

validly measured. External validity, on the other hand, concerns the grounds for generalisation beyond the immediate observations.

The main issue in external validity in sociology, where for practical and validity reasons experiments are rarely possible, is always sampling. Were the steps taken to select respondents reasonable to allow generalization to the relevant population group? The main issue in internal validity of interviews is measurement. With interviews there are two potential problems. First, whether the way questions were asked and likely to have been understood could have "created" the results, as discussed above. Second, whether the way results have been analysed and presented could be biased.

In this particular study for practical reasons and because this was an exploratory study these managers were not drawn at random from a known universe so that generalization is uncertain. As (Bewley 1999) noted there is a trade-off in fieldwork between the randomness of the sample (desirable for external validity), on the one hand, and response rates and the quality of the interview data (internal validity), on the other. Like Bewley, I used a form of snowball sampling. Institutions were gradually selected on the basis of personal and professional contacts with senior management[3]. All the senior managers approached were interested and agreed to find fund managers in their organisations they thought might have different styles. They had to have worked in the business ("survived") for more than ten years and personally controlled and made decisions about at least $1billion of client investments. Within these characteristics and depending on the size of the institution one to six managers in a location were then chosen as interesting and willing. The 52 managers came from 20 different institutional locations. Those interviewed controlled between them $700 billion, a very large sum. This fact alone means that conclusions drawn from what they told me seem likely to have some significance. Given that what interviewees described to me about the context in which they worked was quite uniform (Tuckett 2011)

[3] I am grateful to Richard Taffler and officers of the CFA Institute in London and New York for these iontroductions..

there is no obvious reason to suppose the study presents problems of external validity. A further study to test this assertion is underway.

The internal validity of the data which resulted from the interviews can be judged from the quotations just offered and also from the much fuller account and discussion in (Tuckett 2011)[4]. This was a developmental exploratory study conducted by a single interviewer rather than a formal SNSI investigation in which several interviewers check on and test their levels of inter-rater agreement. A further study aiming to test if the main findings are replicated and permitting that possibility is underway. Meanwhile, the main safeguard adopted against bias in presenting the data now available is that all the main inferences are supported by randomly (rather than conveniently) selected quotations from what the interviewer was told. To substantiate the core findings in that way introduces a strong discipline both for ensuring ideas are being generated comparatively and for testing the internal validity of categorisation.

A general objection to interviewees might be that inferences are invalid because of response biases – respondents "helpfully" answer the investigator to tell her what she wishes. (This is the same problem faced by experimentalists – discussed as "demand characteristics" (Rosenthal 2002)). For instance, sometimes respondents might try to impress an interviewer with what they thought he might want to know or at other times skate over details about which they were embarrassed. There were such examples. But this type of problem is exactly what an SNSI interview is designed to detect and manage. It was dealt with by focusing attention on the detail of the specific issues I wanted to investigate so that respondents are painlessly led into talking in detail about their work and get interested in doing so. The interviewer stressed to them they had expertise we wanted to understand and respect and questioning was aimed to get them to respect the task in which we were all engaged. To gain that respect the interviewer aimed to be friendly, but not too friendly, and to show interest in every little detail coming in if I sensed circumlocution or the wrong level.

[4] See also www.

Interviews are no more a panacea than other methods of research. The brief extracts from Devreaux's interview are designed to illustrate the kind of data you get and also to show that it does seem to have been possible to conduct enquiry in depth and detail in a spontaneous but structured conversation. The personal contact and atmosphere of enquiry it was possible to establish should be evident in the excerpts and the many other quotations available elsewhere (Tuckett 2011). Many respondents became intensely involved in describing their work, which they had probably not told in such unhurried circumstances to anyone else. It seems likely the interviews do capture both their situation and the narratives they used to explain their decisions to themselves and so indicate what they think. The depth of detail and the spontaneous circumstances in which the stories were requested also make it very unlikely that very much was invented.

This last point raises a further methodological question: aren't the narratives collected in interviews just rationales? The very strength of interviews is that they provide respondents with the chance to reveal how they explain themselves and their decisions and for us to learn about that – about what features of the assets they selected were attractive to them and what repelled them, for instance, and under what conditions. It has been established in a variety of fields for some time now that narratives are developed by social actors as part of taking decisions. They are used both in anticipation of justifying and supporting decisions, perhaps for years afterwards (see (Mills 1940)).

The main conclusions show that the valuations respondents make necessarily depended on narratively constructed beliefs about what would happen in future and how they told stories to themselves and others and had to re-assess those stories based on other stories that come their way in the news. It indicated they were not starved of information and explanations but had many to draw on with a difficult deciding on one. The work is consistent with a previous sociological study (Smith 1999). Other methods might be available to confirm this picture. Elsewhere, for example, I have shown how respondents not only used a narrative form to talk to him about their decision-making in the interviews, they also did it to

record decisions for themselves and to communicate them to other team members and compliance departments - in the notes they kept as part of regulatory requirement. The accounts from those notes and interviews about the same decisions look very similar (Tuckett 2011) p.

The characteristics of financial assets.

Devreaux describes a context other managers described too. He used all the tools of modern finance, but could not be the calculating demon of standard theory because he was faced with too much uncertainty and particularly emotion – his and others'. The uncertain task of assessing market sentiment was crucial to all his calculations. For him "emotion" is a constant fact of life. It is opportunity and danger. "Falling in love" or "hating stocks" is what others in the market do and he tries to profit from this. At the same time, he is in no doubt of the importance of emotion in driving markets. His example of *Computer* in which he had "to fight the pain" illustrates how his emotions (his "concern") in the context of the pressure on him to perform sometimes prevented him from acting as rationally and decisively as he planned. His discussion of *Energy* showed that he has the same ambivalent feelings as other managers about having to be dependent on company management to deliver his expectations.

Taking the uncertainty my respondents described as the major experience in financial markets, suggests it makes little sense to continue to model financial markets as trading fundamentally valued securities whose value is calculated by omniscient demons. Participants have incomplete and ambiguous information which does not provide clear solutions. If they were fully rational they would not invest at all. But because there social situation means they must invest they gain they have to gain conviction to act. They do this by telling stories. Devreaux did it when he bought *Car* and *Computer* and *Coal* and it was also what he did when he tried to interpret news after he had bought them and then even

after he had sold. Between them my respondents told 165 such stories all of which had such features.

Characteristics of Financial Assets

Among many of the simplifications made in economic modelling, one is to treat all traded products as the same. Interviews, such as the one I have described, very rapidly revealed this mistaken but hitherto largely suppressed premise in economic thinking. As soon as I talked to asset managers I was forced to realise very rapidly that financial assets were not like other goods and services and to treat them as such was likely to be in error. Looking at Devreaux's interview we can see that three characteristics are important.

First, financial assets are volatile, meaning that they easily create excitement at quick reward or anxiety about rapid loss. They engage emotions. Devreaux's account of *Car*, *Computer* and *Energy* show this clearly.

Second, they are abstract, meaning that they are not concrete items that have utility because they can be consumed immediately but are symbolic representations of future consumption possibilities that have no use in and for themselves. Again as the Devreaux interview shows their future value is entirely dependent on expectations of future events and human behaviours so that it is fundamentally uncertain and dependent on the reflexive (Soros 1987) expectations of traders.

Third, whether financial assets are traded by individuals on their own account or by asking others to do so assessment of the performance of those trading them is noisy. really possible and so competitive market discipline with its potential to ensure only the efficient survive is compromised. In his interview Devreaux is influenced by his worries that his clients will take money out and this undermines his conviction about the accuracy of calculation concerning Computer's future value.

These three facts about financial assets and the uncertainties they introduce mean that it was far from rational to value financial assets (and financial performance) only by calculating risk and probabilistic returns in the way economics and finance textbooks suggest. Rather, to make decisions in the context they inhabited, my respondents had to organize the ambiguous and incomplete information they had into imagined stories about securities with which, if they believed them and were excited enough by them, much as we do in human relationships, they then entered into an actual relationship which had to last through time.

Significantly in this situation, the fact their value can go up and down a lot and quickly means that financial assets instantly provoke the most powerful human desires and feelings – excitement and greed around possible gains and doubt, envy, persecuted anxiety, and depression about potential loss. Such feelings are not just dispositions in a utility function as modelled in behavioural economics. As we have seen with Devreaux they influence managers' daily work in an ongoing dynamic way and also affect the responses to them of their clients and superiors. In particular, holding an asset takes place through time and creates experience which can disrupt or confirm a story. News, such as the news about the computer industry and rumours about accounting difficulties Devreaux described, therefore creates emotion and so particularly do price changes. The price of *Computer* shares did not only clear the market, it functioned as a signal. In this way, as new information which might threaten the future of the "story" emerges, the holder of a financial asset has to be able to tolerate his worries as he watches his cherished investment fall in price and wonder why. S/he knows there may really be good reason to rethink and sell but does not know for sure. Again s/he reacts by telling stories. This characteristic of financial assets also means that in effect the original decision to buy has to be made again and again and again for as long as one holds the stock – a point, missed by current economic theory, recognised by Shackle a long time ago (Ford 1993), which is static in its treatment of time.

Markets in stories and the implication

Modern economists carefully define Knightian uncertainty and distinguish it from risk. They then spend a lot of time discussing risk but ignoring uncertainty. But uncertainty makes all the difference. In that context logico-deductive based thinking and prediction of the kind enshrined in probability theories (and then modelled by economists as rational decision-making and optimisation under constraints) might be worth using but could also mislead. It can only be of limited value and unless that is recognised is actually not rational to use at all (Rebonato 2007). Trying to work out what to do when the relationship of past and present to future is uncertain is not the same as dice-throwing or playing roulette.

My respondents were not trying to predict runs of dice or wheels and balls. These are the wrong analogies for what almost anyone interviewed in a financial market is trying to do. Rather, what these financiers described to me was trying to decide what they thought were the various uncertain futures that might unfold for the future price of various financial assets. To do this they looked at (made guesses about) what they thought would happen and its likelihood, what others thought, what others were doing and what everyone would do in future and combined all this into stories. They used every method they could to think what to buy, sell or hold and they also thought about the responses in the social-institutional situation in which they found themselves - what others would think if they did this and that happened or, if not, what would be the particular outcomes and what would everyone feel about them?

Such facts about financial assets are the reality context. They quite clearly place severe limits on even the most ingenious actor's capacity to make decisions. They make it unlikely that all reasonable agents will draw the same conclusions even if they have the same data. Because my financial actors were not able to see the future with certainty their thinking about the value of securities was saturated with the experience of time, the memory of past experience, experiences of excitement and anxiety and of group life as well as the stories they told themselves about it all. From this perspective, rather than describe financial markets as trading in probabilistically derived estimates of fundamental values, as in the

standard text books, I have suggested they are best viewed as markets in competing and shifting emotional stories about what those fundamentals might be - but with one version or another of the story and its emotional consequences getting the upper hand at any particular time and for some of the time (Tuckett 2011).

Markets in shifting stories of the kind I observed can quite obviously more easily turn into the wild ones that lead to serious crises of the kind we have witnessed. Stories by their nature create belief and conviction even where data is incomplete. In fact as Devreaux's interview indicated the general story in financial markets is already hugely at variance than the one told by academic finance. The marketing strategies and mission statements of the giant funds (Woolley 2010) that dominate financial markets are based on the notion they can provide exceptional performance – a story that provides the social-institutional context Devreaux experienced. He had to be exceptional and so naturally he had to find exceptional opportunities. The context means that financial markets always have the potential to embrace stories about what elsewhere I have called *phantastic objects* (doctoms, tulip bulbs) and to be overtaken by what I term *divided states* and *groupfeel* at any time. In the years leading to the 2008 crash it was financial derivatives which became experienced as *phantastic objects* and after leading to *divided* emotional states and *groupfeel* produced a catastrophe (Tuckett 2009; Tuckett 2011).

Based on such observations I argued that ordinary everyday financial markets as presently constituted necessarily create dangerously exciting stories, problematic mental states and strange group processes in which realistic thinking is fundamentally disturbed. Financial markets, as currently organised, are inherently unstable.

Conclusion

My aim in this contribution has been to demonstrate that at least in some circumstances economists need interview data. In fact, I became aware of the overlooked significance of the characteristics of financial assets and of the uncertainty facing asset

managers that form the basis of this contribution almost immediately I began. In the first half hour of the first pilot interview I spent trying to work out what questions to ask, to test whether the respondent was behaving in the manner expected by standard theory, it already became apparent that focus was not very useful. The respondent was the highly successful head of a major desk. He had a lot of research and computer resources on which to draw. He tried to use them rationally but, as he volunteered with some embarrassment, ultimately it was "touchy-feely" guess work. It became evident that the simplified model of rational decision making used in standard theory just didn't seem to apply to what my respondent was trying to do.

He could calculate as much as he liked but he was still left with uncertainty and several equally attractive alternatives from which he selected by touch and feel. Interviews, therefore, could make clear the decision context (what (Parsons 1937) called the conditions for social action) and in doing so demonstrated the very limited utility of economic rationality as a significant guide to behaviour. However much rational logic and probabilistic reasoning my respondents tried to deploy to interpret the new information available they were not facing simple unambiguous choices which they could get right by logic alone. They had constantly to engage in subjective interpretation. As the labour economist Bewley put it in the apparently very different context of explaining his decision to do interviews to try to resolve key questions about what happens to wages in a depression, "the implications of rationality depend on the conditions constraining decision-makers" (Bewley 1999 p7). He found just what I have reported, namely that it is often knowledge as to what the constraints on behaviour are that "is precisely what" agents are "lacking" (Bewley 1999 p7).

Abolafia, M. Y. (2005). Interpretive Politics at the Federal Reserve. The Sociology of Financial Markets. K. iKnorr Certina and A. Preda. Oxford, Oxford University Press.

Bewley, T. (1999). Why Wages Don't Fall During A Recession, Harvard University Press.

Brown, G. and T. Harris (1978). Social Origins of Depression: A Study of Psychiatric Disorder in Women. London, Tavistock Publications.

Brown, G. and M. Rutter (1966). "The Measurement of Family Activities and Relationships." Human Relations **19**(3): 241-263.
Ford, J. L. (1993). "G. L. S. Shackle: A Brief Bio-Bibliographical Portrait"." Journal of Economic Studies **12**(1/2): 3 - 12.
Godechot, O. (2008). "Hold-up" in finance: the conditions of possibility for high bonuses in the financial industry." Revue Française de Sociologie. **49**(Supplement Annual English edn): 95–123.
Hardie, I. and D. MacKenzie (2007). "Assembling an economic actor: the *agencement* of a Hedge Fund." The Sociological Review **55**(57–80).
Hilton, D. J. (2003). Psychology and Financial Markets: Applications to Understanding and Remedying Irational Decision-Making. The Psychology and Economic Decisions. Volumne 1: Rationality and Well-Being. I. Brocas and J. D. Carrillo. Oxford, Oxford University Press.
Keynes, J. M. (1936). The General Theory of Employment, Interest and Money. London, Macmillan.
Knight, F. H. (1921). Risk, Uncertainty, and Profit. Boston, MA, Hart, Schaffner & Marx; Houghton Mifflin Co.
Knorr-Cetina, K. and A. Preda (2005). The sociology of financial markets. Oxford, Oxford University Press.
Mackenzie, D., F. Muniesa, et al. (2007). Do Economists Make Markets? On the Performativity of Economics. Priceton, Princeton University Press.
Mills, C. W. (1940). "Situated Actions and Vocabularies of Motive." American Sociological Review **5**(6): 904-913.
Parsons, T. (1937). The structure of social action : a study in social theory with special reference to a group of recent European writers. New York, McGraw-Hill Book Company, inc.
Pixley, J. (2004). Emotions in finance : distrust and uncertainty in global markets. Cambridge, Cambridge University Press.
Preda, A. (2009). Information, knowledge, and economic life : an introduction to the sociology of markets. Oxford, Oxford University Press.
Rebonato, R. (2007). Plight of the Fortune Tellers: Why We Need to Manage Financial Risk Differently. Princeton, Princeton University Press.
Richardson, S., B. S. Dohrenwend, et al. (1965). Interviewing: Its forms and functions. New York and London, Basic Books.
Rosenthal, R. (2002). "Covert communication in classrooms, clinics, courtrooms, and cubicles." American Psychologist **57**(11): 839-849.
Smelser, N. (1962). Theory of Collective Behaviour. New York, Free Press of Glencoe.
Smith, C. W. (1999). Success and Survival on Wall Street: Understanding the Mind of the Market. 2nd edition. Lanham,. Maryland, Rowman and Littlefield.
Soros, G. (1987). The Alchemy of Finance. New York, John Wiley.
Tuckett, D. (2009). "Addressing the Psychology of Financial Markets." Economics: The Open-Access, Open Assessment E-Journal **3**(2009-40).
Tuckett, D. (2011). Minding the markets: An emotional finance view of financial instability. London, MacMillan.
Tuckett, D., M.-G. Boulton, et al. (1985). Meetings Betwen Experts. London, Tavistock Publications.
Tuckett, D. and R. J. Taffler (2008). "Phantastic Objects and the Financial Market's Sense of Reality: A Psychoanalytic Contribution to the Understanding of Stock Market Instability." Int. J. Psychoanal. **89**(2): 389-412.
Woolley, P. (2010). Why are financial markets so inefficient and expolitative - and a suggested remedy. The Future opf Finance: The LSE Report. A. Turner, A. Haldane, P. Woolleyet al. London, LSE:.