

Phantastic objects and the financial market's sense of reality: A psychoanalytic contribution to the understanding of stock market instability¹

David Tuckett and Richard Taffler²

Psychoanalysis Unit, Research Department of Clinical, Educational and Health Psychology, UCL, Gower Street, London WC1 6BT – d.tuckett@ucl.ac.uk

(Final version accepted 14 December 2007)

This paper sets out to explore if standard psychoanalytic thinking based on clinical experience can illuminate instability in financial markets and its widespread human consequences. Buying, holding or selling financial assets in conditions of inherent uncertainty and ambiguity, it is argued, necessarily implies an ambivalent emotional and phantasy relationship to them. Based on the evidence of historical accounts, supplemented by some interviewing, the authors suggest a psychoanalytic approach focusing on unconscious phantasy relationships, states of mind, and unconscious group functioning can explain some outstanding questions about financial bubbles which cannot be explained with mainstream economic theories. The authors also suggest some institutional features of financial markets which may ordinarily increase or decrease the likelihood that financial decisions result from splitting off those thoughts which give rise to painful emotions. Splitting would increase the future risk of financial instability and in this respect the theory with which economic agents in such markets approach their work is important. An interdisciplinary theory recognizing and making possible the integration of emotional experience may be more useful to economic agents than the present mainstream theories which contrast rational and irrational decision-making and model them as making consistent decisions on the basis of reasoning alone.

Keywords: financial bubbles, group functioning, market instability, phantasy relationships, splitting

After an initial period of enthusiasm in the earlier years of the discipline's development, and some not inconsiderable success, psychoanalysts have progressively disengaged from joining interdisciplinary attempts to use the insights gained into human psychology from their clinical work to contribute to the task of understanding wider social, political or economic phenomena.³ Yet since standard psychoanalytic thinking significantly differs from other ways of understanding human psychology, it may have a unique contribution to make.

This paper will explore that possibility by examining a topic of current relevance; namely, perceived instability in financial markets with its very widespread

¹The authors are grateful to Liz Allison, Alan Budd, John Kay, Mervyn King, Gabriele Palma, Neil Smelser, David Taylor, Jeremy Vooght, the Editors and four anonymous reviewers for this journal for their time and generous comments on earlier drafts of the manuscript. All faults and errors that remain are the authors alone.

²Richard Taffler's affiliation is: Martin Currie Chair of Finance and Investment and Director of Finance and Investment, The Management School, University of Edinburgh.

³Compare the historical account of the major role psychoanalysts played in aspects of the second world war and its aftermath (King, 1989) with more recent (themselves quite rare) efforts to explore ways it can contribute to socio-economic or political situations – for example, Altman (2005), Eizirik (1997) or Kernberg (2003). An exception is Steinberg, 1991.

consequences for human development and welfare. To understand 'financial instability' (for example, the Internet bubble) we will not introduce new ways of thinking psychoanalytically; one strength of the argument we put forward is that it relies on widely accepted clinical thinking about the working of the unconscious mind, the nature of unconscious phantasy and psychic reality, the relationship between states of mind, and so on. Rather, in proposing the concept of 'phantastic objects' and locating it within an established psychoanalytic theory of thinking in which reality is sensed differently in different mental states, our aim has been to frame the standard psychoanalytic understanding of human psychology in a way that is useful for applying it to social and economic questions. We have then attempted to show how it can be applied to elucidate financial markets.

Our argument is based on the ideas we developed following an analysis we undertook of the financial facts and the commentaries made on them as reported in the pages of the financial press during the Internet bubble, supplemented later by a literature review of earlier financial bubbles and a small qualitative interview study of financial professionals.⁴

Financial instability and mainstream economics

Historically, financial markets are repeatedly subject to periods when prices rise fast or decline swiftly⁵ and from time to time what look like 'bubbles' develop in the markets for particular assets – tulip bulbs, options to buy shares in the South Sea Company, Internet stocks, shares in emerging markets, junk or mortgage bonds, etc. At times, such as in 2007, when the market was erratic over a period of months resulting from uncertainties over the impact of the US sub-prime crisis, events on stock markets no longer merely reflect the prospects for the 'real economy' – profits, incomes and employment opportunities – but affect it on a worldwide scale.

The Internet bubble, which will be our main focus, lasted for five years between 1995 and 2000. It was quite dramatic. In eighteen months between 1 October 1998 and 9 March 2000, the Dow Jones Internet index multiplied six times. In the next month it halved in value and by the end of 2002 stood at only 8% of its high (see Figure 1).

Sun Microsystems (which recently changed its name to Java) is now a successful company providing software for nearly everyone's computer. Its stock price soared so that at its highest point in 1999 the total value of its shares was ten times its annual revenues (see Figure 2). After the Internet price bubble was over, Sun's chief executive set out to his shareholders how unrealistic he thought people had been:

⁴The first-named author is currently conducting an in-depth study of 50 experienced asset or portfolio equity managers working for major asset management houses in Asia, continental Europe, the UK and the US. Some anecdotal comments from this study or the pilot interviews with senior figures in the asset management industry will be used to support some parts of the argument, where it appears that what he has been told is reliable and substantiated by more than one respondent. The basic thesis has been presented to financial professionals and published in two professional directed publications (see Tuckett and Taffler, 2003; Taffler and Tuckett, 2007a, 2007b). The interview study was made possible by a 2007 Leverhulme research fellowship.

⁵The value of all the shares on the US stock market (measured by the Dow Jones Industrial average) can fall precipitously; 90% between 1928 and 1929 causing widespread unemployment and social and political dislocation; 26% on one day on October 19, 1987 (only to recover half that amount two days later); 7% on September 17, 2001 (the first day markets were open after the terrorist attacks).



Fig. 1. The Dow Jones Internet Index (January 1998 = 100)

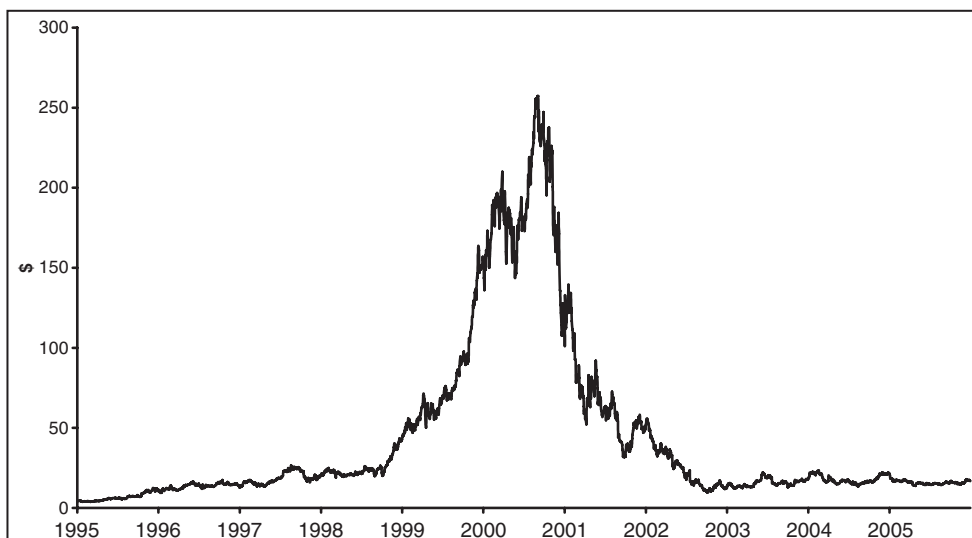


Fig. 2. The Price of Shares in Sun Microsystems (1995–2005)

At ten times revenues, to give you a 10-year payback, I have to pay you 100% of revenues for ten straight years in dividends. That assumes I can get that by my shareholders. That assumes I have zero cost of goods sold, which is very hard for a computer company. That assumes zero expenses, which is really hard with 39,000 employees. That assumes I pay no taxes on your dividends, which is kind of illegal. And that assumes with zero R&D for the next 10 years, I can maintain the current revenue run rate. Now, having done that, would any of you like to buy my stock at \$64. Do you realise how ridiculous those basic assumptions are?

(Pratley, 2005, p. 25)

In mainstream economics the primary explanation for financial market bubbles or other instability is that uncertainty is introduced into individual calculation by *new* information. When there is news that real prospects have changed economic agents buy or sell, until prices change in line with their changed expectations of 'reality'. Insofar as new information is unambiguous and there are enough investors who calculate accurately and act promptly, setting aside their previous attitudes and views, a new equilibrium will be established in a consistent and efficient way. Economists have made a great deal of effort to maintain this line even where observation appears to contradict it. The general argument, although not altogether accepted (see Kay, 2003), is that, although price movements can look excessive, making markets appear inefficient and 'irrational', in fact the extreme changes are perfectly consistent with the range of possible 'rational' responses economic agents may have to the uncertainty introduced into their calculations by exogenous shocks. Shocks are unexpected events or new technical possibilities with implications for the real economy. They introduce uncertainty but the market actually absorbs it in an efficient way (for example, Brunnermeier, 2001; Pastor and Veronesi, 2006).

Emotion, ambiguity and uncertainty

Experience from the interviews being conducted by one of the authors suggests that uncertainty and, in particular, the difficulty of deciding what information to trust and what to ignore are indeed the main issues. This view is supported by Smith (1999), who interviewed a series of senior Wall Street participants in 1989. He found that, although they seldom admitted their uncertainties in public, these clearly emerged in his interviews. 'Some ... claim ... to understand ... but most, if pushed, admit they don't'. He argued that this lack of understanding wasn't the result of a 'shortage of explanations' but of their 'abundance' (1999, p. 12). Estimations about future effects, therefore, may frequently be inherently uncertain and ambiguous.

In the psychoanalytic model we will put forward, the main explanation for market instability arises from the scope that such *ambiguity* and *uncertainty* surrounding the assessment of information provides for varying responses from economic agents. Agents can anticipate a wider range of possible future outcomes in terms of gains and losses, and in the face of uncertainty there is increased scope for emotional and unconscious phantasy to shape reactions to news. We will argue that, in the context of uncertainty and ambiguity, it is emotions and states of mind which determine the way information about reality is apprehended. Thus, willingness to take risks will vary not only when there is clear new information bearing on the 'real' risks but also when there have been significant changes in the states of mind

in which risks are evaluated. Such states of mind are features of the management of an everyday sense of reality in the face of uncertainty.

From a psychoanalytic point of view, we might consider that buying and selling assets involves establishing imaginative object relations to them; probably more or less ambivalent object relations. If this is the case, imaginative relations to creating or breaking emotional investment ties will be part of the evaluation of the facts in any decision to buy, sell or hold. The assessment of what is salient in any information received about a potential investment, what is real, and what the future is likely to bring, would all be influenced by both conscious and (dynamically) unconscious factors, including unconscious phantasies involving excitement, greed, anxiety and guilt, and defences against such affects because they cause psychic pain.

Freud (1911) introduced the idea that achieving the capacity to sense reality as it is, rather than as we might wish it to be, depends on the outcome of a developmental struggle between the 'reality principle' and the 'pleasure principle'. He wrote about a developmental achievement through which a 'new principle of mental functioning was thus introduced', so that 'what was presented in the mind was no longer what was agreeable, but what was real, even if it happened to be disagreeable' (Freud, 1911, p. 219). The battle is never won, of course – a point that Freud saw as a new insight into something which had not previously been adequately acknowledged:

As people grow up, then, they cease to play, and they seem to give up the yield of pleasure which they gained from playing. But whoever understands the human mind knows that hardly anything is harder for a man than to give up a pleasure which he has once experienced. Actually, we can never give anything up; we only exchange one thing for another. What appears to be a renunciation is really the formation of a substitute or surrogate. In the same way, the growing child, when he stops playing, gives up nothing but the link with real objects; instead of *playing*, he now *phantasies*. He builds castles in the air and creates what are called *daydreams*. I believe that most people construct phantasies at times in their lives. This is a fact which has long been overlooked and whose importance has therefore not been sufficiently appreciated.

(Freud 1908, p. 144)

Ideas about the way conflict between the pleasure and reality principles plays out in mental life have received much subsequent attention. A great deal of clinical experience has been accumulated and a secure literature established, describing how the perceptual conflict that gives rise to bad feelings is managed by being defended against (or split off) so that it is repressed and becomes (dynamically) unconscious. In simple terms, we realize only what we find it bearable to feel (Rickman, 1937).

A path dependent emotional trajectory but facts don't change

When we explored the main accounts of stock market bubbles (Galbraith, 1993; Kindleberger, 2000; Mackay, 1932), we were struck by the fact that they were first and foremost descriptions of an emotional sequence. Behaviour is described unambiguously in highly emotional terms. 'Speculative excess, referred to concisely as a mania, and revulsion from such excess in the form of a crisis, crash, or panic can be shown to be if not inevitable, at least historically common' (Kindleberger, 2000, p. 25). In 1720 a Dutch visitor to Exchange Alley in the City of London, where South Sea stock and subscription receipts changed hands, is reported to have written home to say: 'It is like nothing so much as if all the lunatics had escaped out of the madhouse all at once' (Dale et al.,

2005). In other accounts such markets are regularly described at various stages as excited, excessive, euphoric, exuberant, manic, depressed, anxious, panicky, jittery, 'in revulsion', ashamed, etc.

What does not seem to have been noted before, however, is that, although the timing of the emotional stages may be unpredictable, they proceed in what for a psychoanalyst is a predictable emotional direction – they are path dependent; one thing leads to another. Whether it was South Sea or Internet stock, tulip bulbs, railways, joint-stock companies in the 1920s, or junk bonds in the 1980s, in each case there was patchy excitement about an innovation leading to growing excitement, leading to manic or euphoric excitement, then turning to panic and finally resulting in blame. If the initial excitement is sustained, it invariably seems to reach towards a state of severe overconfidence in the euphoric stage (in which objections are typically treated with derision before leading to panic), and in the final stage there is invariably a wish to identify scapegoats.

We shall seek to answer two questions about this emotional path. First, why during a financial bubble does a dominant proportion of economic agents appear to become incapable of using relevant information to assess the generalized belief that something 'phantastic' is happening? Second, why do anger, blame and the search for scapegoats (as in the current sub-prime 'credit crunch' crisis in the UK) erupt in the aftermath of these events, rather than guilt?

A third question is posed by a further set of observations. It is striking that the information available to economic agents to judge or price the riskiness of investments does not really change during the course of bubbles. Rather, what seems to change is the attitude of mind towards available information. While the price of stock and emotions followed their up and down path, such secure facts as were available remained largely unchanged. This point has been made by Greenspan (2007, p. 465) in his attempts to understand what was happening in 1987, when the Dow Jones lost a fifth of its value on one day. It is also clear from detailed study of what information was available during the Internet bubble. New Internet companies, whose shares were avidly accumulated when offered to the market in 1995–2000, were, if only for legal reasons, very detailed and precise in giving information about their current situations and prospects for years ahead. No new information became available that changed these prospects before the fall. At all stages companies were nearly all losing money and had no prospect of making it for many years into the future. Many pages of small print in share prospectuses spelled this out and in this sense investors always knew what they were getting: companies with few assets, little track record, forecast of losses and a lot of hope (Cassidy, 2002). Investors even seem to have thought that losing money was a positive attribute at this time for this type of business, perhaps because it meant they were investing to achieve a strong future position (Hand, 2003).

When Internet companies' share prices collapsed in March 2000 many of them had launched only months before. But after an increasing period of volatility and claim and counter-claim, sentiment towards them changed into revulsion. This was not because the case had changed. Arguments against investing in dot.com companies supported by known facts were frequent between 1996 and 2000. As in previous asset price inflations, reputable commentators and leading economists had questioned the facts or at least the assumptions and expectations implicit in the

pricing of Internet stocks.⁶ Such comments might have provided opportunities for those involved to reflect directly or indirectly on the facts and so to question the assumptions behind pricing. In fact such doubt was not only ignored but dismissed or met with extraordinary hyperbole.⁷

This allows us to formulate a third question: why is it that in these events the normal rules of propriety that underpin investment get broken and warnings get ignored, and why do even professional investors join in?

Towards a psychoanalytic frame: Phantastic objects

During the dot.com bubble (1995–2000) descriptions of the companies and activities associated with the Internet were full of excitement, glamour, and hyperbole. Stock markets were headline news on radio and television and the front pages of major newspapers and periodicals (Tuckett and Taffler, 2003). Looking at these accounts and those in earlier bubbles it is apparent that very clever people are engaging in novel and mysterious activities: they are creating exciting new technologies like tulip bulbs, railways or the Internet, which at the time seem to offer the possibility of substantially changing economic productivity and profitability. The opening of access to new markets, such as in Asia, similarly excites. Other new developments have been less revolutionary in terms of any hint of their direct effect on productivity, but have been novel in the sense that they were financial innovations; for example, the construction of new financial instruments (junk bonds, mortgage bonds), new ideas about efficient combinations of activities in the way businesses are run (mergers and acquisitions), the invention of new ways of holding new asset classes (hedge funds), the emergence of new types of management teams or new ways of judging what they do, and so on.

We suggest that the essence of these exciting developments can be captured by thinking of them as *phantastic objects* (Tuckett and Taffler, 2003). We derive the phrase *phantastic object* from two psychoanalytic concepts. The term *object* is used in the same sense as it is in philosophy, as a mental representation; in other words as a symbol of something but not the thing in itself.⁸ The term *phantasy* (which gives rise to the term *phantastic*), as mentioned in Freud's (1908) view above, refers to an imaginary scene in which the inventor of the phantasy is a protagonist in the process of having his or her latent (unconscious) wishes fulfilled (Laplanche and Pontalis, 1973, p. 314). Thus, a '*phantastic object*' is a mental representation of something (or someone) which in an imagined scene fulfils the protagonist's deepest desires to have exactly what she wants exactly when she wants it. We might say that phantastic objects allow individuals to feel omnipotent like Aladdin (who owned a

⁶There were articles expressing serious doubt in each of the five years – see Tuckett and Taffler, 2003. As an example: *Barron's* (August 30, 1999) 'Qué pasa? Quién sabe?' begins 'We all know that evaluating Internet stocks encompasses less science than does opting whether to hit or hold in Atlantic City ...'

⁷Mary Meeker wrote: 'The difference is that real values are being created. Tulip bulbs would not fundamentally change the way the companies do business' (Cassidy, 2002, p. 217). Henry Blodget (1999) was still more effusive: 'With these types of investments, we would also argue that the 'real' risk is not losing some money – it is missing a much bigger upside.'

⁸An object in this sense, therefore, is not limited to a physical object. It could be a representation of a thing or a person or a relationship but it could also represent just an idea.

lamp which could call a genie); or like the fictional bond trader, Sherman McCoy (who felt himself a Master of the Universe [Wolfe, 1987]).⁹

Insofar as Internet stocks (tulip bulbs, South Sea shares, railways, junk bonds, mortgage bonds) are unconsciously apprehended as having the quality of phantastic objects, it is unsurprising that they generate so much excitement. As such they appear to break the usual rules of life and turn aspects of 'normal' reality on its head; creating the impression that what was previously thought impossible or permanently elusive might happen after all. They are likely to create great excitement and greed which would be magnified by the worry that others might be getting them first – perhaps unconsciously reminiscent of early infantile struggles for possession of the primary objects and their attributes and also of old defeats and the opportunity to reverse them.

This hypothesis seems to us to help explain why active investors (like those in earlier asset bubbles before them) could not treat information about dot.com stock as describing shares in real companies with employees, prospects and specific calculable probabilities of finite future return, unconsciously understanding them rather as concrete opportunities to achieve omnipotent and omniscient phantasies which are usually restrained from becoming conscious reality or treated as delusions. These exciting phantasies had the power to over-ride more realistic calculation and the judgement of the facts – a process facilitated because (as we have seen) the prospects of many companies were entirely abstract conceptions. As we see it, active investors did not 'think'; rather, Internet stocks were 'felt' to be a good buy. Dot.com and other 'new' technology stocks came to dominate the financial markets and the financial indices, generating such extraordinary expectations that demand grew exponentially; investors competed with each other, perhaps creating further unconscious competitive excitement but certainly driving prices higher and higher.

A technical consequence of rising prices which alter the balance as to which companies are large or small relative to each other is that passive investors or those seeking to track benchmarks are also drawn into the market; the large number of index tracking funds¹⁰ are largely forced by their mandates to own shares in popular sectors and even active professional asset managers are pressured to join in or to take the risk of being an outlier. Those who chose to stay out between 1995 and 2000 performed so badly that they either found ways to convince themselves to join in, or if they stayed true to their valuation principles then lost clients. One senior partner in a major institution interviewed in 2007 told one of us that 60% of their assets under management were lost to other asset managing firms in 1999 – many billions of dollars. Such transfers had the technical effect of further amplifying trends; those assets would have been allocated to those who had performed better and so would have gone to a team prepared to invest in dot.com stocks, driving up prices even further!

A simple but ingenious piece of research provides what seems to us overwhelming evidence for the proposition that it was the idea of the Internet rather

⁹Or indeed like the successful bond traders at Solomon brothers who thought of themselves as 'big swinging dicks' (Lewis, 1989).

¹⁰Tracking funds are obliged to invest in the same proportion of different stocks as contained in the index being tracked. These proportions are dynamically updated by price changes.

than any complex calculations of the facts about it that drove the excitement. Cooper et al. (2001) looked at the effect on the share price of companies when they changed their name. They demonstrated dramatic increases in the share price of firms which added '.com' to their names in 1998 and 1999, regardless of other factors. Specifically, they found that prices exceeded those of a control group by 63% for the five days around the name-change announcement date and that this effect was independent of a company's actual level of involvement with the Internet. More detailed analysis showed how companies with non-Internet-related core businesses appearing to be Internet companies earned the greatest post-announcement returns. The excitement of association with the Internet appears to have quite overcome any detailed thinking about companies' real prospects.

A supporting story and a covering idea

When enough people perceive investment opportunities to offer the chance to possess phantastic objects and the kind of excitement just described is generated, it seems unconscious wishful phantasies can appear to be self-fulfilling, due to what are termed naturally occurring Ponzi processes (Shiller, 2000); if a market is suddenly dominated by more buyers than sellers then prices do rise, which itself appears to show the wisdom of the investment and then causes fresh waves of buying, further price rises and so on.

Markets are necessarily dominated by the active – if you don't trade by buying or selling you can't influence the price. We might think, therefore, that a self-selected group of active investors, who are more preoccupied with the search for phantastic objects than others, engage in a Ponzi process and become rewarded by it. As things go on they become more and more excited and want to engage some more. At the same time others, including the asset management professionals responsible for billions of dollars, are drawn in. Although at first they may hang back out of scepticism, they eventually convince themselves something is happening (perhaps citing a populist version of the economists' theory that markets do not lie). They then feel they can ride the wave and time their entry and exit to the market; or they may be drawn in for technical reasons (such as investment mandate requirements stating they may not be unduly underweight in a particular sector since they track an index); or there may be more subtle adaptive pressures not to be left behind. One of the interviewees we spoke with recalled that during the dot.com bubble clients were anxious about fund performance and that this did create pressure for policy changes:

And then the head of equity argued along the following lines, maybe there is something here that we're missing. I'm not sure, maybe there is, maybe we should factor in some different criteria, change some parameters to allow for something we are obviously overlooking. The market's telling us there's something we're missing. Maybe we factor in different growth rates or that did actually cause us to slightly change.

Rationalization of the kind just mentioned was made easier during the dot.com bubble, as in all others, by the availability of a narrative that satisfied what Shiller (2000) calls the need for a 'superficially-plausible popular theory that justifies'. In fact Smelser (1962, 1998) has identified how it is necessary for leaders in a wide

range of collective actions (stock market bubbles, fads, crazes and other mass movements) to supply a 'generalized belief' supporting the phantasy which we might also call the manifest cover story.

Galbraith (1993) discusses the role of banking leaders and economists in helping to provide an underlying belief-narrative that made sense in the period of enthusiasm about joint-stock companies prior to the Great Crash. During the Internet bubble the cover story, which became current and apparently able to capture thinking and so perhaps to justify what was happening, was the 'New Economy'. The idea offered in the most influential intellectual circles was that information technology, and, in particular, the Internet, could transform productivity in the US and other economies in ways hitherto unimagined (Hall, 2000).

Cover stories appear to capture some essential sharable and simple element of the new phantastic object inventions and so provide a rationale even if it is only vaguely understood. The tone in which the new ideology of the new economy was discussed in the Internet bubble is particularly indicative. Discussions of the end of traditional methods of doing business hit headlines and today seem full of hubris. A *Time* headline (July 20, 1998) read: 'Kiss Your Mall Goodbye: Online Shopping Is Faster, Cheaper and Better'. An article in *Business Week* (February 8, 1999), commented: "Amazon's fourth quarter sales nearly quadrupled over 1997, and compared to that, *Sears is dead*" (italics added). The co-founder of Nerve.com (*New York Magazine*, March 6, 2000) was quoted as saying: 'It's incredibly powerful to feel you are one of seventeen people who really understand the world' (Grigoriadis, 2000).¹¹ Such irrepressible excitement about the new is characteristic of new technology bubbles (Perez, 2002).

In fact, while the bubble was still in full flow, Shiller (2000) made an extensive analysis of the rhetoric surrounding the idea and how it might increase profitability. His analysis shows that the Internet was relatively pedestrian as a new idea to increase profitability; especially compared to railways or the original freeway (motorway) system, both of which were still going to be necessary to transfer many of the Internet-ordered products. Shiller's carefully argued analysis was dismissed before the crash but proved correct soon afterwards; a further sign, perhaps, of the characteristic capacity of phantastic objects to create omnipotent and closed ways of thinking.

Changes in the financial market's sense of reality

We have seen how market thinking at the time of the dot.com bubble became saturated with the emotions felt towards Internet stock. Perceptions of reality were coloured by wishful thinking. Sceptical analysis of the claims that something completely new was happening to the economy might have provoked cautious analysis just as the rather excited and flamboyant claims being made for the new situation might have caused alarm. It is because caution, anxiety and alarm were unable to stem the flow of enthusiasm sustained by the weak cover story just discussed, that we suggest that the key to understanding such bubbles lies in the

¹¹The point is made in this article that the original entrepreneurs interviewed had little genius for business or computer programming but did have "the kind of finely tuned pop culture antennae needed to be in the right place at the right time" (Grigoriadis, 2000).

way normal reality-oriented thought, including the capacity to be anxious about potential loss in risky situations, is overridden. Active investors on a significant scale worry more about missing out on gains if they do not own a phantastic object than about losses possibly incurred from doing so.

Psychoanalytically we might understand this kind of disturbance in the market's sense of reality as the product of a group regression, where investment judgements about the risk of owning or not owning Internet stocks, based largely on individuals each assessing the situation using the reality principle, shifted towards 'groupthink' (Janis, 1982) judgements based essentially on the pleasure principle. We suggest three elements are involved in this shift. First, a change takes place in the market conceived as a large group of individuals imaginatively related to each other – from work group functioning towards basic assumption group functioning (Bion, 1952). A second related change takes place in the group's sense of reality; wishful thinking – making judgements in an omnipotent mindset that makes one feel good – takes over from reality-based thinking. Third, conflict about taking on risk is eliminated or at least reduced by splitting off from awareness information that creates 'bad' feelings. Together these elements allow a phantastic object to be pursued as though it is a reality and without experiencing anxiety, but at the cost of an ongoing unconscious threat that has been split off and will return. When it does re-emerge, phantastic objects become objects of revulsion.

At the heart of the psychoanalytic understanding of reality is the assumption that individuals are always in some degree of unconscious conflict; in fact, we develop a sense of mature reality by finding an individual way to accommodate the ongoing and potentially creative conflict between our wishes and our real opportunities. Much psychoanalytic theory takes as a starting point the infantile sense of wishful thinking (omnipotence). Following Freud's (1908) lead, it traces how in 'normal' development a child moves, via the medium of play and in the context of a supportive familial environment, from a sense of omnipotence towards a more or less developed awareness of the facts of life (see, for example, Fenichel, 1945; Ferenczi, 1913; Fonagy and Target, 1996; Klein, 1935; Milner, 1945; Sandler and Joffe, 1965; Winnicott, 1971 and many others). Gradually the child comes to recognize his dependence on others for satisfying wants, the limits to his personal capacity; and the facts of procreation and death (Money-Kyrle, 1971).

Again, following Freud (1908), this development towards a more realistic sense of one's capacities and place in the world is nearly always more or less of a compromise and is always only more or less believed in by the individual. One might say reality can be accepted as true 'in one's heart', so to speak, or simply complied with by submitting to authority so as to reduce anxiety (see, for example, Steiner, 1996). Such theories imply that, whatever the exact outcome in any one individual, a developmental process takes place so that gradually what is felt socially and personally acceptable as 'real' coincides more closely with the 'true facts' of life – this is in effect what Freud had in mind with the 'reality principle' and what we mean by working through the Oedipus complex.

Generalizing, we might say that what an individual knows 'realistically' to be true is conscious, while what is wished for but 'known' to be unrealistic, is kept secret;

whether from others (more or less deliberate dissembling to avoid embarrassment, etc.) or from one's own awareness by being split off and 'made' unconscious.¹²

We might summarize psychoanalytic ideas on these points by saying that they imply that the acceptance of reality is always *ambivalent*¹³ and accepting the limits to personal omnipotence is a lengthy and incomplete process. Melanie Klein's (1935) concepts of the paranoid-schizoid and depressive positions deal specifically with some aspects of the process and the difficulties encountered due to intense projective and introjective mechanisms. Klein elaborates on how knowledge of ambivalent conflict is painful – creating anxiety about retaliation or experiencing guilt – and so may be avoided by splitting the perception of reality at the cost of the subject's sense of reality. Drawing on her work, we see the gradual development of a 'sense of reality' as a process dependent on the capacity to reduce splitting mechanisms and to integrate conflicting feelings towards the parents in the early years.

By developing Klein's descriptions of the paranoid-schizoid and depressive positions and of the relations between them, Bion (1970) located the experience and awareness (or not) of ambivalence at the heart of psychic life. He postulates two fundamental states of mind throughout life (in Bion's notation, *PS* and *D*). We use Bion's conceptualization (italicizing his notation for this somewhat different purpose) to describe what happened to the sense of reality and states of mind in markets; we refer to the primitive (paranoid-schizoid) splitting solution to perception with the shorthand *PS*, while using *D* to designate the state of more realistic perception in which conflicts can be acknowledged.

As is well known, a *D* state involves giving up the feeling that one is all-powerful and all-knowing (attributed by Freud to 'his majesty' the baby but a state of mind recognizable in some adults), feeling a certain amount of regret about the consequences of past actions, and a potential anticipatory feeling of depressive anxiety or guilt when contemplating potentially repeating past actions which led to failure or suffering. In a *PS* state all such feelings are evaded by evacuating them from awareness (projective identification) – perceiving the painful feelings as felt by others. By contrast, in a *D* state truth, as far as it can be seen at any one moment, can be recognized emotionally. It is important that a *D* state, while potentially hated and avoided in a *PS* state, is, once reached, often felt as a relief – offering, for example, the opportunity to repair damage and rethink errors which often leads to the better deployment of talent, or to deeper and more meaningful human relationships more free of anxiety and distrust. Shifts in the sense of reality and accompanying states of mind can be designated as *PS*→*D* or *D*→*PS* and, like the paranoid-schizoid and depressive positions, might oscillate throughout life (Britton, 1998, p. 74).

Bion (1952), it will be recalled, also made use of Freud's (1921) ideas about relations between the individual and the group, distinguishing groups as to their tendency to be Work groups or Basic assumption groups functioning in two quite different ways; both of which have a considerable effect on thinking and judging

¹²The way the bond trader, Sherman McCoy, struggled with voicing his belief his success showed he was a Master of the Universe is masterfully described by Tom Wolfe (1987).

¹³The ideas set out here were arrived at independently. But Neil Smelser, a sociologist also trained as a psychoanalyst, has made the case for using ambivalence rather than rationality as an assumption governing economic and social analysis (Smelser, 1998).

reality. It is significant that verbal communications are treated very differently in the two types of group functioning:

We have been forced to the conclusion that verbal exchange is only understood by the W[ork] group. In proportion as the group is dominated by a basic assumption *verbal communication is important only as a vehicle for sound.*

(Bion, 1952, p. 244, italics added)

This implies that the information gained from activities like data analysis and detailed company research would be treated differently by the two different types of group; in a Work group it can be used by individuals in the service of real thought (in the usual symbolic reflective sense), but in the Basic assumption group the accumulation of information is used not for thought but to feel good (Bion, 1952, p. 245).

If we return now to the way the sense of reality in financial markets appears to change during an asset price bubble, we suggest that, to the extent that there is a shared belief in the existence of a phantastic object as a real possibility, a Basic assumption group has formed. The group is subject to wishful thinking – making judgements omnipotently that feel good – which takes over from reality-based thinking, leading to a Basic assumption rather than Work group approach to information. A PS state of mind is also established in which conflict about taking on risk is split off from awareness so that information is evaluated only to create ‘good’ excited feelings. A phantastic object can now be enthusiastically pursued as though it was a reality, and the view that it is much less risky to invest than to miss out on investing in dot.com stocks can become dominant. In this state the judgements of economic agents are based primarily on their excited and wishful feelings and they disregard the countervailing anxiety which would otherwise be awakened by traditional valuation methods. The shared unconscious phantasy (the existence of phantastic objects) is legitimated through a cover story – for example, a new economy which does not work like the old.

Dominated by the pursuit of such excitement and in a PS state of mind, potentially persecuting and frustrating opposing views could be, as we have seen, ignored or dismissed. In this state of mind neither sceptical comment nor the facts of companies’ own detailed warnings of losses for some years to come had sufficient impact to cause caution. Active economic agents did not ‘feel’ interested. The state of mind in which active investors eventually made their judgements can be characterized as anti-thought, or, to use another of Bion’s ideas, governed by –K (Bion, 1962). –K contrasts with K, where the relationship to an object in unconscious phantasy is imbued with curiosity and enquiry. The distinguishing point is that, while in both types of object-relationship there can be a great deal of preoccupation or excitement with the object, in –K the object itself is of no interest or concern except to be possessed. This is a form of greedy relationship to an object characteristic of the PS state of mind. Concern for the used object is split-off from consciousness, existing only as unconscious anxiety.

When the dominant mental state within the market was PS it was impossible to reflect upon the true nature of what was being wished for. Conflict in a PS state is persecuting so doubts, objections, and anxieties are not salient; they are unconscious and kept unconscious because they are painful. This represents a reversal of the

usual developmental trajectory towards accepting painful conflict and where necessary disappointment, which is associated with the D state of mind.

New economy: New rules

According to the view just set out, belief in the real availability of phantastic objects turns reality upside down. Beliefs otherwise thought unrealistic become commonplace and a new *PS* reality is born. In the dot.com period the new enterprises were widely discussed and seriously ‘analysed’ as subject to different ‘new’ rules. The implication was that the usual developmental trajectory that an individual’s sense of reality could take might be reversible – instead of gradually giving up the conviction that one is all-powerful there is a new belief that omnipotent wishful fulfilment may really be on offer. Euripides describes such scenes in the *Bacchae*.

As a matter of fact the dot.com entrepreneurs were youthful and as such (and as indicated by some of the more flamboyant quotations earlier) apparently able to reverse the normal pecking order of the generations as well as to dismiss the ‘outdated’ methods of thought accumulated by their experienced superiors. Kay (2003) makes the point that the behaviour of economic agents is adaptive to their (emotional) environment. If a ‘new reality’ starts to dawn, then valuation procedures within groups change to fit it.

In December 1998 Henry Blodget, a journalist who had found a job as a securities analyst at a small investment bank, announced that shares in Amazon.com were worth at least \$400 each. The price was then already \$250. Jonathan Cohen, the analyst at the prestigious Merrill Lynch, using traditional criteria, countered with the suggestion (subsequently shown to be correct) that \$50 was more realistic. But within a month Amazon shares had soared beyond \$400 and, as Kay put it, ‘Blodget soared with it: he succeeded to Cohen’s job’ (Kay, 2003, p. 208).

The rules governing how securities analysts calculated the value of Internet companies underwent further adaptation. Since conventional methods of valuation showed them to be very risky investments at high prices, the idea was not to concentrate on such ‘old’ economy measures as earnings, cash flows or dividends but to use ‘new’ economy concepts instead: such as profits net of most costs; revenue growth; mind share; website activity measured in terms of clicks, reach and stickiness; and numbers of visitors times lifetime value of a customer. This shift was well described as it was happening but not to any effect: ‘Analysts are slicing, dicing and torturing numbers until they can be moulded into what might pass for a rationale to back up a table pounding investment recommendation’, two critics suggested at the time (Laderman and Smith, 1998, pp. 120–2). On the excited side, it was claimed that the Internet had ‘... introduced a brave new world for valuation methodologies ... we believe that we have entered a new valuation zone’ (Meeker, 1997, p. 1).

What happened in the euphoria period is common to other periods of basic assumption group pressure. One US investment banker interviewed put into words what many others implied. He and his senior colleagues had felt pressurized, he said, ‘to conform with the demands of younger colleagues during this period – as regards investment policy, house rules, dress codes, etc.’ He reported there was even a word coined for not going along with it all: you would be ‘Amazoned’ – left out in the cold, made obsolete, like ‘old’ economy blue chip companies.

There is some evidence those in authority were taken by the mood of rebellion. For example, in its e-commerce policy paper in the summer of 1997 the Clinton administration decided a hands-off attitude to the Internet was in the US's strategic interest. Clinton himself is reported to have 'felt' the economists he consulted were wrong (Greenspan, 2007, pp. 170–1), and one of the most influential proponents of taking seriously the New Economy doctrine was the then Federal Reserve Bank Chairman, Alan Greenspan (1997). Both may have thus have lent the idea, more than they realized, both authoritative and moral legitimation.¹⁴

Certainly rules were modified opportunistically over a wide range of financial activity – as, for instance, in the culture of risk control in investment banks – as it now appears was also happening prior to 2007 when banks could not resist the extra yield on mortgage securities and Collateralized Debt Obligations. Before the Internet companies arrived, it had been usual for top investment banks to avoid high-risk new companies, to protect their valuable 'reputational capital'. But not this time. Offers to purchase shares in new Internet companies (IPOs) were eventually over 40% more likely to be underwritten by one of the six most prestigious underwriters than by others (Schultz and Zaman, 2001) presumably because they did not think them risky.

Panic: The return of the repressed?

The crash that occurred in April 2000 was dramatic, like the earlier ones in financial history. What was once highly valued became quickly shunned and many Internet share certificates soon became less useful than wallpaper. The 'new economy' and all its valuation metrics were now mostly dismissed as 'fantasy'. As in other bubbles investors did not gradually become more realistic; their valuations were suddenly and almost universally *felt* to be hopelessly unrealistic so that many more sellers than buyers were to be found and prices fell exponentially.

Whereas Internet stocks had been phantastic objects they were now reviled ones; stigmatized and felt to be a massive liability. The same research team who had demonstrated the positive effect of adding the .com suffix in 1999 now showed the benefit of taking it away (Cooper et al., 2005). They showed how investors reacted very positively to these name removals with abnormal positive returns of around 70% for the 60 day period surrounding the announcement day. Their work shows that the market was still operating more on feelings than careful thought and confirmed perceptions at the time.

It does not require any psychoanalytic thinking to describe the crash as panic or to predict what people were likely to do when faced with a sudden threat to the value of their investments. But a psychoanalyst can perhaps add to understanding by drawing attention to a path dependent process. Holding financial assets necessarily establishes ambivalent unconscious phantasy relationships, which can then be managed in a D or PS state of mind, and in bubbles a *PS* sense of reality derived from splitting comes to dominate. Then, in the crash, investors suffer the return of the repressed. Knowledge that their investments were based on very risky assumptions had always been there; but such doubts were unconscious while an

¹⁴Shiller (2005, pp. 207 et seq.) has suggested authoritative official pronouncements at such moments could be an important way to prevent the development of price bubbles.

idealized love affair was in progress. Investors became conscious of the knowledge and feelings hitherto split off, including perhaps the anxiety stirred by their previous activities. They were now forced to own the experience of risk and to notice facts that had always been there. Moreover, 'cover' stories now failed to give support; if doubts were now to be subjected to thought such theories were not convincing. The phantastic object was now an unconscious persecutory object.

It seems unlikely that we will ever be able to say why a crash happens when it does, just as in psychoanalytic treatment it is by no means easy to know what it is that causes a patient finally to take in difficult interpretations and then to work them through rather than to leave treatment and fail. Because hindsight is a great provider of wisdom, it is worth mentioning that several interviewees mentioned that, even in the few weeks before the bubble burst, a significant number of leading investment managers (or the institutions they worked for) were sacked or nearly sacked by their clients for underperformance; because they had not been prepared to invest in dot.com stocks.

Blame as a signal of unconscious guilt and shame

So far we have proposed that, during an asset price bubble, it is economic agents' sense of reality that shifts first in favour of and then in revulsion towards phantastic objects and that this change in sentiment occurs without new information.

Once the bubble bursts a new sense of reality can come about but this is not necessarily based on *D*, that is to say, the acceptance of conflictual and limited reality. A period of what might be called bargaining with reality can take place in which it is not only the pleasure principle that must be relinquished as an organizing principle for investment but also the *P* sense of reality; to give up the latter requires a mourning process in which integration of split-off and conflicting thoughts and feelings towards the phantastic object must take place.

In fact observation suggests that after a crash the euphoria stage of financial bubbles generally gives way to denial, to anger, and then to paranoid efforts to find scapegoats. Typically there is rather little real working through or recognition of responsibility and guilt. Insofar as the incidents receive formal forensic investigation, it tends to focus on external sources (exogenous shocks) and on the 'shakers' and 'movers' promoting the objects that once caused such excitement.

After the collapse a series of long articles in the *New York Times* variously blamed Wall Street (December 31, 2000), corporate 'propaganda' (March 18, 2001), investment banks (April 15, 2001) and conflicts of interest (May 27, 2001). Blame was also successfully laid in the courts. A \$1.4bn global settlement was extracted by US regulators from 10 leading Wall Street investment banks in April 2003, and lawsuits were taken out against the main Internet analysts at Merrill Lynch, Salomon, and Credit Suisse First Boston. A similar process is now observable in the 2007 UK banking crisis that has followed the sub-prime debacle.

History teaches us to expect blame rather than analysis in such situations. MacKay in his discussion of the outcome of the South Sea Bubble notes what he called the innumerable public meetings and inquests held in 'every town of the British empire'. There was a good deal of 'praying for vengeance' on the company directors but:

Nobody seemed to imagine that the nation itself was as culpable as the South Sea Company. Nobody blamed the credulity and avarice of the people...or the infatuation which had made the multitude run their heads ... These things were never mentioned.

(Mackay, 1932, p. 72)

Similarly, Galbraith (1993) describes how repeated inquests and investigations in other bubbles attend to everything but the basic issue: how and why did otherwise sensible people get caught up? He finds it common that prominent figures turn from being perceived as financial geniuses into immoral knaves and are then prosecuted. External exogenous shocks or foreign influences are the candidates to be implicated.

From a psychoanalytic point of view the presence of denial, anger and then blame (rather than guilt) indicates the continuance of a *P* rather than a *D* sense of reality: whereas criticism of Internet companies was projected and denied during the upside, it is now the old love of the companies which is disowned and projected. In such a state of mind individuals are free to feel angry and hurt and to blame those who seduced them. The companies themselves are hated and stigmatized and it remains difficult to value them realistically.

We have suggested that investing in assets of all kinds is usefully conceived as creating an unconscious and necessarily ambivalent phantasy object relationship, where the experience of dependence leads to potential anxiety and distrust. When these emotions are split off they can return with a vengeance when things go wrong, attacking the individual with bad feelings. Blaming others is unlikely to help participants to come to terms with their experience or learn from it; this requires a *D* state and acceptance of the pain of feeling guilt.

A psychoanalytic understanding of financial bubbles

Financial market bubbles mainly occur when new developments appear to offer potentially exceptional yields to investors, often at times of promised technological changes which make future developments increasingly difficult to predict (for a discussion, see Perez, 2002). The foregoing analysis shows how a psychoanalytic understanding of emotional processes can throw light on the behaviour of economic agents in these circumstances. It shows why, even if economic agents try to adopt the consistent utility-maximizing behaviour which economists model when the circumstances are propitious, they are unable to do so effectively when faced with ambiguous information which creates strong ambivalent feelings.

We have argued that information is processed differently when groups of economic agents come to share an unconscious belief in the existence of what we have termed a phantastic object. Through imaginative identification with each other they become a Basic assumption group united by their belief in the phantastic object and its supporting cover story and operating within a *PS* sense of reality; in which the conflicts otherwise caused by risky behaviour, anxiety and doubt, or anything that could give rise to 'bad feelings', are split off so that information about them is non-salient. Once deemed 'real' and sanctioned within a social group, phantastic objects appear to offer the opportunity to break the rules of usual life and so turn 'normal' reality on its head; creating the impression that what was previously thought impossible or given up as a possibility might happen after all. Not everyone in a market has to be a believer. The active behaviour of the believing group is

sufficient to move prices and to become self-rewarding, feeding the belief they are really in the presence of the phantastic object which leads to growing excitement and a belief in a more and more contagious new reality. When the bubble bursts this is not due to new information; rather it seems the dizzy heights reached create an accumulation of split-off anxiety recognized in past descriptions as 'uneasiness, apprehension, tension, stringency, pressure, uncertainty, ominous conditions, fragility' (Kindleberger, 2000, p. 95); this ushers in a period of volatile oscillation before the return of the repressed anxieties and the crash. This analysis offers some answers to the three questions about financial market bubbles posed earlier.

First, it suggests why during a financial bubble a dominant proportion of economic agents appear to become incapable of using relevant information to assess the generalized belief that something 'phantastic' is happening. It is because they have become part of a Basic assumption group operating with a *PS* sense of reality and so able to share a feeling that phantastic objects are actually real.

Second, it explains why once 'basic assumption' mentality takes over, those who do use known facts to make 'rational' and cautious choices tend to lose their jobs; fear of which causes others to 'adapt' and so fuels the process. Only when the anxieties produced by available information can no longer be made unconscious do economic actors within Basic assumption groups become overwhelmed by 'jitters'; at this point their ambivalent relationship shifts in a reverse direction; the same information is now considered to be nothing but 'bad' news.

Third, it helps explain why anger and blame rather than guilt erupt in the aftermath of these events. Feeling guilt requires painful working through of the truth of events which is often avoided; certainly within basic assumption groups and so long as individuals' sense of reality is governed by a *PS* rather than *D* state of mind. A *D* state of mind is not reached out of panic and compliance; it requires mourning.

Economic theory as an institutional frame

We suggest, tentatively, that the psychoanalytic understanding just offered can contribute to a more complete interdisciplinary theory of financial market instability making better sense of economic agents' experiences; in part by directing attention to some institutional features of these markets which may predispose them to develop states of mind and group functioning of the kinds discussed.

Two such institutional features will be discussed. The first concerns the nature of theories about their work that economic agents develop, and how far these equip them to deal with the problems that their emotions and the inherent uncertainty of their task necessarily force them to experience. The second concerns the arrangements within financial market institutions to assess and manage personal performance, including when losses are incurred for clients. Some institutional arrangements may be more or less conducive to processes of mourning and learning from experience, for example. We will close by reviewing some preliminary ideas.

The theories with which individuals explain to themselves what they do and how they do it are part of the institutional arrangements which help them to work competently and to manage the stresses of work. Whereas a psychoanalyst will to a considerable extent define his or her task on the basis of his or her private and more or less conscious understanding and internalization of psychoanalytic theory

(see Canestri, 2006; Tuckett et al., 2008), an economic agent in a financial market will do the same but based on economic theory. Formal economic theory, therefore, is part of the institutional arrangements framing how individuals 'should' perform their market roles (Mackenzie, 2005). In this respect, based on our observations about the Internet bubble, mainstream economics and finance theories may be problematic because they misdirect attention away from the issues economic agents must ordinarily face in financial markets in several important ways.

First, mainstream economic theory (unlike its Keynesian variant, see, for example, Minsky, 1982) conceives of markets as composed of unattached and un-related individuals operating in an institution-free world. That might be an acceptable characterization of a Work group. However, financial markets frequently resemble large Basic assumption groups acting almost without individuality.

Second, mainstream theories do not help economic agents with the problem of how to make quick decisions with too much ambiguous and uncertain information. The institutional context we found professional fund managers describing, when they were interviewed in 2007, was one in which interpreting information in financial markets was a matter of selection from conflicting signals. Situations where things were straightforward either did not occur or were uninteresting – because everyone agreed on the price and there was no investment opportunity. Rather they had routinely to manage two different orders of essentially irresolvable uncertainty that necessarily posed emotional conflict. One set of uncertainties was caused by unavoidable information asymmetries as they tried to sort out the mass of ambiguous information with which they were bombarded at the moment of decision-making. Another set was determined by the fact that, however well they know the present, the future is inherently unknowable. Respondents had to predict both how the underlying enterprises they wanted to invest in would do in the future and how other people would predict as well (see, also, Keynes, 1936, p. 156). They then had to wait and see what the necessarily unpredictable future would bring. Nothing done in the present can quantify that risk or remove that uncertainty. Because investors need to predict the future behaviour of firms and their customers, competitors, future human innovation, and the responses to information about all this among others in financial markets, they are constantly uncertain and anxious about their decisions to buy, hold or sell assets. Decisions will always involve some degree of balancing hope and risk – including the risk of getting it wrong and then of having to pay the price. This leads to the temptation to split off the good 'exciting' experience of hope from the bad 'painful' risk of loss.

Third, mainstream economic theory reduces emotion to the irrational. It thus implausibly and unhelpfully ignores the functional role of emotion in good decision-making. In recent years a weight of argument has been assembled to suggest that the model of consistent calculating economic man is an unhelpful abstraction at odds with empirical descriptions of how anyone makes effective decisions (see Berezin, 2005; Gigerenzer, 2007). The traditional contrast between rational economic man and irrational or emotional decision-making ignores not only psychoanalytic and other empirical experience but also growing neurobiological evidence that emotion, far from being a distraction for effective decision-making, has been evolved to be useful in making complex decisions quickly and adaptively (Bechara and Damasio, 2005; Gigerenzer, 2007). The important point is that ignoring emotion in economic theories creates an institutional context where formal attention

cannot be given to it; in these circumstances it is very likely defended against and split off, probably in dysfunctional ways. This is an area for further research.

Fourth, through the doctrine of general equilibrium (the idea that the 'hidden hand' of the market always produces the best possible outcomes providing individuals are left free to pursue self-interest), economic theory enables individuals to split off the consequences of responsibility for decision-making; it is the market not individuals which can somehow be held accountable. This may help to explain why little forensic examination is given to the aftermath of financial crises beyond seeking to place blame. A theory leaving out emotion, defensive behaviour and institutions will not facilitate working through guilt and developing a D state of mind in which to make future uncertain and anxiety-inducing decisions. We might also expect that the greedy pursuit of individual interest in a PS or D state of mind is rather different. In a PS state longer term consequences can be split off, but not in a D state. Currently financial markets are notoriously short-term.

Evaluating performance

The way economic agents are rewarded for their performance in financial markets is another important part of the institutional context in which they work. Earlier we described how, during the Internet bubble, fears about under-performance and subtle adaptation brought in even the 'unbelievers'. The way performance evaluation works may create emotional conflicts for economic agents which, if left unaddressed, may worsen market instability in at least three ways.

First, the industry is founded on a contradiction. The professional asset management industry is very large, global and highly competitive. Asset managers sell their approach by pointing to past performance while at the same time they advise would-be customers, using small print, 'past performance is no guide to future performance'. The contradiction frames the institutional situation in which portfolio managers find themselves as they try to think about their work; the size of the sums they can obtain to manage determines their fees and their performance determines the assets they get asked to manage. At the same time, the evidence as to whether a fund manager or any other investor can systematically and consistently outperform the market except by chance is largely negative (for example, Malkiel, 2003, p. 268). This situation undoubtedly creates emotional conflict but may also create a PS state of mind. Managers who survive may do so because they take more risks than average and get lucky – the others who take equivalent risk but were not so lucky lose their jobs. If so, there is a reward for splitting. Adapting expressions used by Arrow (1963), investment management may be based on adverse selection and moral hazard (both rewarding a *PS* rather than *D* sense of reality). If so, this is likely to contribute to ongoing financial instability.

Second, the asset management industry, like the wider banking community, has taken the view that it can actually measure risk. Following a number of financial scandals and administrative reforms (Clark and Thrift, 2005), risk in investment portfolios is now measured. This is done by calculating the historical variability of the price of all assets in a portfolio and then calculating an overall risk coefficient represented as volatility. This approach can be regarded as impression management (Goffman, 1959) or part of the way investment professionals configure their image as so-to-speak scientists; thus creating formal ways to distance themselves from the

origins of the industry in gambling and speculating (Preda, 2005). It is controversial because the measurements, which appear to predict the future precisely, use inevitably arbitrary selections of past data to do so. The approach may discipline economic agents and make them think about the positions they build up, but cannot overcome the fact that the future is inherently uncertain (Pixley, 2004; Taleb, 2005). This logical point was demonstrated in the summer of 2007, when after financial markets behaved in 'extraordinary' ways, some investment managers were to be found complaining there has been more than one '25 sigma' event in a week.¹⁵ In terms of the psychoanalytic ideas we have been developing, the question would be whether risk measurement is implemented in a PS or a D state – as part of a Work group approaching a problem to create more thought, or a Basic assumption group making itself feel safe by trying not to think. In the latter case risk measures could function like reassuring noise, making anxieties unconscious pending the return of the repressed.

Third, the way performance measurement is used to reward managers or funds may have some significant consequences. Performance is generally defined in relative terms; by comparing any one manager against a benchmark index which is the average of all others in a given category over a set period of time. Because computers make such performance easy to calculate on a moment by moment basis managers can be compared to their peers minute by minute. This raises the question of whether short-term performance provides any guide to longer term performance (Taleb, 2005) but also, and more significantly, how long managers, their superiors or their clients can tolerate performance below the average – clearly an emotional question involving trust and distrust. What one interviewee called the 'tyranny' of the benchmark creates continual pressure and stress, potentially directing everyone to short-term results and making the ongoing relation to assets fraught. This structural situation makes it hard to stick to unfashionable strategies if they do not produce quick results and will tend to create benchmark hugging – one explanation for the pressure for the unbelievers to join in when a phantastic object makes waves.

Translations of summary

Phantastische Objekte und der Realitätssinn des Finanzmarktes: ein psychoanalytischer Beitrag zum Verständnis der Instabilität des Aktienmarktes. Dieser Beitrag geht der Frage nach, ob das herkömmliche psychoanalytische, auf klinischer Erfahrung basierende Denken Licht auf die Instabilität der Finanzmärkte und ihre weltweiten Konsequenzen für die Menschen zu werfen vermag. Das Kaufen, Behalten oder Verkaufen von Geldanlagen in unsicheren und nicht eindeutig zu bestimmenden Situationen impliziert, so die These, immer auch eine ambivalente emotionale und Phantasiebeziehung zu ihnen. Auf der Grundlage historischer Berichte sowie einiger Interviews vertreten die Autoren die Meinung, dass ein psychoanalytischer Ansatz, der sich auf unbewusste Phantasiebeziehungen, auf mentale Zustände und auf das unbewusste Funktionieren in Gruppen konzentriert, einige überaus wichtige Fragen über Spekulationsblasen erklären kann, an denen die tonangebenden Wirtschaftstheorien scheitern. Die Autoren postulieren zudem einige institutionelle Merkmale der Finanzmärkte, die die Wahrscheinlichkeit erhöhen oder verringern können, dass finanzielle Entscheidungen aus der Abspaltung jener Gedanken resultieren, die unlustvolle Gefühle auslösen. Weil aber die Spaltung das künftige Risiko einer finanziellen Instabilität erhöht, ist die Theorie, mit der die Finanzagenten auf solchen Märkten arbeiten, wichtig. Eine interdisziplinäre Theorie, die die Integration von emotionalem Erleben anerkennt und ermöglicht, kann für Finanzagenten hilfreicher sein als die aktuellen Mainstreamtheorien, die rationale und irrationale Entscheidungsprozesse kontrastieren und sie so auslegen, als erfolgten logische Entscheidungen einzig auf der Grundlage vernunftgeleiteter Überlegungen.

¹⁵...“We were seeing things that were 25-standard deviation moves, several days in a row,” said Goldman Sach’s chief financial officer.” *Financial Times*, 17 August 2007.

Objetos fantásticos y sentido de realidad del mercado financiero: una contribución psicoanalítica a la comprensión de la inestabilidad del mercado bursátil. Este trabajo se propone explorar si el pensamiento psicoanalítico estándar basado en la experiencia clínica puede echar luces sobre la inestabilidad de los mercados financieros y sus múltiples consecuencias humanas. Se argumenta que comprar, poseer o vender activos financieros en condiciones de inherente incertidumbre y ambigüedad implica necesariamente una relación emocional y fantástica ambivalente con ellas. En base a la evidencia de relatos históricos, complementados por algunas entrevistas, los autores sugieren que un enfoque psicoanalítico centrado en las relaciones de fantasías inconscientes, estados mentales y funcionamiento grupal inconsciente pueden explicar algunas cuestiones pendientes sobre burbujas financieras que no pueden explicarse con las teorías económicas predominantes. Los autores también sugieren ciertos rasgos institucionales de los mercados financieros que por lo general pueden incrementar o reducir la posibilidad de que se tomen decisiones financieras a partir de la escisión de aquellas ideas que hacen surgir emociones dolorosas. La escisión podría incrementar el riesgo futuro de inestabilidad financiera y en este respecto es importante la teoría con la cual los agentes económicos en tales mercados enfocan su trabajo. Una teoría interdisciplinaria que reconozca y haga posible la integración de la experiencia emocional puede ser más útil para los agentes económicos que las teorías predominantes hoy, las cuales contrastan la toma de decisiones racionales e irracionales y las modelan como si tomaran decisiones consistentes en base al puro razonamiento.

Les oset outbjets fantastiques et le sens de réalité du marché financier: une contribution psychanalytique à la compréhension de l'instabilité du marché de la Bourse. Cet article se propose d'explorer dans quelle mesure la pensée psychanalytique de base, étayée sur l'expérience clinique, peut éclairer l'instabilité des marchés financiers et ses vastes conséquences humaines. Acheter, garder ou vendre des produits financiers dans des conditions qui comportent en soi l'incertitude et l'ambiguïté implique nécessairement, selon les auteurs, une relation émotionnelle et fantasmatique ambivalente à leur égard. A partir de preuves issues de comptements historiques, assortis de quelques interviews, les auteurs proposent une approche psychanalytique centrée sur les relations fantasmatiques inconscientes et les états mentaux inconscients, le fonctionnement inconscient groupal pouvant répondre à certaines questions plus exceptionnelles comme les phénomènes de « bulle » financière que les théories économiques dominantes ne peuvent expliquer. Les auteurs se proposent également d'étudier quelques aspects institutionnels des marchés financiers, qui d'ordinaire sont susceptibles d'augmenter ou de diminuer le risque que les décisions financières résultent du clivage de ces pensées qui pourraient être à l'origine de sentiments douloureux. Le clivage augmenterait le risque futur d'instabilité financière et sous cet angle, la théorie selon laquelle les agents économiques considèrent leur travail dans de tels marchés est loin d'être négligeable. Une théorie interdisciplinaire reconnaissant et rendant possible l'intégration des vécus émotionnels pourrait être plus utile aux agents économiques que les théories dominantes actuelles qui opposent prises de décision rationnelles et irrationnelles et les modélisent en tant que décisions stables reposant exclusivement sur le raisonnement.

Oggetti fantastici e senso di realtà nel mercato finanziario: un contributo psicoanalitico verso la comprensione dell'instabilità del mercato azionario. Questo articolo vuole esplorare in quale misura il pensiero psicoanalitico fondato sull'esperienza clinica possa illuminare l'instabilità nei mercati finanziari e il loro notevole impatto sulle vicende umane. L'acquisto, la proprietà e la vendita di beni finanziari in condizioni di incertezza e ambiguità inerenti implica necessariamente, secondo gli autori, un rapportarsi ad essi in modo ambivalente e improntato a emozioni e fantasie. Muovendo da resoconti passati, corroborati da interviste, gli autori propongono un approccio psicoanalitico centrato su modelli relazionali, stati mentali e dinamiche di gruppo inconsci in grado di spiegare prominenti questioni sulle bolle finanziarie, non esplicabili mediante le teorie economiche classiche. Gli autori suggeriscono inoltre che alcuni aspetti istituzionali del mercato finanziario in grado in genere di aumentare o diminuire la probabilità che le decisioni finanziarie risultino dalla scissione di quei pensieri suscettibili di provocare emozioni difficili. La scissione aumenterebbe il rischio futuro di instabilità finanziaria e sotto questo punto di vista si rivela importante la teoria su cui si fondano gli operatori economici per svolgere il loro compito. Una teoria interdisciplinare che riconosca e renda possibile l'integrazione dell'esperienza emotiva risulterebbe, per gli operatori del mercato, più utile delle attuali teorie classiche che si limitano a contrapporre il razionale all'irrazionale e assumono che il solo presupposto per la coerenza delle decisioni sia la ragione.

References

- Altman N (2005). Manic society: Toward the depressive position. *Psychoanal Dial* 15:321–46.
- Arrow KJ (1963). Uncertainty and the welfare economics of medical care. *Am Econ Rev* 53:941–73.
- Bechara A, Damasio AR (2005). The somatic marker hypothesis: A neural theory of economic decision. *Games Econ Behav* 52:336–72.
- Berezin M (2005). Emotions and the economy. In: Smelser NJ, Swedberg R, editors. *Handbook of economic sociology*, 2nd edn, 109–27. New York, NY, Princeton, NJ: Russell Sage Foundation and Princeton UP.
- Bion WR (1952). Group dynamics: A re-view. *Int J Psychoanal* 33:235–47.
- Bion WR (1962). *Learning from experience*. London: Tavistock.
- Bion WR (1970). *Attention and interpretation: A scientific approach to insight in psycho-analysis and groups*. London: Tavistock.

- Blodget H (1999). *Internet/Electronic commerce report*. Merrill Lynch, 9 March.
- Britton RS (1998). Before and after the depressive position Ps(n)->D(n)->Ps(n+1). In: *Belief and imagination: Explorations in psychoanalysis*, 69–81. London: Routledge. (New Library of Psychoanalysis, Vol. 31.)
- Brunnermeier M (2001). *Asset pricing under asymmetric information: Bubbles, crashes, technical analysis, and herding*. Oxford, UK: Oxford UP.
- Canestri J, editor (2006). *Psychoanalysis: From practice to theory*. London: Wiley.
- Cassidy J (2002). *Dot.com: The greatest story ever told*. London: Allen Lane/ Penguin.
- Clark GL, Thrift N (2005). The return of bureaucracy: Managing dispersed knowledge in global finance. In: Knorr Certina K, Preda A, editors. *The sociology of financial markets*. Oxford: Oxford UP.
- Cooper MJ, Dimitrov O, Rau PR (2001). A rose.com by any other name. *J Finance* **56**(6):2371–88.
- Cooper MJ, Khorana A, Osobov I, Patel A, Rau PR (2005). Managerial action in response to a market downturn: Valuation effects of name changes in the dot.com decline. *J Corp Finance* **11**(1–2):319–35.
- Dale RS, Johnson JEV, Tang L (2005). Financial markets can go mad: Evidence of irrational behaviour during the South Sea Bubble. *Econ Hist Rev* **58**(2):233–71.
- Eizirik CL (1997). Psychoanalysis and culture: Some contemporary challenges. *Int J Psychoanal* **78**:789–800.
- Fenichel O (1945). The means of education. *Psychoanal Stud Child* **1**:281–92.
- Ferenczi S (1913). Stages in the development of the sense of reality. In: *First contributions to psychoanalysis*, 212–39. London: Hogarth, 1952
- Fonagy P, Target M (1996). Playing with reality: I. Theory of mind and the normal development of psychic reality. *Int J Psychoanal* **77**:217–33.
- Freud S (1908). Creative writers and day-dreaming. SE **9**, 141–53. London: Hogarth.
- Freud S (1911). Formulations regarding the two principles of mental functioning. SE **12**, 213–26. London: Hogarth.
- Freud S (1921) Group psychology and the analysis of the ego. SE **18**, 65–144. London: Hogarth.
- Galbraith JK (1993). *A short history of financial euphoria*. New York, NY: Penguin.
- Gigerenzer G (2007). *Gut feelings*. London: Allen Lane/Penguin.
- Goffman E (1959). *The presentation of self in everyday life*. New York, NY: Doubleday Anchor.
- Greenspan A (1997). Monetary policy testimony and report to congress, July 22nd.
- Greenspan A (2007). *The age of turbulence: Adventures in a new world*. London: Allen Lane/Penguin.
- Grigoriadis V (2000). Silicon Alley 10003: Long before the suits logged on, a small group of prep-school slackers had faith in the Web. Now they're the alley's establishment. *New York Magazine*, March 6, 2000 (URL: <http://nymag.com/nymetro/news/media/internet/2285/>)
- Hall RE (2000). E-capital: The link between the stock market and the labor market in the 1990s. *Brookings Papers on Economic Activity* **2**:73–102.
- Hand JRM (2003). Profits, losses and the non-linear pricing of Internet stocks. in: Hand JRM, Lev B, editors. *Intangible assets: Values, measures and risks*, 248–68. Oxford, UK: Oxford UP.
- Janis I (1982). *Groupthink*, 2nd edn. Boston, MA: Houghton Mifflin.
- Kay J (2003). *The truth about markets*. London: Penguin.
- Kernberg OF (2003). Sanctioned social violence: A psychoanalytic view. Part I. *Int J Psychoanal* **84**:683–98. (See also Part 2, 953–68.)
- Keynes JM (1936). *The general theory of employment, interest and money*. PaperMac edition. London: Macmillan, 1961.
- Kindleberger CP (2000). *Manias, panics and crashes*, 4th edn. New York, NY: Wiley.
- King PH (1989). Activities of British psychoanalysts during the Second World War and the influence of their inter-disciplinary collaboration on the development of psychoanalysis in Great Britain. *Int Rev Psychoanal* **16**:15–32.
- Klein M (1935). A contribution to the psychogenesis of manic-depressive states. *Int J Psychoanal* **16**:145–74.
- Knorr Certina K, Preda A editors (2005). *The sociology of financial markets*. Oxford: Oxford UP.
- Laplanche J, Pontalis JB (1973). *The language of psychoanalysis*, Nicholson-Smith D, translator. New York, NY, London: Norton and Hogarth.
- Laderman M, Smith G (1998). Internet stocks: What's their real worth? New methods show why the bets are so risky. *Business Week* **3608**, 14 December.
- Lewis M (1989). *Liar's poker*. London: Coronet.
- Mackay C (1932). *Memoirs of extraordinary popular delusions and the madness of crowds*. London: Wordsworth Reference.
- Mackenzie D (2005). How a superportfolio emerges: Long-term capital management and the sociology of arbitrage. In: Knorr Certina K, Preda A, editors. *The sociology of financial markets*. Oxford: Oxford UP.
- Malkiel B (2003). *A random walk down Wall Street*, revised edn. New York, NY: Norton.
- Meeker M (1997). US and the Americas investment research, Morgan Stanley Dean Whitter, September 16.
- Milner M (1945). Some aspects of phantasy in relation to general psychology. *Int J Psychoanal* **26**:143–52.
- Minsky HP (1982). *Can 'it' happen again? Essays on instability and finance*. New York, NY: Sharpe.
- Money-Kyrle R (1971). The aim of psychoanalysis. *Int J Psychoanal* **52**:103–6.
- Pastor L, Veronesi P (2006). Was there a NASDAQ bubble in the late 1990s? *J Financ Econ* **81**:61–100.

- Perez C (2002). *Technological revolutions and financial capital: The dynamics of bubbles and golden ages*. Cheltenham: Edward Elgar.
- Pixley J (2004). *Emotions in finance*. Cambridge, UK: Cambridge UP.
- Pratley N (2005). Google shares are a bubble waiting to pop. *The Guardian*, 10 June 2004.
- Preda A (2005). The investor as a cultural figure of global capitalism. In: Knorr Certina K, Preda A, editors. *The sociology of financial markets*. Oxford: Oxford UP.
- Rickman J (1937). On 'unbearable' ideas and impulses. *Am J Psychol* **50**:248–53. [(1957). *Selected contributions to psycho-analysis*. London: Hogarth.]
- Sandler J, Joffe WG (1965). Notes on obsessional manifestations in children. *Psychoanal Stud Child* **20**:425–38.
- Schultz P, Zaman M (2001). 'Do the individuals closest to Internet firms believe they are overvalued?' *J Financ Econ* **59**(3):347–81.
- Shiller RJ (2000). *Irrational exuberance*. Princeton, NJ: Princeton UP.
- Shiller RJ (2005). *Irrational exuberance*, 2nd edn. Princeton, NJ: Princeton UP.
- Smelser N (1962). *Theory of collective behaviour*. New York, NY: Free Press of Glencoe.
- Smelser N (1998). The rational and the ambivalent in the social sciences. *Am Sociol Rev* **63**(1):1–16.
- Smith CW (1999). *Success and survival on Wall Street: Understanding the mind of the market*, 2nd edn. Lanham, MD: Rowman & Littlefield.
- Steinberg BS (1991). Psychoanalytic concepts in international politics: The role of shame. *Int Rev Psychoanal* **18**:65–85.
- Steiner J (1996). Revenge and resentment in the 'Oedipus situation'. *Int J Psychoanal* **77**:433–43.
- Taffler R, Tuckett D (2007a). Emotional finance: Understanding what drives investors. *Professional Investor*, Autumn, 26–7.
- Taffler R, Tuckett D (2007b). In the mood for instability. *Financial Times*, September 20.
- Taleb NN (2005). *Foiled by randomness*, revised edn. London: Penguin.
- Tuckett D, Taffler R (2003). Internet stocks as 'phantastic objects': A psychoanalytic interpretation of shareholder valuation during dot.com mania. In: *Boom or bust? The equity market crisis: Lessons for asset managers and their clients*, 150–62. London: European Equity Management Association.
- Tuckett D, Basile R, Birksted Breen D, Bohm T, Denis P, Ferro A, Hinz H, Jemstedt A, Mariotti P, Schubert J (2008). *Psychoanalysis comparable and incomparable: The evolution of a method to describe and compare psychoanalytic approaches*. New Library of Psychoanalysis. London: Routledge.
- Winnicott DW (1971). *Playing and reality*. London: Tavistock.
- Wolfe T (1987). *The bonfire of the vanities*. London: Picador.