

Internet stocks as “phantastic objects”: A psychoanalytic interpretation of shareholder valuation during dot.com mania

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The meteoric rise in share values in Dot.Com companies and then their equally spectacular fall is a well-documented example of a bubble ([Graph](#)). During it asset values altered spectacularly although most of the companies concerned were always and quite transparently losing money¹.

No complex theory is required to understand why anyone wishes to possess what he or she thinks is a very valued object at a bargain price nor is one required to understand the motivation to dispose of an object that is felt likely to fall in value. But how could stock prices vary to the extent that what is so highly valued at one moment is so unwanted at another? Standard economic theory supposes share valuations will generally reflect supply and demand based on investor calculations of future rates of return indicated by underlying accounting realities. Standard finance theory supposes that calculations of future returns will be based on assessments of underlying business realities – assessments for the demand for products, costs, price/earnings ratios, etc.

It can be argued that because the Dot.com companies were engaging in new activity this introduced uncertainty into forecasts as to how much profit they would generate. Nonetheless, on most theories valuations should not vary in an extreme way especially across a large part of the market, unless alterations in valuation can be tied to material events altering underlying calculations². Equilibrium in capital markets is achieved because investors are all solving what amounts to a constrained maximization problem in which arbitrage opportunities are provided in only a limited way by the conditions of imperfect information and uncertainty. While some investors would be expected to miscalculate future returns upwards or downwards these “errors” should have little effect on the price. Prices

¹ For example, Priceline.com, an Internet company where people could name their price for airline tickets, had been in business for less than a year losing three times its \$35m revenues and was employing fewer than 200 people at the time of its IPO, March 30th 1999. Its stock rose by 330% on its first day of trading, closing at \$69 and valuing the company at almost \$10bn, more than the market capitalisation of United Airlines, Continental Airlines and Northwest Airlines combined. A few weeks later its stock reached \$150, at which point this tiny company was worth more than the entire US airline industry. Its stock was trading in September 2001 at less than \$2 – one thirtieth of its first day close. Meanwhile, Priceline.com continues in operation successfully albeit at a modest level, obtaining for its users cheap airline tickets and similar commodities in an innovative way. Other stock in companies offering similar products followed a similar course.

² For instance a pharmaceutical product supporting a high share price could prove unsafe or a new method inefficacious. By contrast what caused the dot.com collapse seems to have been a long article in *Barrons* on March 18 2000, 8 days after the Dow Jones Internet Index all-time high, entitled “Burning up”... This article collected and presented in a new way data long available and concluded that at least a quarter would run out of cash within a year.

should be based on the many unrelated individual calculations of atomistically conceived investors. When large numbers of investors and financial institutions appeared to have miscalculated together we are presented with a theoretical anomaly. In this paper we wish to propose that in fact an understanding of the dot.com affair shows that existing theories are insufficient to explain how investors are reaching their valuations and to suggest that valuation theory, if it is to reach a fuller explanation, needs some additional tools that can be garnered from the psychoanalytic theory of psychic reality.

Previous authors have sought to explain price bubbles in terms of the impact of positive feedback (Shliefer, 2000 ch 6; Shiller, 2000 ch 3) and of herd effects (Bikhchandani, Hirshleifer and Welch, 1998) on investor behaviour. The essence of these theories is to suggest that investors make choices by imitating the decisions others are observed to be making, not on the basis of reaching their own judgement independently³. We will attempt to add to these theories and to extend them.

Over many months during the Dot.com bubble shares in the Internet sector became so desirable to possess that investor valuations of them were sustained despite their values being extraordinarily out of line with the underlying balance sheet realities that were well known at the time. Any adequate theory must account for how prices could remain so high so tenaciously - particularly given what was well known about the accounting realities of shares in this sector, which were frequently the topic of readily available sceptical analysis and comment. We suggest the Dot.com experience makes it necessary to consider the causal role of some hitherto not considered psychoanalytical (non-cognitive) psychological factors in studying investor valuations and provides a striking opportunity to explore them.

We hypothesise that the main explanation for what happened to investors buying and selling shares during the dot.com bubble is that they became caught up *emotionally* in their activity. They were first mainly driven by compelling and exciting emotions and then by terrifying and shameful ones. In each case these emotions, amplified by their experience as members of

³ Maynard Keynes argued famously that assessing which stocks will do well in future is like being asked to bet on the outcome of a beauty contest held by judging 100 photographs in a newspaper. Judgement of such a contest only very loosely depends on which individual an individual believes is the most beautiful. Rather what we as punters have to devote "our intelligences to anticipating is what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees" (1936: 156).

a group caught up in a particular collective behaviour⁴, dominated and distorted investors' cognitive capacities in a way in which they were only partly aware. In fact in unconscious psychic reality⁵ Internet stocks became subjectively mentally represented as what we will describe as infantile "phantastic"⁶ objects. We suggest this explains the way possessing such stock became so charged and exciting that investor behaviour departed in an extreme way from that defined by the usual *homo economicus* valuation theorems. Our theory will allow us to link the first process of excited over-valuation and seeking to possess Internet shares, which is observed during the upturn, to the subsequent process of disillusion and panicky disposal during the downturn – the severity and extent of the second process is predictable from a psychoanalytic perspective, because the first process involves individuals unconsciously treating "external"⁷ objects concretely as "phantastic" ones and then attempting defensively to deny to themselves this is what they are doing.

"A Psychoanalytic Theory of Mental Objects"

The starting point for our thesis is that in psychic reality Internet stock certificates became more than unusually highly desirable because in conveying ownership of a dot.com company they became, in a compelling and hard to resist way, a particular type of "phantastic object" for investors; one felt able, magically, to be capable of transforming an individual from a normal kind of existence into a super one. The transformation corresponds to one

⁴ Neil Smelser (1963, 2000), a psychoanalyst and sociologist, uses the term "collective" behaviour to understand common social and psychological factors influencing a number of different historical incidents – stock market bubbles, crazes, panics, fads, political movements etc.

⁵ Psychic or Psychological reality is "a term often used by Freud to designate whatever in the subject's psyche presents a consistency and resistance comparable to those displayed by material reality; fundamentally, what is involved here is unconscious desire and its associated phantasies" (Laplanche and Pontalis, 1973: 363).

⁶ What exactly we mean by a "phantastic" object is subtle and will be developed later (p 7 et seq), but we have in mind an object of perception whose qualities are primarily determined by an individual's unconscious beliefs or *phantasies*. The term "phantasy" is a technical one implying the existence of organised unconscious ideation – "an imaginary scene in which the subject is a protagonist, representing the fulfilment of a wish (in the last analysis, an unconscious wish) in a manner that is distorted to a greater or lesser extent by defensive processes" (Laplanche and Pontalis, 1973: 314). It is, therefore, a technical term more specific than the commonly used word "fantasy" which tends to denote notions of whimsy or eccentricity. In psychoanalytic thinking unconscious phantasies are the driving force of all significant human subjective experience.

⁷ Speaking psychoanalytically an "external" object of perception is one whose qualities and function are not primarily given by factors dependent on an individual's imaginary beliefs. It is equivalent to what is loosely termed "objective" or material reality.

psychoanalysts suggest is wished for in early human mental development, and by being retained unconsciously never entirely given up.⁸

Our reasons for thinking it useful to understand the valuation process in the case of Internet stocks in terms of a theory of unconscious mental representation rest on examining what was happening in psychic reality in five different phases of the dot.com affair.

First, we propose that Internet stocks were quite easily represented in the minds of investors as alluring phantastic objects because this is how they seem to have struck those who publicised their existence, as they emerged into public view in the first “boom” phase of the bubble.

Second, we think that as “phantastic objects” they stimulated a headlong euphoric craze in the second phase of the bubble because they had a particular power to stimulate further compulsive behaviour driven by unconscious intergenerational as well as intragenerational rivalry.

Third, and crucially, we consider they could remain for many months tenaciously valued in a contrarian way, despite growing evidence that this might be foolish, because when the normal valuation criteria of material reality are applied to phantastic objects they are not necessarily salient, due to the specific ways phantasy representations are maintained in psychic reality.

Fourth, we think the value of Internet stock disappeared over night not just because everyone was selling them but because they had gone so absurdly high that once the contrarian logic holding the price up was no longer underpinned by their unconscious status as revered

⁸ The reader who has observed small children will probably concur that most of them want to change from feeling small, powerless and frequently frustrated by those on whom they depend into feeling magically and all-powerfully big and strong and possessed of endless supplies of satisfaction. Still more strongly, infants (who cannot yet speak) appear to wish to be transformed from being greedy needy and dependent into the object of their greed, their mother or parts of her body that they desire. In coming to terms with reality during development such wishes create guilt and anxiety or become felt as childish and shameful. They are gradually and painfully more or less given up or at least their unrealistic aspects are made unconscious, a process aided by actual mental and physical maturation, learning, social rules, and real achievement of greater capacity. From this point of view we are suggesting that owning Internet stocks can be considered to represent, in the unconscious mind of investors, achieving the desired and never given up possession of the most long desired and imagined infantile objects, the highly charged and totally satisfying objects of the infant’s early stages of psychic emotional development ownership of which in unconscious phantasy convey a blissful state of omnipotence and omniscience.

phantastic objects, Internet stocks became hated and despised objects, actually felt to have let down their owners and potentially to stigmatise them.

Fifth and finally, once widely disposed of in the terminal phase, Internet stock can be seen as lost phantastic objects, which create psychic pain, which is hard to bear. A consequence is that investors may have wished to forget all about their previous “phantasies” and not to wish to be reminded of them. This may create prejudice against valuing the sector rationally subsequently with implications for companies remaining in this sector and for learning from the experience.

1. Emerging to be viewed

There were only a handful of Internet companies before the Netscape launch in August 1995, which began the boom. Very few people had previously invested in them or known about them. However, Netscape’s share price rose over 100% on its offer price by the close of the first day’s trading valuing Netscape at \$2.2bn, or about as much as General Dynamics, the giant defence contractor. Its shares changed hands almost three times on average during the day; the launch and the news of the success of the launch somehow captured the public imagination and in consequence everyone involved with the IPO had immediately become enormously rich.

The Netscape launch and its huge success propelled the owners of Internet stock into the public gaze and seems to have created an exciting spectacle containing a particularly alluring new object. Certainly what happened created great media interest. As one example, Marc Andreessen of Netscape appeared as barefoot on the cover of *Time* (February 19, 1996) with the associated article portraying him as a modest tycoon-cum-superman with whom ordinary investors could identify. Similar media coverage seems likely to have helped to create a heady emotional climate. Then, two months later Steve Case, America Online’s 37 year old chairman, appeared on the front of *Business Week* (April 15, 1996) lying on top of a pile of its diskettes together with appropriately eulogistic copy in the accompanying article. Other early and still limited in number Internet stock entrepreneurs achieved similar celebration, attracting great interest and being presented as charismatic figures and stars. In this way they became the owners of exhibitable objects, ones they might appear to be showing off, and with great new powers.

The new powers associated with Internet companies were certainly the subject of further public claims of a particular significant type: they seemed to transform ordinary and more limited reality. For example, two weeks after the Netscape IPO *Forbes* (August 28, 1995) anointed Marc Andreessen, Netscape's founder, as the new Bill Gates and claimed that the Internet would "displace both the telephone and the telephone over the next five years or so." These comments supported and were supported by what was happening to share prices. Four months after Netscape's launch its share price was six times its offer price, valuing the company at \$6.5bn.

Internet companies were new and appeared to offer new methods of doing business. Before the crash it is striking to notice the excited and contemptuous tone of the dismissal of "old" ways of doing things. Internet companies, for instance, were hailed as part of a new economy whereas non-internet businesses were on the way out. These views were born out by what was happening to share prices⁹ and an extraordinarily excited set of claims to the superiority of these approaches then circulated.

For instance, *Time* (July 20, 1998) offered a headline above a cover picture of Jerry Yang, the founder of Yahoo!: "Kiss Your Mall Goodbye: Online Shopping Is Faster, Cheaper and Better." (Cassidy, 2002, p. 172) Similarly, an article in *Business Week* commenting on Amazon.com's 1998 results pointed out: "Amazon's fourth-quarter sales nearly quadrupled over 1997, and compared to that, *Sears is dead*" (italics added). Likewise, Josh Harris, the founder of Pseudo.com, a fledgling online television network, interviewed by CBS reported his aim was "...to take you guys out of business. I'm in a race to take CBS out of business." (Cassidy, 2002, p. 276).

Still more astonishingly Rufus Griscom, the cofounder of Nerve.com in a *New York* cover story on Silicon Valley's "Early True Believers" was quoted as saying: It's incredibly powerful to feel you are one of seventeen people who really understand the world." (Quoted

⁹ Consider the following two stories: 1. Yahoo!, with just 68 employees, listed on Nasdaq on April 12th, 1996. Its stock closed that day at two and a half times its issue price valuing the company at 100 times its previous year's sales. By early 2000 Yahoo! was worth more than Walt Disney and News Corporation combined with a stockmarket valuation of \$132bn and a P/E ratio of no less than 2150. 2. Amazon.com. IPO was on May 15th 1997. Its prospectus showed that it was losing \$9 on every book sold but its shares sold spectacularly. Its market capitalisation eventually peaked at around \$37bn in December 1999, more than sixty times its value when it listed, and despite forecast losses for that year of \$720m.

in *New York magazine*, March 6, 2000; Cassidy, 2002, p. 276) No being left out, not knowing, waiting, developing, learning, grinding, normal reality there. Omniscience!

As it was reported and played out in the financial press, television and general media, the progress of dot.com businesses in fact became an exciting spectacle, with the companies' executives presented as supernatural stars. This attention seems likely to have amplified exponentially the psychological desirability of Internet stock by exhibiting them so tantalisingly and so openly: they became phantastic objects – super, new, exhibitable, not to mention enriching.

Moreover, the new Internet could itself be used to buy these stocks: you could use it to buy it. Almost anyone could know about and buy Internet stock paper so that possession of these phantastic objects seemed particularly open to everyone. Almost everyone's unconscious wishes could now, apparently, be fulfilled and, it seems to us, this created a powerful yet subtle group pressure on anyone in contact with it.

Our argument is that in phantasy the Internet stock boom meant to many that anyone could now be publicly possessed of what could be imagined as the “Real Thing”. In psychoanalytic terms this means much more than just becoming potentially wealthy. By holding stock in these companies investors perhaps felt themselves actually endowed with the qualities of their inventors, part of a magic circle of people who were “in” on the new. In this and other ways possessing stock was like possessing the primary phantastic objects of childhood in a primary identification¹⁰. The sense one possesses a “phantastic object” would make an investor (in phantasy) into the sort of person all desired. In this way it would be felt¹¹, actually to reverse the many slights of childhood and turn the unconsciously never-forgotten experience of being a powerless and dependent infant into the mental phantasy of the all-powerful big man (or woman) who can do anything. The same phantasy turns the baby, who doesn't have uncontrolled access to his mother's breast (metaphorically) into the one who possesses it. It turns the child excluded from the parental couple in the bedroom into one who is right in the middle, able to see and do anything. In imagination this phantasy creates the

¹⁰ “Primitive mode of the constitution of the subject on the model of the other person...” (Laplanche and Pontalis, 1973: 336)

¹¹ The psychoanalytic approach to subjective experience concentrates on feelings as operating mentally separately from cognition. One may “feel” one has “it” while retaining perfectly clear cognitive capacities, which if salient would allow one to see this is a gross exaggeration.

mental impression one can at last circumvent the more mundane facts of ordinary life and achieve magical powers: a possibly alluring possibility compared to the hard slow work of learning to wait, to grow up, to accumulate skills and to create value in material reality.

2. The Rush to Possess: introducing intergenerational and intragenerational rivalry

As the owners of Internet stock multiplied and hence became more and more viewable the impression seemed to grow up and to become the object of attention not only that they used a new technology but that they were part of something “phantastic” called the “new economy” which was organised along different rules and principles than the old. The earlier quotes from *Business Week*, *Time* and *New York* magazine have emphasised the claims being made by the entrepreneurs on their behalf but many other commentators took up these ideas and developed them.

From a psychoanalytic point of view these claims and the level of emotional excitement signal a state of Oedipal triumph and a perverse reversal of generational difference¹² or the “triumph of the short way over the long way” (Chasseguet, 2001)¹³. Instead of the relatively ordinary process of internalising the qualities of desired parental objects and their creativity and aspiring through growth to be “like them” it was apparently now possible actually to become the ideal. The possibility of possessing the phantastic objects was a seductive temptation allowing a sense of triumph over the normal sense of reality for which we all struggle¹⁴.

¹² The Oedipus Complex, so named after the ancient Greek play *Oedipus Rex*, refers to an “organized body of loving and hostile wishes the child experiences towards its parents.” Laplanche and Pontalis, 1973: 282. It plays a fundamental part in the structuring of the personality, and in the orientation of desire as well as in the conscious and unconscious ambivalent relationships between the generations.

¹³ Psychological maturity is hard won “the long way” by renouncing incestuous wishes – the perverse temptation or the “short way” (Chasseguet, 2001). “When the child comes to recognize the complementary nature of his parents’ genitality, he is reduced to feelings of his own smallness and inadequacy. Recognition of the difference between the sexes is thus bound up with recognition of the difference between the generations. The perverse temptation leads one to accept pregenital desire and satisfactions (attainable by the small boy) as being equal, or even superior, to genital desires and satisfactions (attainable only by the father). Erosion of the double difference between the sexes and the generations is the pervert’s objective. He is generally helped to reach it by his mother who, by her seductive attitude towards him and her corresponding rejection of his father, fosters in him the illusion that he has neither to grow up nor to reach maturity taking his father as a model in order to be her satisfactory partner. (Chasseguet, 1983)

¹⁴ “The bedrock of reality is created by the difference between the sexes and the difference between generations: the inevitable period of time separating a boy from his mother (for whom he is an inadequate sexual partner) and from his father (whose potent adult sexual organ he does not possess). (Chasseguet, 1983)

Of course, as in the emotional state described as mania the process fed on its own momentum. While it was in full swing, optimism about valuation further stimulated the demand for stocks and so raised the price and increased the excitement. Normal checks on investor excesses were somehow overcome during the dot.com euphoria so that the events of the period look like a charismatic led Dionysian orgy, throwing down the walls of tradition and order with striking parallels to that described by Euripides in the *Bacchae*. The usual stigma or doubt associated with very excited or particularly risky investor behaviour seemed not only to depart but actually to be ridiculed¹⁵.

Altogether between August 1995 and October 1998 there were another 69 dot.com IPOs with the Nasdaq increasing in line with the Dow Jones, both up by around 75% over this period. This “boom” stage of the bubble was characterised by the entrenchment of the idea that the US economy was being transformed by information technology and, in particular, the Internet. The argument was made that the old rules of economics no longer applied and that in these new types of investment traditional earnings-driven valuation methods could not be used.¹⁶

From a psychoanalytic perspective this emphasis on the “new” would have intensified the allure of Internet stock as “phantastic objects” and encouraged what would normally be considered perverse or dangerous practices. The new entrepreneurs were manifestly young and apparently also subject to different rules – unveiling a kind of adolescent paradise and stimulating the unconscious processes surrounding the rivalry that exists between generations: the desire of the young to rival their parents and the fear of the parents at being left behind. Whereas children tend to feel left out of what the parents are doing (the primal scene¹⁷) it now seemed the parents might envy and feel left out by their children, a powerful dynamic normally restricted to the phantasies of children. This impression of a reversal of

¹⁵ For example, *The Economist* (April 18, 1998) and the *Financial Times* (April 22, 1998) contained sceptical articles describing the US as experiencing a serious asset price bubble. In response the *New York Times* published an editorial defending the nation’s amour-propre (April 29, 1998) and *Newsweek* dismissively poked fun at *The Economist* article (May 11, 1998).

¹⁶ For example, see the series of articles, by Michael Mandel, a Harvard PhD in Economics and *Business Week* economics editor arguing there was a New Economy entitled “The Triumph of the New Economy”, “The New Business Cycle” and “The New Growth Formula” (*Business Week*, December 1996, March 31, 1997, p. 58 and May 19, 1997, pp. 31-33 respectively). In the latter case he argued that the new ways in which computers could be used could lead to good times “for the foreseeable future.”

¹⁷ The imagined highly charged scene of sexual intercourse between the parents from which the child is usually excluded (Laplanche and Pontalis, 1973: 335). This scene is also the unconscious mental template for all experience of “spectacles”, whether as participant or spectator.

generations seems to have been accentuated by the reaction of various authorities. At this time if the object of speculation had anything to do with the Internet the underlying situation was apparently so exciting it could not be defined as speculation at all. Moreover, one of the most influential public proponents of the Internet New Economy doctrine was Alan Greenspan, chairman of the Federal Reserve Bank¹⁸, which seems likely to have lent authoritative and perhaps moral legitimation to these new ways of thinking. Instead of seeking to control the speculation, Alan Greenspan and the Federal Reserve took the view that what was happening in 1998 was good for everyone. Also, as another example, of changes in the culture of risk control, whereas it had been usual previously for top investment banks to avoid high-risk issuers to protect their valuable “reputational capital”, Internet IPOs eventually became over 40% more likely to be underwritten by one of the six most prestigious underwriters (Schultz and Zaman, 2001).

Unchecked¹⁹, the headlong rush to possess Internet stock became matched to a stampede to become associated in almost anyway with it: the euphoric stage of the boom in which it seems nobody could afford to be left out²⁰. Those who did not join in lost out on the gains that others were making and in the case of fund managers and analysts under-performed and so were at risk to lose their jobs. Between October 1998, when Dow Jones launched the Dow Jones Internet Composite Index, and the end of March 2000 no fewer than 325 Internet IPOs took place, or an average of 18 a month compared with under 2 a month over the previous three years. From October 1st 1998, when the Dow Jones Internet Index stood at 72, to March 10th 2000 when it peaked at 510, its monthly rate of increase was almost 12%. Its 600% increase over this period was exactly twice as great as the broader based Nasdaq

¹⁸ E.g. See Alan Greenspan *Monetary Policy Testimony and Report to the Congress*, July 22nd 1997. Alan Greenspan will go down in the history books as the Fed chairman who oversaw the greatest speculative boom and bust that the US has ever seenHe wasn't the only person responsible for the Internet bubble but his actions encouraged and prolonged the speculative mania.” (“A saint or a sucker”, *The Financial Times*, March 2/3, 2002, p. 10)

¹⁹ The psychoanalytic concept of the Super-Ego as an internal source of control over untrammelled and dangerous desire and based on the capacity to internalise parental figures is implicit here (Laplanche and Pontalis, 1973: 435).

²⁰ “...there are great fundamental reasons to own these stocks ...The companies underneath are (1) growing amazingly quickly, and (2) threatening the status quo in multiple sectors of the economyWith these types of investments, we would also argue that the ‘real’ risk is not losing some money – it is missing a much bigger upside.” Henry Blodget, *Internet/Electronic Commerce Report*, Merrill Lynch, March 9, 1999.”

technology index, whereas the Dow Jones Composite only increased by 20% over the same period.²¹

Among the 325 new issues in this period, average first day returns over the euphoria period were around 90% (Schultz and Zaman, 2001). In fact companies were now coming to the market with business models that by the normal rules might have seemed completely implausible. Significantly, although this was being made explicit in offer documents, it did not dampen enthusiasm. A particularly striking example is given by Cassidy (2002 pp. 204-5), who discusses Healthon, which planned to outdo what had defeated many before: “fix the US health care system.” Despite meeting scepticism and considerable adverse publicity when trading started on February 10 1999 the stock closed at 4 times its offer price, valuing Healthon at more than \$2bn.

In fact, looked at with the benefit of hindsight many, if not most, of the companies formed and brought to the market at this time were ideas or concepts which amounted to little more than clever names. At the time, however, under the influence, we suggest, of an experience of encountering “phantastic objects” and faced with offer documents which did not anticipate profits for a considerable length of time, analysts were faced with a problem. They had the unexciting or even depressing option to regard them as worthless or had to find some way to value them that would, as the boom and then euphoria progressed, justify the market’s valuations and show the prices paid by investors were reasonable.

We have mentioned that the new companies used new technology and an atmosphere of innovation was in the air. The idea, therefore, arose not to concentrate on such “old

²¹ The kind of thing that was happening to valuations is illustrated by the story of three examples: (1) At Home listed on Nasdaq two months after Amazon.com. This “broadband” Internet business had just 5,000 subscribers when it announced it was going public and warned that “there can also be no assurance that the Company will ever achieve profitability”. Nonetheless, At Home’s opening market capitalisation was no less than \$2bn, reflecting a price to sales ratio of 1350 times; in due course its market capitalisation reached \$22bn. (2) eToys was floated on Nasdaq on May 20th 1999. By the end of the first day of trading its price was up 280%, valuing the company at 220 times its revenues, or \$7.8bn, substantially exceeding the market capitalisation of the successful and hitherto highly profitable Toys’R’Us shop, with sales almost 400 times larger. At its peak, eToys was valued at well over \$10bn, despite losing \$4 on every order, even ignoring marketing costs. (3) Webvan was an on-line grocery home delivery business which filed for an IPO in early August 1999, just two months after it started selling groceries. Its prospectus expected losses of over half a billion dollars between 1999 and 2001! Nonetheless, when Webvan finally listed on November 5th 1999 its stock rose by two thirds on the offer price, valuing the firm at \$8bn, 20,000 times its annualised revenues. The claims and the valuations proved hopelessly unrealistic. At Home filed for bankruptcy at the end of September 2001, eToys declared its shares worthless in February 2001 and Webvan filed for Chapter 11 in July 2001.

economy” measures as earnings and revenues but on new concepts such as “mind share” and “market share” and these were to be quantified in terms of “website traffic”. The Internet “..has all introduced a brave new world for valuation methodologies. ...we believe that we have entered a new valuation zone”, was the argument of one influential analyst, Mary Meeker²².

In the emotional climate we have described, this idea that Internet stock did require a radically new valuation method seems to have caught on to an extraordinary extent. Demeris and Lev (2001) compared the relative valuation models for an Internet company in 1999 and 2000 and show how investors were favourably disposed towards Internet companies’ aggressive cash expenditures in 1999. The more their sample firms lost in 1999, the higher their share price to sales figures. Hand (2000) also shows for a large sample of Internet firms from the first quarter of 1997 until the third quarter of 2000 that their stocks were priced in a *contrarian* way. While reported profits were positively valued, losses were negatively priced, i.e. the larger the losses the greater the market value. Hand argues that the stockmarket in this period treated losses as intangible investments in the future growth of the firm, considering the source of the losses as being due to high R&D and sales and marketing expenses.

The evidence is that for over two years it was the dot.com suffix that was magic. Cooper, Dimitrov and Rau (2001) demonstrate dramatic increases in the value of firms which added “.com” to their names in 1998 and 1999, which increase in firm value appeared permanent. Specifically, they found cumulative abnormal returns of no less than 63% for the five days around the name-change announcement date and most notably with the effect independent of a company’s actual level of involvement with the Internet. Moreover, their paper provides evidence that sample companies with non-Internet related core businesses earned the greatest post-announcement returns! To us this suggests that it was mere association with the Internet (the phantastic object) that provided a firm with an aura and a large and ongoing value increase. We suggest it offered that special sense of primary identification and possession of

²² Mary Meeker, *US and the American Investment Research*, Morgan Stanley Dean Whittler, September 16 1997, p. 1. Similarly, in December 15 1998, Henry Blodget, another high profile Internet analyst, issued a \$400 price tag for Amazon then valued at 60% (\$242/share) of that figure. He justified this on the basis of its “astounding revenue momentum” and what he saw as its potential to become the Wal-Mart of the Web taking 10% of its target market. Assuming a profit margin of 7% (Amazon was making increasingly heavy losses at the time) it would then, on a P/E multiple of 30, be worth \$21bn or \$400 a share. Less than a month after this prediction, Amazon.com’s stock actually topped \$400.

the “phantastic object” that a girl child achieves holding a doll or a boy child achieves by wearing a policeman’s helmet or his team’s football shirt. They feel they are mother or father. In this way valuation in the bubble was based on unconscious identification and possession of a phantastic object: it was, therefore, at bottom, based on an emotional sense of Internet stock value and its capacity to transform the investor not on a cognitive calculation of return. In that heady atmosphere justifications of valuation procedures were rationalisations of wishes.

3. Keeping stock values high: the stage of defence

“Phantastic objects” are too fantastic to be so in material reality. In psychic reality, however, there is no particular difficulty about being able to carry on life dominated by imaginary or “phantastic” beliefs for quite extended periods of time. In its most extreme form it is what is happening in psychiatrically diagnosed madness and in lesser forms it is the basis for many neurotic problems.

Psychoanalysts have devoted much effort to a description of defences against reality (for instance, Sandler and Freud, 1985). Individuals have available sophisticated and themselves very satisfying unconscious mental mechanisms that can be used to shut out and modify bad news. They can, for instance “turn a blind eye” mentally (denial); see only one side (the bright side, splitting); or see a problem somewhere else (projection). As time goes by an increasing number of such defences will be necessary to maintain any phantasy belief that is manifestly at odds with the perception of reality, such as the accounting realities of price/earnings ratios, etc. However, the belief that a share certificate in which one has emotionally and financially invested heavily and which is believed to have the transforming qualities of the “phantastic object” is a belief that cannot be dropped without the consequence of mental pain. To avoid this an investment analyst who suggested such to investors could expect to be “dealt with” in a number of ways. His presentation of accounting reality could be countered by suggestions that he does not understand “new” situation, is perhaps envious and because he has not invested is surely suffering from “sour grapes”. He could then be treated with contempt and then (so long as all went well for a bit) investors could sleep easy and carry on behaving as they felt compelled to do so anyway. Freud (1908) states 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" (p. 145).

There were many occasions during the dot.com bubble when commentators did in fact question the assumptions and expectations implicit in the pricing price of Internet stock and, especially when these were associated with negative gyrations in prices, such articles provided opportunities for those involved to reflect. But they did not. When doubt was expressed there is clear evidence it was ignored or even denigrated. For instance, On April 15, 1996 *Fortune* published a cover story “How Crazy is this Market?” arguing a “confidence-shattering crash” was inevitable at some point and, 15 months later, in 1997, with the Dow 2,000 points higher, it ran another sceptical cover story. *The Economist* (April 18, 1998) and the *Financial Times* (April 22, 1998) already questioned what was happening and describing the US as experiencing a serious asset price bubble called on Alan Greenspan to take action. There were other distinguished doubters²³. But in response to the *Financial Times* the *New York Times* published an editorial defending the nation’s amour-propre (April 29, 1998) and *Newsweek* dismissively poked fun at *The Economist* article (May 11, 1998).

Undaunted and a year later, *The Economist* (January 30 1999, “Why Internet shares will fall”) was quite explicit about Internet companies: “...however exciting the Internet may be, retail and content companies will never make enough money to justify today’s share prices*Once normal valuations fly out of the window, there are no reference points.* (italics added) Nor does anyone know how the day traders will cope with sustained downward pressure. Internet shares are not liquid and online brokerages may not be able to handle large volumes of stock.” It was, however, well over another year before this view gained attention with any consequence.

In fact analysts and other commentators kept advising investors to keep buying and kept dismissing alternative views. Comparing the dot.com market with tulip mania, Mary Meeker wrote: “The difference is that real values are being created. Tulip bulbs would not fundamentally change the way the companies do business.”²⁴ Another analyst was still more effusive on this point: “The overall Internet stock phenomenon may well be a ‘bubble’ but in at least one respect it is very different from other bubbles: there are great fundamental

²³ The distinguished economist, Milton Friedman, told the *New Yorker* (August 17, 1998) “I think there is a good deal of comparison between the market in 1929 and the market todayI think both of them are bubbles ...if anything, I suspect there is more of a bubble in today’s market than there was in 1929.” Similarly another Nobel Laureate, Paul Samuelson, was equally blunt “...there has been an element of bluff in the market for at least two years, possibly longer...(Greenspan had) painted himself into a corner. He is now dealing with the physics of avalanches.” (Cassidy 2002, p. 183).

²⁴ (Cassidy, 2002 p. 217).

reasons to own these stocksThe companies underneath are (1) growing amazingly quickly, and (2) threatening the status quo in multiple sectors of the economyWith these types of investments, we would also argue that the ‘real’ risk is not losing some money – it is missing a much bigger upside.”²⁵

Of course, the emotional cost of realising one may have made a mistake becomes greater as realisation promises more of a fall. Realisation threatens to release many feelings. At first these may only be noticeable in the form of increasing anxiety but also perhaps signified by particularly spectacular spurts of optimistic assessments or an increasingly strident tone of dismissal such as those just mentioned.

In summary, while the market was in the grip of the pursuit of the phantastic object twin factors seemed to have operated to continue to propel it up. On the one hand it was driven by infectious excitement. On the other, specific defences against perception in the form of denial or splitting were operating to attack and to prevent awareness of more material reality. It is a clinical maxim that awareness of being just ordinary in an excited manic state is unwelcome to the point of being terrifying. It is felt to threaten a complete depressive collapse and panic. It threatens the loss of the phantastic object as well as anxiety about what has been done in the frantic effort to possess it. If the bubble bursts there will be pain in the form of loss, humiliation and shame.

In the euphoric stage of the bubble we suppose these potentially painful feelings and anything or anyone stirring them up were quite literally to be hated. It is this hatred that leads to the manic contempt and dismissal of sceptical analysts or commentators who are felt to be seeking to deny the value of the phantastic object structure and trying to spoil the party in the process. The process is inimical to thought.

4. The collapse: Panic and loss

What finally pricked the bubble was a long article in *Barrons* on March 18 2000, 8 days after the Dow Jones Internet Index all-time high, entitled “Burning up”. The conclusion was that at least a quarter would run out of cash within a year²⁶.

²⁵ Henry Blodget, *Internet/Electronic Commerce Report*, Merrill Lynch, March 9, 1999.

²⁶ We do not see once predict this moment but such mental states do have something of the quality of the dizziness we all experience as we feel exposed to being too far above the ground.

The realisation, when it finally occurs, that a phantastic object is not what it was felt to be creates panic and other undesirable feelings that all of us experienced much earlier in life and have had to work hard and to be helped to overcome. The feelings may include a shameful feeling one has been metaphorically soiling one's hands. The immediate emotional consequence for many investors would be that they will feel compelled to wash their hands of their situation and to try to get rid of the pieces of paper.

The rapidity of the collapse in the Internet index after the bursting of the bubble is exactly consistent with these expectations – the phantastic object no longer had its previous meaning and there was no other logic to hold the situation. The stock became a source of embarrassment and those publicly involved with it seem to have become soiled.

Insofar as repressing any memory of one's excited possession is impossible in the face of stark material reality, there is likely to be shame and guilt, with the desire to find someone else to blame for the losses and the associated painful bad feelings engendered. The combination of the desire to dump and the anger about feeling let down, generates helplessness, shame and guilt and particularly hatred of the object that let one down. We believe this kind of scenario explains the emotional tone of the very negative and dismissive “wise after the event” comments occurring after the collapse of the dot.com bubble²⁷.

Whereas at the height of the bubble no one seemed to take much notice of adverse comment, once the bubble was burst no one seemed to take much notice of good news either. Thus, after the crash Internet companies found it hard to raise money and the fantasy that it was possible to make easy money by buying and selling pieces of paper was seen as just that²⁸. Activity turned to blame. Spotting the next dot.com to go bankrupt became a popular spectator sport with websites encouraging users to submit predictions for the next dot.com

²⁷ The recent successful action by Eliot Spitzer, the New York Attorney General, against Merrill Lynch and other investment banks for their excesses in the technology boom which were blamed for heavy investor losses, can be viewed in this light.

²⁸ As an indication the moral climate during and after the bubble it interesting that when after the fall Henry Blodget changed his tune, the tone of his language remained the same - although targeted in quite an opposite direction. In private (*Financial Times* April 10, 2002), he apparently described four Internet stocks he was recommending publicly as alternatively “a powder keg” (July 13, 2000), as in such shape that “we see nothing that will turn this around near-term” (October 6, 2000), a “piece of shit” (October 10, 2000) and similarly “POS” (December 4, 2000).

failure. The *New York Post* actually created a “dead dot.com of the day” column and a website was set up to preserve the home pages of deceased dot.coms, www.disobey.com/ghostsites to ensure they didn’t vanish without trace.^{29,30}

We would hypothesise a parallel process by Internet companies of divestment of such stigmatised association, now the bubble has burst. Just as in the boom period adding a “.com” suffix to a company name had a sharply positive effect on its subsequent market valuation the same attribution would be likely to have a reverse effect after the fall. In fact in 2001 Internet.com, a publishing company, changed its name to INT Media Group. Since going public in June 1999 its stock had gone from \$14 to \$72 then back to \$4. “We have been the whipping boy because of the name” its founder complained to the *Wall Street Journal*. (*Wall Street Journal* April 15, 2000, quoted in Cassidy, 2002, p. 308). *Business Week*, (“What’s in a Name”, October 29, 2001) lists several such publicly quoted companies removing their .com suffixes, replacing these with Inc. or Corp. or changing their names more radically. It is such observations that make us suppose that with Internet stocks we were dealing with a “phantastic object”; why should changing a name have such a significant impact on share valuation when any kind of actual link is tenuous in the extreme?

5. Learning From Experience

Freud and later psychoanalysts have argued that unconscious impulses, taking the form of attempts to enact phantasy, are part of everyone's reality. If we do not defensively evade the reality of these impulses, we will eventually confront their consequences, and experience the fear and the guilt, which necessarily follow from them. The dot.com investor holding shares at the time of the fall, inevitably, through the unconscious greedy pursuit of the phantastic object and the surrounding beliefs of becoming and overthrowing the established order of reality, would, when the bubble burst, face unconscious shame and guilt, revealed when the consequences of his actions become losses.

²⁹ Paul Andrews “The Virtual Dead Live on in Museum of Web Failures” *International Herald Tribune*, May 25, 2001 p. 13.

³⁰ Investors who, in many cases, had lost very large sums of money in dot.com speculation kept a very low profile. *Fortune* wound up its Dot-com Deathwatch monitoring in December 2001 after listing 384 dot.coms which had filed for bankruptcy or ceased operations in that year. The reason given was that Internet startups have become a relic of the 1990s. (Ellen Florian: “Dead and (Mostly) Gone”, *Fortune*, December 24, 2001, p. 46)

One reaction to the situation is to feel persecuted. If such anxieties predominate, it will be difficult to face reality except by seeking to project the blame and to persecute and take revenge on someone else. A second reaction is depressive: to accept loss experience and to give up the “phantastic” dream. If feelings of loss can be tolerated and understood then mourning can take place which ushers in the experiences and allows the development of new capacities which Melanie Klein described under the heading of the depressive position (Klein, 1935). The overvalued “phantastic” beliefs can be relinquished by being mourned as lost objects – a process that is linked with realising and tolerating the distinction between what is mental and what is material (Britton, 1995). Mourning involves a drive to make reparation. In this way, if the experience is not eviscerated, growth and learning is made possible.

Psychoanalytical theory, therefore, suggests that it is important when the consequences of the kind overvaluation process that took place in the dot.com affair are revealed, that they should be “worked through”³¹ so that they can be learned from, leading to modification of subsequent investor behaviour, or not, as the case may be. It is an important guiding principle of the proper functioning of markets that investors should learn – in traditional economic theory it is by learning that the market keeps to sound maximisation principles – so that any barriers to doing so matter.

If a lesson is not learned there is the danger of repetition and in this context, if the idea of Internet stock as “phantastic object” is used, it will help to focus on some of the compulsive difficulties that are likely. The feeling of being cheated by reality may fester and so create the conditions for a new search driven unconsciously by the desire to undo the humiliation, guilt, shame and hurt – to clear one’s name or to get back at and take revenge on those who are felt to have cheated one of one’s prize.

It is, as yet, too early to say how far investors and their advisors have reacted to the dot.com experience by learning from experience, although the signs are not good. The primary activity at present appears to be an attempt to lie low and to project the blame and to persecute those felt responsible – in others word to try and wash hands for getting caught up in what in retrospect was a frightening, shaming and damaging experience for all but a few.

³¹ See Laplanche and Pontalis, 1973: 488.

6. Summary and Conclusions

In this paper we have suggested that those caught up in the dot.com phenomenon can usefully be understood as driven by compelling, exciting and then terrifying and shameful emotions which dominated their thoughts and of which they were only partly aware. Their thinking and behaviour seems to have been manifestly at variance with that associated with *homo economicus* and may be better understood in terms of a parallel and equally purposive mean-ends schema, making sense from the investor's viewpoint, but defined by their subjective or, psychoanalytically speaking their psychic, reality.

In setting out a five step understanding of the dot.com affair in terms of psychic reality we have introduced a number of core psychoanalytic concepts and argued that during the dot.com bubble there was an exceptional degree of distortion in valuation realities into which it was very difficult not to get drawn and to which investors cling tenaciously by "falling for" more and more unrealistic theses. During this period normal accounting realities became suspended while those who raised doubts about the valuations achieved were triumphantly mocked and denigrated. There was an enormously exciting atmosphere in which there was a curiously excited moral tone – both in the claims first made for the Internet and the new economy and then in the denigration of the companies afterwards. In our view these features are striking and consistent with the idea that in inner psychic reality Internet stocks became mentally represented as infantile "phantastic" objects. We believe this idea and the associated quality of perverse hidden intergenerational (Oedipal) rivalry help to explain in a consistent manner core characteristics of the exciting rise and the dramatic fall in stocks, as well as the apparently phobic way the sector has subsequently been treated.

Phantastic objects are unconsciously idealised and then, on letting one down, denigrated. One consequence of understanding Internet stocks as phantastic objects is that it points to the need for the market community to attend to these matters and to acknowledge and emotionally understand what has happened, lest by treating the experience as unpleasant and best forgotten, there is an institutional as well as individual failure to learn from experience.

Such ideas, although perhaps strange to the finance literature, seem to us to be worth a more empirical investigation. Although like other ideas from behavioural finance they focus on hypothesised aspects of the process of individual decision-making, they do aim to address

particular aggregate outcomes of great significance for understanding how markets can significantly depart from equilibrium in the medium term (Keynes' "animal spirits"). Moreover, the dot.com experience, like the earlier South Sea bubble which had highly restrictive legislative consequences, may exert a considerable impact on investor confidence for some time to come. There are already signs that it is leading to a fundamental alteration in the rules governing investment banks as the recent agreement between the New York Attorney General and Merrill Lynch and the parallel attention of the SEC demonstrate!

We also suggest that while the dot.com experience is a dramatic example of how valuations are driven more by emotion than cognition, that knowledge of the subtle and complex way emotions determine psychic reality will be of ongoing use in understanding all investor behaviour. It has long been recognised that markets are driven by greed and fear: the psychoanalytic theory of psychic reality provides a complex systematic model with which to begin to investigate and more systematically understand and apprehend these phenomena.

REFERENCES

Bikhchandani, S., D. Hirschleifer and I. Welch, 1998, "Learning from the Behaviour of Others: Conformity, Fads and Informational Cascades", *The Journal of Economic Perspectives*, 12 (3, Summer): 151-170.

Britton, R.S., (1995) Psychic Reality And Unconscious Belief. *Int. J. Psycho-Anal.*, 76:19-23

Cassidy, J., 2002, *dot.con: the greatest story ever told*, London: Alan Lane The Penguin Press.

Chasseguet -Smirgel ,J., (1983) Perversion and the Universal Law. *Int. R. Psycho-Anal.*, 10:293-301

_____ (2001) The Ego-Ideal Today: The Triumph of the Short Way over the Long Way. *Bulletin of the European Psychoanalytic Federation* number 55.

Cooper, M. J., O. Dimitrov and P. R. Rau, 2001, "A Rose.com by Any Other Name", *Journal of Finance*, 56(6), 2371-2388.

Demers, E. and B. Lev, 2001, *A Rude Awakening: Internet Shakeout in 2000*, Unpublished working paper, Simon School of Business, University of Rochester, January 2001.

Freud, S (1908) Creative Writers and Day-Dreaming. Standard Edition 9 pp. 143-153

Hand, J. R. M., 2000, *Profits, Losses and the Non-linear Pricing of Internet Stocks*, Unpublished working paper, Kenan-Flager Business School, UNC Chapel Hill, November 13.

KLEIN, M. 1935 A contribution to the psychogenesis of manic-depressive states In *The Writings of Melanie Klein Volume 1* London: Hogarth Press.

LAPLANCHE, J. & PONTALIS, J. B. 1973 *The Language of Psychoanalysis* trans. D. Nicholson-Smith. New York/London: W. W. Norton and Hogarth Press.

Sandler, Joseph & Freud, Anna (1985) *The Analysis of Defense: The Ego and the Mechanisms of Defense Revisited*. Madison Connecticut: International Universities Press

Schultz, P. and M. Zaman, 2001, "Do the Individuals Closest to Internet Firms Believe They are Overvalued?", *Journal of Financial Economics*, 59, 347-381.

Shefrin, H., 2000, *Beyond Greed and Fear*, Boston, Mass: Harvard University Press.

Shiller, R. J., 2000, *Irrational Exuberance*, Princeton: Princeton University Press.

Shliefer, A., 2000, *Inefficient Markets: An Introduction to Behavioural Finance*, Oxford: Oxford University Press.