Emotional Finance: Theory and Application

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ABSTRACT

Unconscious mental processes are ubiquitous in all human activity. However, little attention has been paid in the finance literature to date to how people's unconscious fantasies, needs and desires help drive their investment decisions, and markets more generally. This paper first presents some of the theory underpinning the new domain of emotional finance, which is informed by the psychoanalytic understanding of the human mind, and then outlines some of its practical insights and applications. The potential contribution of emotional finance more generally in helping explain asset pricing bubbles and the global financial crisis is also explored, as well as the paradox the asset management industry represents. Recognising that investment evokes the emotions of excitement, anxiety and denial, this paper concludes by suggesting that the key role our inner world plays in financial markets is worthy of greater attention.

1. Introduction

Traditional finance assumes financial decision-makers are "rational". *Homo oeconomicus* dominates. Behavioural finance, on the other hand, recognises that investors are prone to bias and fallible in their judgments. Nonetheless, the premise is still that if only investors could learn to be less biased, then they would be more rational. However, despite all market participants experiencing directly how emotion-laden the investment process is, emotions, and particularly those of an unconscious nature, are ignored by both paradigms.

Emotional finance, on the other hand, explicitly sets out to examine how our emotions, both those of which we are conscious, and, more importantly, those unconscious, play a key role in all financial decisions. This new perspective in finance formally recognises how the inherent uncertainty in the investment process and associated problems in predicting future outcomes inevitably unleashes powerful feelings of both excitement and anxiety.

Emotional finance draws on the psychoanalytic understanding of the human mind and dynamic mental states to describe how unconscious processes drive investment decisions and are an integral part of all financial decision making more generally. As Eric Kandel (1999, p. 505), the 2000 Nobel Laureate psychiatrist and neuroscientist, points out "psychoanalysis still represents the most coherent and intellectually satisfying view of the mind" and, according to Fotaki, Long and Schwartz (2012, p. 1105), psychoanalysis is "arguably the most advanced and compelling conception of human subjectivity that any theoretic approach has to offer".[1] Emotional finance seeks to enhance our understanding of investor and market behaviour not well explained by existing theories and models.[2]

The next section of this paper describes some of the emerging theory of emotional finance which is now developing into an established corpus of knowledge. Drawing on recent research section 3 then illustrates some of its practical applications in a range of investment areas. Section 4 takes a broader perspective to explore the potential contribution emotional finance can make in explaining asset pricing bubbles and related market phenomena, including the recent financial crisis, which existing economic and financial theories have great difficulty in doing in any coherent way. The following section examines the paradox in the nature of the fund management industry. Taking an emotional finance perspective it highlights how the real (and important) contribution the asset management industry makes to investors is quite different to the way this is conventionally viewed. The paper concludes by suggesting that the key role unconscious fantasy plays in investment should be formally acknowledged if we want to understand and predict investor and market behaviour in a more holistic way. In fact, we might speculate on whether the idealised construct of *homo oeconomicus*, who in being "rational" is, in some sense, predictable, may be serving on one level as a psychic defence against the reality that ultimately the future is uncertain, with the associated anxiety to which this inevitably leads.

2. Emotional finance theory

Neuroscientists point out how most mental activity occurs outside of conscious awareness (e.g., Bargh and Chartrand, 1999; Turnbull and Solms, 2007). Modern research in neuropsychology is increasingly confirming Freud's original insights into the workings of the

[1] Bargh and Mosella (2008) show how activities of the unconscious mind precede their experience, explanation and ownership by the conscious mind, i.e., "action precedes reflection", and similarly point out that "Freud's model of the unconscious as the primary guiding influence over daily life, even today, is more specific and detailed than any to be found in contemporary cognitive or social psychology." (p. 73)

[2] This paper focuses specifically on issues relating to investor and market behaviour although emotional finance has equal application at the corporate level. See, for example, the work of Fairchild (2009; 2014).

human psyche and the formative role early infant relationships and experiences play in adult mental processes (e.g. Kandel, 1999; Solms, 2004; Bechara and Damasio, 2005; Wolozin and Wolozin, 2007; Turnbull and Solms, 2007; Tuckett, 2011, pp. 59-62). Emotion and unconscious psychic processes are central in the way people deal with the world. Nonetheless, the role people's unconscious needs, fantasies and drives might play in their financial decisions is conventionally ignored by financial researchers.[3]

Investment market outcomes are inherently unpredictable and such uncertainty leads to emotional responses of both a neurological and psychological nature. Emotional finance directly explores how unconscious processes help drive investor and market behaviour. The important role of *illusion* in investment, which from a psychoanalytic perspective is viewed as any belief heavily influenced by *wish fulfilment* and the distortion of reality (Auchinloss and Samberg, 2012, p. 110), is explicitly recognised.[4] People unconsciously *feel* what they want to be true, rather than what actually *is*. The *psychic*, or subjective, *reality*, of the "inner world", the world of unconscious fantasies and wishes, is very different to the material world of external reality, the actual *facts* of the matter, with which finance traditionally seeks to deal.

2.1 Ambivalence and unconscious conflict

Psychoanalysis views thoughts created by feelings as ultimately being of two types: *pleasurable* (exciting) or *unpleasurable* (painful, anxiety generating, or loss provoking) (Freud, 1911). Mental functioning reflects the outcome of an ongoing and never fully resolved struggle between the *pleasure principle* and the *reality principle*, the capacity to sense reality as it really is, however painful, rather than how people might wish it to be (Freud, 1908).[5]

Investment decisions create feelings of both *excitement* (the pleasure of imagined future gain) and *anxiety* (the pain or unpleasure of potential future loss).[6,7] The process of

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[3] Although cognitive psychologists also acknowledge that most judgment and decision making is automatic and intuitive rather than reasoned (e.g., Kahneman's Systems 1 and 2 [Kahneman, 2012]), the role unconscious emotions play in decision making is almost completely ignored. For example, the word *unconscious* appears only once in both of Kahneman's two articles based on his 2002 Nobel Prize in Economics lecture (Kahneman, 2003a; 2003b), and then only in a referenced book title.

[4] An important form of illusion in financial systems is the combination of knowing and not knowing, i.e., "turning a blind eye" to what is going on, when market participants have access to reality but choose to ignore it because it is "convenient" to do so (Kirsner, 2012).

[5] Freud (1908, p. 144) points out: "But whosoever understands the human mind knows that hardly anything is harder for a man than to give up a pleasure which he has once experienced."

[6]The universal human emotion of *anxiety*, the not always consciously experienced apprehension and anticipation of danger, plays a central role in psychoanalytic theory (Auchincloss and Samberg, 2012, pp. 18-20) and can be

investing means that the investor enters into an emotional attachment, whether conscious or not, with something, a stock or other asset, which can lead to both gain or pain. The investor becomes dependent on its future price, something which is inherently uncertain. There is the wish and hope the stock will go up, which is pleasurable or exciting, but on the other hand it can very easily let the investor down, the thought of which is unpleasurable and anxiety-generating. Importantly, since both pleasurable and unpleasurable feelings are generated at the same time, this leads to subjectively painful emotional conflict or *ambivalence.*[8] For example, professional investors are very aware of the danger of falling in love and idealising a stock or company management which can then do no wrong, which feelings then turn to anger and disgust when they do not perform as expected (Tuckett and Taffler, 2012).

Investment thus provokes highly charged emotions and associated emotional conflict. Such unconscious conflict is dealt with typically by evacuating the potentially unpleasurable thoughts from conscious awareness leaving only the good ones. "Defences" or "avoidance strategies" are used in this process such as *splitting,* mentally separating the good and bad feelings with the latter being *repressed* and rendered unconscious, *idealisation* (the unrealistic exaggeration of attributes or qualities), *projection* (unconsciously attributing unwanted feelings to others) and, crucially, *denial* (the repudiation or disavowal of aspects of external reality the individual does not want to know about to diminish or avoid the painful affects associated with that reality) (Auchincloss and Samberg, 2012). In this way emotional conflict or ambivalence is sidestepped and avoided.

2.2 Unconscious phantasies

Broadly speaking, the term *unconscious* refers to the mental processes of which the individual is unaware but which nonetheless exert a direct effect on conscious experience. The term is associated with the way in which people are driven by ideas, conflicts and feelings beyond their conscious awareness (Auchincloss and Samberg, pp. 277–279).

Phantasies are the basic building blocks of unconscious mental life and thus deep drivers of human behaviour and subjective thought. Such unrecognised emotions are

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viewed as the *prototypical emotion* in investor behaviour. In a person's unconscious there is no such thing as a little anxiety, anxiety is experienced as total.

[7] *Inter alia*, see Tuckett and Taffler (2012) and Tuckett, Elliott Smith and Nyman (2014) for empirical confirmation of the key role this dynamic process plays in investment.

[8] The psychoanalytic concept of ambivalence is used to describe the simultaneous existence of, and opposite feelings and attitudes about, an object, person, thing or situation, typically of both a loving and hating nature (Auchincloss and Samberg, 2012, p. 14). How we deal with this ambivalence is at the heart of our psychic life (Bion, 1970).

powerful because they remain unknown and thus not accessible to conscious thought and reflection. The term *phantasy* with a *'ph'* is used conventionally by psychoanalysts to refer to unconscious events and *fantasy* to more conscious constructed ones such as day dreams or wishful thinking (Auchincloss and Samberg, 2012, pp. 85–87).

Klein (1935) views the whole of an individual's psychic life as dominated by phantasies originating in the early stages of emotional development: "…infantile feelings and phantasies leave, as it were, their imprints on the mind, imprints that do not fade away but get stored up, remain active, and exert a continuous and powerful influence on the emotional and intellectual life of the individual." (p. 90).

Individuals cannot directly know what their unconscious phantasies, or those of others, are, save by inference, nor their disguised effects on conscious experience or behaviour, because of the mental processes of repression. Psychoanalysis, as a dynamic psychological theory, views what has been made unconscious as being more, not less, influential.

2.3 *Phantastic objects*

As has been pointed out above, investment provokes feelings of both excitement about gain (pleasure) and anxiety about loss (unpleasure). Emotional finance explicitly incorporates the role of excitement in the study of investor and market behaviour by recognising that any investment can have an exceptionally exciting and transformational meaning in unconscious reality. This stimulates a state of high excitement and associated idealisation leading to the desire to possess.

The term *phantastic object* is derived from the Freudian concept of *object* which is used to describe the internalised "representations" of people, ideas or things in our unconscious mind, and *phantasy* as defined above. It describes the unconscious mental representation of something (or an idea) that fulfils the individual's deepest (and earliest) desires to have exactly what they want exactly when they want it. Possession of such phantastic objects allows investors unconsciously to feel omnipotent, like Aladdin whose lamp could summon the genie, or the fictional bond trader, Sherman McCoy, in *The Bonfire of the Vanities* (Wolfe, 1987) who felt himself to be a master of the universe (Tuckett and Taffler, 2008). As Taffler and Tuckett (2008, p. 396) point out, phantastic objects are exciting and transformational, "they appear to break the usual rules of life and turn aspects of 'normal' reality on its head."

The idea of the phantastic object originated in trying to understand the powerful unconscious attraction of investors to dot.com stocks during dot.com mania (Tuckett and Taffler, 2008).[9] However, emotional finance theory suggests that in investors' psychic reality all investments have the potential to become phantastic objects, even in normal market conditions and day-to-day trading activity, provoking extreme emotions with love turning to hate and anger when they do not perform as expected.[10] Such an awareness of the unconscious and excited ambivalent object relationships we enter into with our investments can be very helpful in understanding investor behaviour in a much more complete way.[11]

2.4 Judgments and states of mind

As we have seen ambivalence is at the heart of psychic life. All emotional relationships are in some sense ambivalent, we create both good (pleasurable) and bad (unpleasurable) feelings leading inevitably to mental conflict of which we are usually unaware. We can deal with this in a more or less *integrated* state of mind where both the good and bad feelings are acknowledged and tolerated, ambivalence is felt and recognised and uncertainty accepted, i.e., in reality. Or in a *divided* state of mind by avoiding, ignoring or rationalising away any feelings that might cause mental pain and spoil the positive or pleasurable ones, in an attempt to be left with only the pleasurable, i.e., in unreality. Here everything is in a sense black or white, there is no uncertainty. Good and bad feelings are kept mentally separate with the latter denied and put onto others.[12] However, what is repressed and no longer directly accessible to conscious awareness, of course, continues to exist "behind" the scenes affecting what we do and feel.

Tuckett and Taffler (2008, p. 400) summarise the distinction between integrated and divided senses of reality; the integrated state "involves giving up the feeling that one is all

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[9] See section 4.1 below.

[10] The power and seductiveness of the phantastic object is also well demonstrated by Bernie Madoff's Ponzi scheme which was able to exploit his investors' unconscious search for wish-fulfilling investment fantasy: annual returns of 8–12 per cent with no risk seemingly forever. With Madoff being described as "the miracle worker", investors and regulators continuously turned a blind eye ignoring any challenges to their emotionally very satisfying fantasy of the omnipotent fund manager (e.g., Markopolos and Casey, 2010). In their paper *Hedge Funds and Unconscious Fantasy*, Eshraghi and Taffler (2012) in fact suggest that many hedge funds, together with their enormously wealthy managers, have the characteristics of phantastic objects.

[11] Psychoanalysts use the term object relationships to describe the relationships of attachment and attraction that we all establish in our minds with objects which are based on our unconscious understanding of our early emotional experiences and are inevitably of an ambivalent nature (see e.g., Tuckett, 2011, pp.107–8).

[12] Klein (1935) describes these two oscillating basic mental states technically as the *depressive* state of mind and the *paranoid-schizoid* state of mind. Schizoid refers to the splitting and projection process, i.e., mentally separating the good and bad feelings, denying or repressing what we don't want to "know" and projecting these bad feelings onto others. Paranoid refers to the resulting unconscious feelings of persecution.

powerful and all knowing" and in the divided state "all such feelings are evaded by evacuating them from awareness". In investment, there is constant tension between judgments grounded in reality (made in an integrated state of mind), stocks can have both good and bad characteristics, they can go up, and also go down, and those made in a divided state of mind dominated by phantasy. Here the direction is only one way, and that is up!

2.5 Markets as large groups

Emotional finance views markets as virtual large groups with behaviour reflecting the interaction of the often unconscious drives, needs, emotions and phantasies of their participants as they deal with the inherent ambivalence and uncertainty of the investment process. Markets, in effect, take on a dynamic unconscious "emotional" life of their own which commentators often acknowledge by viewing Benjamin Graham's Mr. Market in an anthropomorphic way as being prone to such human emotions as panic, euphoria and mania, and frequently being "irrational". Emotional finance sees markets as amenable to analysis drawing on the psychoanalytic understanding of unconscious group dynamics.[13] Group processes do not require their members to be in the same room; markets are made up of myriad individuals all interacting with each other on different levels and in different ways.

Drawing on the original insights of Freud (1921), Bion (1952) distinguishes between two principal group processes, *work groups* and *basic assumption groups,* which behave in very different ways. In a work group its members work together in a creative way to a common end using information appropriately, both positive and negative, in this task. On the other hand, when a basic assumption group is operating, the purpose of the group is to provide good (i.e., pleasurable) feelings through the unconscious defences the group as a whole adopts against anxiety, rather than through reality-based thought and working together for a common purpose. In this case the group doesn't consider the actual facts. Information is employed to promote comfort and excitement in a divided state of mind with the negative aspects denied and split off. Any potential adverse consequences are lost sight of and *unconscious wishful thinking* dominates. Such processes are equally present in asset pricing bubbles and in the way new financial innovations and ideas are often treated with investors

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[13] There are direct parallels with aspects of the socioanalytic study of social phenomena and dynamics as it is applied to financial markets (see, for example, the excellent collection of papers in Long and Sievers, 2012). Socioanalysis seeks a "deeper understanding of the 'social fabric' of organizations and society … [and] the impact of the 'social' on individuals and their inner world" (Sievers and Long, pp. 4–5, 2012) drawing, *inter alia*, on psychoanalytic theory and social systems dynamics. Emotional finance, itself, is a new branch of finance directly concerned with investor and market behaviours and the role unconscious emotions and needs play in driving these.

being caught up in the underlying phantasy.[14] People in a basic assumption group (whether actual or virtual) want to agree, face the world together, and be looked after; anything that might challenge such pleasurable feelings is strongly defended against. Bion (1952) discusses the unconscious phantasy of *dependency* in such groups, the leader will look after and provide security for everyone (like a good father) so its members do not have to think for themselves.[15] Anyone who might think differently and question the group's underlying *raison d'etre* risks being ostracised to avoid the group having to acknowledge what they would rather not know.[16] Belief in the existence of the phantastic object often dominates in basic assumption thinking in financial markets as section 4 below explores.

3. Emotional finance in practice

The previous section summarised some of the underlying theory of emotional finance; this section explores its relevance to real-world capital markets. First, the *real* meaning of risk is discussed; this is very different to how risk is conventionally viewed in finance teaching. Next, the key role the need to trust plays in investment decisions, and some of the implications of this for investor and market behaviour, is described. The potential contribution of emotional finance in helping to explain stock market anomalies is then considered; some psychodynamic parallels between investment behaviour and gambling are also drawn. Next the question of why individuals are often reluctant to save adequately for their retirement is explored, and whether what old age represents in psychic reality could help us understand such arguably "irrational" behaviour. Finally, this section describes how emotional finance can help explain how professional investors are able to enter into ambivalent object relations with financial assets and stocks when outcomes are largely unpredictable and they can very easily be let down. This is via the process of storytelling.

3.1 Emotional finance and the real meaning of risk

> "Our institutional clients sometimes define risk as tracking error.
> They are looking to maximise their information ratio, yet you can

[14] Tuckett (2011, pp. 65–70) describes the process of basic assumption group operation in terms of its members engaging collectively in *groupfeel* to stress how feelings generated in the group's processes influence group thinking. A more familiar term for such group behaviours is *groupthink* (Janis, 1982).

[15] The way in which the "legendry" Chairman of the Federal Reserve Bank, Alan Greenspan, was worshipped as an omniscient guru before the financial crisis may be remarked on in this context.

[16] As Bion (1961, p. 162) insightfully comments: "I know of no experience that demonstrates more clearly … [the existence of basic assumption group behaviour than] the dread with which a questioning attitude is regarded".

> maximise your information ratio and minimise your tracking error and drive your portfolio right off a 40% cliff. In that case it is about *career risk,* right? … to me, the definition of 'risk' is not standard deviation, it's not volatility, it's not beta; it's what your risk of a meltdown [is]. What's the risk that you dig your client into a hole large enough that they never recover, they never get out of it? That's risk!" (Fund manager interviewee quoted in Tuckett and Taffler, 2012, p. 69)

Investment risk is typically measured by such metrics as variance of returns, tracking error, value at risk (VaR), stock beta and a broad range of characteristic-based factors such as size, value/growth, momentum, yield and earnings variability etc., and viewed as objective and quantifiable.[17] The idea is that risk can be appropriately managed through the application of sophisticated quantitative analysis and experience (e.g., Lleo, 2009). However, there is a clear distinction between *risk* and *uncertainty*. Risk is recognisable, measurable and known, being based on the idea that the past can, in a sense, be used predict the future. On the other hand, uncertainty is unidentifiable, immeasurable and unknown (Ricciardi, 2008).

Tuckett and Taffler (2012, ch. 5) show in their interview study of elite fund managers that although they are all familiar with conventional measures of risk, what risk really means to them in practice is very different. There are four principal concerns:

(i) Information risk – worries about the quality of the information fund managers rely on to make investment decisions and whether they can trust what company management is telling them,

(ii) Anxiety (risk) about the inherent unpredictability of the investment task,

(iii) Business risk – the danger of underperformance leading to client loss, and

(iv) Career risk – threats to compensation and promotion, and even job termination, if the fund manager underperforms for any length of time.[18]

Emotional finance distinguishes between conventional or *idealised* measures of risk which imply the future can implicitly be predicted in terms of a probability distribution of potential outcomes, and *real* risk related to the actual anxieties of investors. It sees the attraction of risk measurement models as not just in terms of their "truth value", but also the way in which

[17] Ricciardi (2008) summarises the literature and lists no fewer than 63 different risk categories in traditional finance.

[18] This can, of course, potentially lead to dysfunctional investing behaviour such as index-hugging.

they can be used in a divided state of mind to provide emotional comfort that in some sense investment outcomes are no longer uncertain. Unpleasurable feelings associated with the fact the unknowable future cannot be controlled are mentally split off, denied and repressed in industry-wide basic assumption group thinking. The unconscious panic associated with the fact that the future is ultimately uncontrollable can be avoided, rather than recognising its inherent unpredictability in an integrated state of mind.

Statistical measures of risk may thus be viewed on one level as *pseudo-defences against uncertainty* or *real* risk. Traditional risk measurement models are not helpful for understanding the underlying visceral fear of underperformance the fund manager has to cope with which is in the realm of the emotions, not rational calculus. The quote at the beginning of this sub-section makes this point very clearly.

3.2 Emotional finance and the need to trust

As has been pointed out above, investment is synonymous with uncertainty; investors cannot predict with any degree of accuracy the outcomes of their investment decisions. This inevitably leads to anxiety which is often suppressed. Given such unpleasurable affects, how are investors able to enter into ambivalent object relationships with assets that can so easily and painfully let them down? Emotional finance views this enigma in terms of the key role trust plays in the investment process.

Trust permeates all human activity with the ability to trust rooted in the security of early infant experiences and safely in parental physical and emotional dependency relationships (Neri, 2005). However, there are the inevitable, and often unconscious, conflicts between trust and suspicion, and need and the associated anxiety about being misled or let down, which are experienced as truly frightening in psychic reality. Nonetheless, without the ability to trust (and have faith) investment is not possible, leading to stasis. To invest (act) is to trust. The ability to trust when 'not knowing' the outcome generates the conviction to commit to an asset or stock. Trust leads to *vulnerability* as it involves giving discretion to, relying on, or being vulnerable to, another under conditions of uncertainty (Shapiro, 2012) whether, for our purposes, the "market", company management or the analyst who provided the original investment idea. Importantly, it provides an "illusion of control" (Pixley, 2004, pp.19–20). Trust "trumps" anxiety and leads to action; in emotional terms it links the present and the future – it "creates" desired future outcomes.

Trust is also linked in investment to faith which requires only conviction or "belief", not verification or confirmation, and is based on *idealisation* (i.e., "perfection" as in the

phantastic object) and *illusion*. Reality testing, as in investment generally, is avoided with basic assumption group thinking dominating – faith is facilitated within the collective belief of the group (Neri, 2005) in financial markets.

The need to trust to invest despite the associated anxiety about being thwarted helps us understand not just how investors are able to engage in markets when future outcomes are unpredictable, but also why fund managers place so much emphasis on meeting company management despite being aware of how easily they can be misled (e.g., Barker, Hendry, Roberts and Sanderson, 2012). Although meeting management leads to trading activity (e.g., Bushee, Jung and Miller, 2011; 2013) there is no evidence this is translated into superior longer term returns.[19] Such meetings seem to have as their main purpose the alleviation of (unconscious) anxiety by projecting this on to firm management to perform for the fund manager, and generating the feeling of trust (or personal liking of the CEO or management team) needed to invest in the first place.

Emotional finance views the resolution of the anxiety inherent in the investment process associated with the unknowable future in terms of the key role trust and (blind) faith play in the process. To trust is to invest!

3.3 Emotional finance and stock market anomalies

Stock markets are conventionally viewed as "efficient". However, much of the finance literature has focused on seeking to identify trading strategies that violate the Efficient Markets Hypothesis.[20] This sub-section suggests some emotional finance explanations for why stock market anomalies *could* exist in practice.[21]

Investors acting individually as well as together enter into essentially ambivalent object relationships with stocks where what these represent in psychic terms may well dominate their relative attractiveness based on conventional fundamental asset valuation criteria. On this basis emotional finance would, for example, speculate in the context of the book/market (value/growth) anomaly (Lakonishok, Shleifer and Vishny, 1994) that high market to book stocks which are likely to be "exciting" (pleasurable) could as a result be

[19] In fact, Agarwal, Taffler and Brown (2011) show that despite quality of management being value relevant this is already in the market price so investing in stocks perceived to have good management does not lead to superior returns.

[20] Fama and French (2008) and Avramov, Chordia, Jostova and Philipov (2013), for example, explore a range of asset pricing anomalies and Green, Hand and Zhang (2013) demonstrate the existence of such anomalies is much more pervasive that is usually recognised.

[21] Although such empirical regularities clearly do exist despite some attenuation in recent periods (e.g., Chordia, Subrahmanyan and Tong, 2014), whether abnormal profit opportunities can actually be earned after all costs is a separate issue (e.g., Rubinstein, 2001).

potentially overpriced leading to subsequent underperformance.[22] On the other hand, low market to book stocks may well have unpleasurable or anxiety-generating characteristics leading to them being potentially underpriced in fundamental terms, and subsequent outperformance.[23,24] In fact, Jegadeesh, Kim, Krische and Lee (2004) show that sell-side analysts generally recommend "exciting" or "glamour" (i.e., positive momentum, high growth, high volume and relatively expensive) stocks although naively following these recommendations can be costly.

In the case of the well-known momentum anomaly (e.g., Jegadeesh and Titman, 1993) emotional finance speculates on whether there is the emotional need for market prices to have already moved up for investors to have the confidence to trust in and commit to the risky investment. That the stock is already a "good" stock and viewed as such by others may serve to provide reassurance and help alleviate the anxiety associated with involvement with an asset that can easily let the investor down. Interestingly, emotional excitement in the unconscious itself has momentum. The experience of emotion tends toward infinity exponentially (Rayner and Tuckett, 1988); people want more and more pleasurable feelings. On the other hand those stocks which have underperformed may well have unpleasurable (painful) associations and as a result be stigmatised leading to further price decline.

This paper suggests that such ideas could be helpful in explaining stock market anomalies apart from momentum and value/growth, and at the very least, provide empirically testable propositions for the existence of particular market anomalies to complement those of standard and behavioural finance.

Market underreaction to bad news appears manifest in the finance literature, whereas good news seems to be anticipated or incorporated in market prices immediately and without bias. For example, the market reacts instantaneously to sell-side analysts' new buy recommendations but it takes several months for the information content of new sells to be fully priced (e.g., Womack, 1996; Mokoaleli-Mokoteli, Taffler and Agarwal, 2009), and similarly with bond rating changes (e.g., Dichev and Piotroski, 2001) and going-concern modified audit reports (Kausar, Taffler and Tan, 2009; Taffler, Lu and Kausar, 2004). In

[22] Such as, for example, those growing rapidly, that have significantly outperformed, are in new and desirable industries and where there is a lot of corporate finance activity and news coverage which will be viewed as emotionally fulfilling.

[23] Such as having underperformed significantly in the recent past, being perceived as risky and unpredictable, and have unattractive characteristics like poor profitability and growth prospects and perhaps perceived low management quality.

[24] In seeking to explain the book/market anomaly, Lakonishok, Shleifer and Vishny (2001) show that glamour (exciting) stocks grow substantially faster than value stocks in terms of fundamentals prior to portfolio formation, although growth is far less impressive subsequently.

parallel, firms that enter into Chapter 11 bankruptcy proceedings take up to a year for prices fully to adjust (Coelho, John, Kumar and Taffler, 2014). Although in many cases limits to arbitrage can help explain the time needed for the market fully to react to bad news events (e.g., Lesmond, Schill and Zhou, 2004), emotional finance provides another perspective. This is that such differential market reaction to good and bad news may well be inevitable in group situations where basic assumption group thinking dominates and there is a tendency to split good and bad. In a divided state of mind people employ a range of unconscious defences against the emotional pain of having to acknowledge that their previously "idealised" investments have let them down, both financially and emotionally. Such mental defences against "knowing" can be very powerful and entrenched and it may well take time for reality ultimately to overwhelm them leading to delay in the market fully responding to the pricing implications of the bad news. On the other hand, good news which is pleasurable and exciting and what investors are continuously seeking has no such barriers to its assimilation.

3.4 Investment and gambling

Stock traders and lottery buyers have much in common (Statman, 2002). In his seminal paper "Who Gambles in the Stock Market?" Kumar (2009) shows how the propensity to gamble and the investment decisions of retail investors are correlated. State lotteries, used to proxy for gambling propensity, and stocks with similar gambling-like characteristics attract very similar clienteles. In particular, Kumar (2009) investigates the extent to which people's overall attitude towards gambling influences their stock investment decisions. Based on a range of detailed analyses Kumar concludes that there are "a set of common personal attributes" which provide evidence of strong similarities between the behaviour of state lottery players and individual investors who invest in lottery-type stocks.

Kausar et al. (2014) and Coelho et al. (2014) both explore whether following Kumar (2009) retail investors buy bad news stocks (which institutions sell down) for gambling reasons despite this leading to heavy losses, and find strong evidence of such behaviour.[25] In addition, both sets of authors demonstrate that those investors with personal characteristics consistent with a greater propensity to gamble are more likely to trade in such acute bad news stocks.

An interesting avenue that may be pursued here is to recognise that investing in the stock market generates many of the same emotions experienced by gamblers in a casino.

[25] This, these papers show, is what leads to the delay in market prices reacting in a timely manner to the respective bad news information events (going-concern audit report and Chapter 11 filing).

Rosenthal and Rugle (1994) explore gambling from the psychodynamic perspective and parallels with stock market investing are striking. The authors describe the excitement gambling generates and the strong sensations it arouses. Physiologically, it can have a temporary anti-depressant effect for people who are depressed as the intense concentration and focus involved blocks out memories of everyday life.

The feeling of *omnipotence* may be the most important concept for understanding the pathological gambler with this defined as an illusion of power and control which defends against helplessness, shame and guilt. Crucially, as with stock investment, "essential to the activity of gambling is the notion that one can predict the future. One is attempting to control the uncontrollable … gambling offers the possibility of the improbable or seemingly impossible occurring." (Rosenthal and Rugle, 1994, p.32) Gambling offers an escape from painful awareness of reality (Schull, 2012). Phantasy is inherent in maintaining the denial of external reality; the pathological gambler believes, in the face of evidence to the contrary, that he or she can gamble in a normal or controlled manner. In a divided state of mind with acknowledgement of reality split off and disavowed the gambler gambles as a defence against depressive anxieties.[26]

As we have seen in the previous sub-section gambling in the stock market is not restricted to day traders, only 1% of whom are actually able to earn positive returns net of fees (Barber, Lee, Liu and Odean, 2014).[27] There may even be some similarities with aspects of gambling in the behaviour of professional investors including the excitement and similar implicit beliefs about the ability to control future desired outcomes (e.g., Tuckett and Taffler, 2012). It is not for nothing that speculating was the word used to describe stock market investing in Victorian times (Itzkovitz, 2002).

3.5 Emotional finance and retirement saving behaviour

Individuals often fail to save adequately for retirement (Skinner, 2007). Behavioural finance explanations are often adduced. Agnew (2010) provides a good summary of behavioural explanations for lower than expected participation rates in pension savings plans.[28] In

[26] Bergler (1957) also describes the gambler's unconscious motivations as including the desire to lose and be punished, again with possible parallels to certain types of retail investor as we have seen in the previous sub-section.

[27] Konstantaras and Piperopoulou (2011) show retail investor trading in the stock market to be addictive and active traders both exhibit a significant incidence of compulsive behaviour and underestimate the degree of risk.

[28] These include such things as the tendency to procrastination given the complexity and importance of the savings decision as well as lack of financial knowledge. There are also problems of self-control and time inconsistent behaviour leading to the pursuit of immediate gratification over long-term benefits.

addition, once the employee is enrolled in the plan, a strong default bias is observed with contribution rates anchored to the (usually low) default rate, rather than a more appropriate one (Benartzi and Thaler, 2007). Whereas automatic enrolment is now conventionally used to encourage participation in retirement saving plans thereby significantly increasing participation rates, including since October 2012 by the UK government, nonetheless savings levels remain very low and inadequate to provide appropriate pensions on retirement.[29] Ackert and Deaves (2010, ch.17) provide a good survey of more general issues.

However, this understanding ignores the very powerful emotions and phantasies associated with retirement such as ill-health, infirmity and, importantly, the fear of death. This unconscious "meaning" of retirement and associated need for saving may thus lead to unconscious denial and not wanting to know, splitting off and repressing the implications of inevitable old age and death from perhaps a currently healthy and active early middle age. Interestingly, mutual funds seem to recognise these factors implicitly by marketing their pension products with pictures of an idealised old age thereby promoting denial and the not facing of reality. The risk is that this can feed into a divided state of mind, further encouraging denial of the associated underlying fears and panic, and lead to inaction so people can avoid or deny unwanted reality. Such unconscious dynamic processes are deeply rooted and need to be properly acknowledged; emotional finance suggests it is not enough just to leave pension saving decisions to the application of paternalistic libertarianism using behavioural principles (as advocated e.g., by Thaler and Sunstein, 2008, ch. 6).[30]

3.6 Emotional finance and the conviction to invest

The research evidence in finance suggests that fund managers are unable to outperform other managers or their respective benchmarks after costs (e.g., Carhart, 1997; Fama and French, 2010) and particularly in more recent periods (e.g., Barras, Scaillet and Wermers, 2010). Also, even if particular managers do have superior abilities it is very difficult to identify them *ex ante* (Jones and Wermers, 2011) and, more generally, distinguish skill from luck

Fund managers are fixed on the horns of a dilemma. They "know" on one level that there is little empirical evidence they are able to do what is (unrealistically) expected of them.

[29] Thaler and Benartzi (2004) suggest a behavioural solution that takes this into account to overcome self-control problems.

[30] Skinner (2007), a professor of economics, makes this point very clearly, presumably unconsciously, when he states "thus, saving for retirement may ultimately be less about the golf condo at Hilton Head and more about being able to afford a wheelchair lift, private nurses, and a high quality nursing home." (p. 60) In this context one may recognise how Freud (1905) saw jokes as a way of avoiding facing what one does not want to know. Jokes bear the traces of what is repressed returning to haunt us in disguise.

But, on the other hand, they have to believe it is nonetheless possible to deliver superior returns on a consistent basis as demanded by their clients. Emotional finance suggests that fund managers deal with the ambivalence required of them by doing what we all do, which is by telling stories. This is both to themselves consciously and unconsciously, and to others. Importantly, being able to explain in a plausible way why investment decisions both worked out and did not allows the unknown future to appear predictable, and by imposing meaning can help the fund manager feel able to control the inherently uncertain world he has to deal with and the associated underlying anxiety.

Weick (1995) points out there is no requirement for stories actually to be true: "accuracy is nice but not necessary in sense-making … what is necessary in sense-making is a good story". Through the medium of story the unexpected can be transformed into the "expectable", and the story-teller can feel on one level the unmanageable future is "manageable" or "controllable". "[T]he truth of the story lies not in *the facts*, but in *the meaning*. If people believe the story, if the story grips them, whether events actually happened or not is irrelevant." (Gabriel, 2000, p. 4) Importantly, in stories *unpredictability* does not imply *inexplicability*. Gabriel (2000, p. 239) shows how the key way in which stories construct a "truth" is through the manner in which they generate emotion and engage both the narrator and the audience. The story plot serves to transform a sequence of events into a story so their deeper significance can be recognised. Stories are an essential part of the fund manager's sense-making process.

Eshraghi and Taffler (2014) explore this process of sense-making more formally. They analyse the investment stories told by fund managers in interview about those stocks which they got "right" and those which underperformed, together with those related by fund managers in their annual reports to investors when reporting on their prior year performance. When investments are successful this is usually explained in epic mode with the protagonist (the fund manager) as symbolic hero. The story plot focus is typically built around a challenge and an achievement (against the odds) or symbolically a "noble victory", with emotions of pride and admiration implicitly generated both in the narrator and the interviewer.

On the other hand if investment decisions don't work out a tragic story genre is employed leading to emotions of pity and sorrow, and respect and compassion for the "non-deserving" victim (i.e., the fund manager). The plot is often about his undeserved misfortune, usually with a "villain" (who thwarted the fund manager in his task) such as firm management, or the market, present. Importantly, by being able to explain in a plausible way

why investments work out or do not, fund managers are able to deny the inherent unpredictability of their task and associated anxiety.[31]

Paradoxically, stories which explain investment failures, including those attributed to the asset manager's own errors of judgment (which they will not repeat), are seemingly even more plausible in generating fund manager conviction to invest than in the case of their investment successes. As Eshraghi and Taffler (2014) point out, excitement and anxiety dominate. In fact, emotional finance speculates on whether in practice markets are not being driven by different perceptions of asset valuation, but are ultimately "markets in stories" – who tells the more persuasive and credible (i.e., better) story (Tuckett, 2012); not *homo oeconomicus*, but *homo narrans*, or even *homo fabulans*?

4. Bubbles and financial crises: an emotional finance perspective

Traditional financial and economic theories find great difficulty in explaining asset pricing bubbles and financial crises in any convincing way (for summaries of attempts see e.g., Brunnermeier and Oehnike, 2013; Scherbina, 2013). Such models, usually of a highly mathematical nature, revolve around ideas of herding, informational cascades and the "greater fool" theory (see Hirshleifer and Teoh, 2003 for an accessible overview). However, whereas the assumptions of rational economic behaviour are relaxed in more recent theoretical models with market agents allowed to be "irrational" in some stylised way (see Scherbina, 2013, pp. 18-29), nonetheless the roles played by unconscious emotions and social and group processes are largely ignored. Because of the failure of conventional economic and financial theories to explain such major events as asset pricing bubbles and financial crises in a convincing way, there is even a tendency among some economists to see these as unavoidable implying trying to understand their causes makes little sense (Shulman, 2014).

Accounts of what actually happen in financial crises and asset pricing bubbles (e.g., Mackay, 1995; Galbraith, 1993; Cassidy, 2002; Tuckett and Taffler, 2008; Kindelberger and Aliber, 2011) are first and foremost descriptions of highly emotional speculative processes. Terms such as excited, euphoric, exuberant, manic, depressed, anxious, blame, illusion, delusion and panic etc., abound. Drawing on the psychoanalytic understanding of unconscious phantasy relationships, states of mind and unconscious group functioning,

[31] Interestingly, quantitative managers also tell stories (in epic mode) with the "hero" in the quest for superior returns using his special powers and insights – i.e., his statistical models, and not being prone to emotion like everyone else. However, these interviewees became equally excited (and emotional) when describing their models. Eshraghi and Taffler (2014) speculate on whether such fund managers are actually more successful in practice or just tell more plausible (convincing) stories to themselves and their clients.

emotional finance may have a role to play in helping to explain why asset pricing bubbles and financial crises continuously repeat.[32]

In the following sub-section case studies of dot.com mania and the Chinese stock market bubble are placed within the broader context of the path-dependent process of asset pricing bubbles, and in the second sub-section the recent financial crisis is explored.

4.1 Dot.com mania and the Chinese stock market bubble

A common feature of the myriad of financial crises described in Kindelberger and Aliber (2011) ranging from tulip bulbs, through the South Sea Bubble, canals, railroads, stock prices before the Great Crash, real estate, internet stocks and the recent property led financial crisis is the presence of a five stage path-dependent emotionally driven trajectory. In each case *patchy excitement* about an innovation leads to *euphoria* (or mania), *denial* (or manic defence) and then when reality ultimately intrudes and the bubble bursts *panic* followed finally by *shame and blame*. Tuckett and Taffler (2008) point out that throughout this process it is not a question of lack of information about the riskiness of the respective investments, but the way in which this is treated. They view asset pricing bubbles as due to a disturbance in the market sense of reality brought about by an exciting new idea that captures the financial imagination (a phantastic object) with an associated move from individuals investing using the reality principle towards judgments based essentially on the pleasure principle. Markets conceived as large groups turn from work group towards basic assumption group functioning. Collective wishful thinking is the order of the day. Emotional conflict is eliminated, or at least reduced, with anything that might create bad feelings evacuated from awareness. Together these processes allow the phantastic object to be pursued as if it were "real" with any associated anxiety denied and repressed. However, eventually reality has to intrude, panic takes over and the phantastic object is now hated and an object of revulsion.

Because of the enormous excitement and feelings of omnipotence[33] that possession of the phantastic object provokes, the shared unconscious phantasy (that the phantastic object actually exists) is legitimated through the superficially plausible cover story that "this time it is different" (Kindleberger and Aliber, 2011, p. 29). Sceptical commentators felt to be denying the value of the phantastic object, and spoiling the party are treated with contempt

[32] Galbraith (1993), in his *A Short History of Financial Euphoria*, interestingly comes to similar conclusions as here although without the direct psychological underpinnings.

[33] Freud's "His Majesty the Baby" (1911) is a useful metaphor here to signify the repetition of associated feelings of infantile omnipotence.

and dismissal (e.g., Cassidy, 2002).[34] Their warnings are viewed as an attack motivated either by "deficient understanding or uncontrolled envy, on the wonderful process of enrichment … [or] thought to demonstrate a lack of faith in the inherent wisdom of the market itself." (Galbraith, 1993, p.2) When the bubble eventually bursts this is not due to new information but that the repressed anxieties can no longer be rendered unconscious. The whole process then goes into reverse. Anger and blame of others rather than feelings of personal guilt erupt allowing investors to remain operating in a divided state of mind and avoid the painful realisation of how they have been caught up themselves in the very fulfilling and exciting phantasy. Emotional finance also points out the mental pain involved in giving up belief in the transformational power of a magical phantastic object. Anxiety will change into even more painful feelings of loss, humiliation and guilt when unconscious defences against reality no longer work.

In the case of the internet bubble, as is well known, the Dow Jones Internet Index rose by 500% in 18 months to its peak in March 2000 despite most firms losing large amounts of money and likely to continue making losses for many years, even if they managed to survive. Six weeks later the Index had halved in value and by the end of 2002 was still at only 8% of its high. Cassidy's (2002) seminal history of the period *Dot.con* describes how internet stocks were treated in the media as an exciting spectacle with their young entrepreneurs presented as charismatic figures and superstars with amazing new powers. Such stocks possessed all the characteristics required of phantastic objects: exciting, new, exhibitable and enriching with their possession "promising" investors that their deep unconscious wishes could be fulfilled through magical thinking.

Not surprisingly on this basis normal valuation fundamentals were no longer relevant with the market's subjective sense of reality being captivated by the phantastic object becoming "real". The *manifest cover story* necessary to rationalise departure from reality into phantasy was that the "old economy" adult world of "bricks and mortar" had been replaced by the "new economy" of the 20 somethings; in short the old economy was dead (Tuckett and Taffler, 2008). The hubristic claims made about how the internet would drive out traditional ways of doing business and the associated level of emotional excitement also signalled intergenerational rivalry and state of oedipal triumph (Auchincloss and Samberg, 2012, pp

[34] Galbraith (1993, pp. 8-9) writes entertainingly on his personal experiences (and the hate mail he received) after testifying to a Senate hearing about an earlier speculative increase in market prices and the predictions he made about the forthcoming 1987 Crash early that year.

180-182).[35] On one level the young seemed to be seeking to overthrow the old with associated unconscious guilt and fear denied.

Via basic assumption group thinking the capacity to be anxious about potential risk and loss was split off and the reality principle became dominated by judgments based on the pleasure principle through investors' imaginative identification with each other in the pursuit of the common phantasy. Ultimately, only when the split off anxieties produced by available information could no longer be rendered unconscious in March 2000 did the market collapse. The bubble then burst almost overnight, panic set in and the nature of the ambivalent relationship of investors with the phantastic object reversed direction dramatically with dot.com stocks now hated. There was enormous anger associated with the feelings of being let down, embarrassment, fear, helplessness and shame quite apart from the heavy financial losses. Still operating in a divided state of mind those involved felt persecuted and as a result had to project the pain for being caught up in their phantasy onto others. Interestingly general equity markets suffered contagion with the S&P 500 falling by more than 40% over the three years following the bursting of the dot.com bubble. All stocks were seemingly tainted, even those that had nothing to do with the internet!

Interestingly, the more recent Chinese speculative stock market bubble (Yao and Luo, 2009; Bellotti, Taffler and Tian, 2012), in which investors lost over $3 trillion, more than three times as much as in dot.com mania, has almost the same trajectory as figure 1 illustrates. However, discussion of this bubble, for some reason, is largely absent in the finance literature.[36] Specifically, between June 2005 and October 2007, when it peaked, the Shanghai Stock Exchange Composite Index had risen fivefold with the Chinese stock market becoming, for a short time, the third largest stock market in the world. It then went into free-fall losing 70% of its value over the following year and, at the time of writing five years later, has still hardly recovered, languishing at only two fifths of its high.[37] Bellotti et al. (2012) conduct discourse analysis of media coverage of the speculative bubble as it evolved and subsequently inevitably collapsed. Interestingly, they find the same emotional path-dependent trajectory as in dot.com mania with parallel market-wide basic assumption group thinking and equivalent beliefs in the phantastic object which in this case was the Chinese

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[35] As Josh Harris, the founder of Pseudo.com, a fledgling online television network, reported when interviewed by CBS, 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)

[36] Emotional finance suggests this may possibly be due to the process of denial and not wanting to know given the problems extant economics and finance theory has in explaining such dramatic events in any plausible way.

[37] This compares with the S&P 500 which fell from a peak of 1530 in July 2007 to 800 in January 2009 but at the time of writing has recovered to well above its 2007 high standing at the 2000 level.

stock market itself. The manifest cover story was that the 10% annual growth rate in China's GDP coupled with the government's embracing of capitalist ideas would trigger a continuing increase in share values. Everything had changed. The state of manic excitement and euphoria was fanned by the financial media and internet websites and everyone wanted a stake believing the government, playing the role of "the leader" in the market's basic assumption group thinking (Bion, 1952) would ensure there was no downside risk. Investing in the Chinese stock market took on the nature of a one way bet. Any nay sayers seeking to introduce some sense of reality were summarily dismissed. At its peak the average P/E ratio for Chinese firms was 73 compared with under 20 for the S&P 500.

It is generally not possible to predict when increasing levels of anxiety can no longer be held at bay and reality ultimately overwhelms the enormously satisfying wish fulfilment phantasy associated with owning the phantastic object. However, one possible trigger for what led to the bursting of the Chinese stock market bubble seemed to be increasing concerns about the impact of the credit crunch in the US on East Asia despite the fantasy that the Chinese market was safe and disconnected. Chinese investors began to panic; reality was no longer as they wanted it to be. Excitement turned to revulsion and condemnation with the Beijing government now blamed for letting Chinese investors down and responsible for their market losses.[38]

Repeated asset pricing bubbles can be viewed on one level as the inevitable consequence of investors' unconscious search for transformational phantastic objects. Conventional attempts to explain such events are arguably constrained by economists' assumptions about individuals' rational utility maximising behaviour. This paper suggests that explicitly recognising the inherently emotional nature of investor relationships with their assets, and their unconscious phantasies and needs, may well be helpful in understanding the nature and trajectory of asset pricing bubbles and how such tendencies in financial markets might be alleviated.

4.2 The global financial crisis

An enormous amount has been written seeking to explain the recent financial crisis. For example, Kindleberger and Aliber (2011, pp. 9–10) list 30 books by journalists, academics and 'insiders' "with titles and subtitles … express[ing] common themes – greed, the

[38] Interestingly, Chinese real estate appears subsequently to have taken over as the new phantastic object. Kindelberger and Aliber (2011, see e.g., pp. 111–115) emphasise how real estate bubbles and stock market bubbles are very closely related with similar processes at work (see the next sub-section).

malfunctioning of markets, the corruption of Wall Street, and the capture of the regulators by the bankers. And more greed." Although they point out attributing the crisis to greed and hubris is too simplistic. Stein (2011) describes how the events culminating in the 2008 credit crisis were incubated over the previous 20 years or more when what he describes as the manic culture in financial markets built on denial, omnipotence, triumphalism and over-activity developed and then ultimately imploded. This sub-section explores whether formal analysis of the key role unconscious phantasies and needs and group psychology demonstrably played in the run up to the global financial crisis, and how these were acted out, may be helpful in understanding what happened and what we can learn from this to avoid repetition. *Inter alia*, there are very direct parallels with what happened in the 1987 stock market crash with very similar processes of illusion, euphoria, denial and basic assumption group behaviour at work (e.g., Kirsner, 1990), not just with the Great Crash of 1929.[39] Discussion of such issues has been noticeably lacking in the finance and economic literatures to date.[40]

The *Final Report of the Financial Crisis Inquiry Commission* which was set up by Congress in 2009 (FCIC, 2011) concluded the "crisis was avoidable and the result of human action and inaction … [and it was] the failure to account for human weakness that is relevant to this crisis" (p. xxiii).[41] Many researchers see the housing bubble which followed on from the internet bubble as "a major cause, if not *the* cause of the subprime crisis and the broader economic crisis" (Shiller, 2008, p.29).[42] As with the emotional path-dependent trajectory of dot.com mania, which the global financial crisis closely resembles, real estate prices now

[39] For somewhat related analyses of the financial crisis to that of emotional finance see Kirsner (2012) who explores events in terms of a breakdown of underlying trust. Shulman (2014) views what happened through the lens of regulators' and investors' collusion with the narcissism of the leaders of the major investment banks who were treated as exempt from normal rules and laws. Severs (2012) discusses a range of socioanalytic perspectives on the financial crisis including corruption and perversion and social psychosis.

[40] For example, mention of the "unconscious" is completely absent from any the 16 articles by leading academics and other experts on different aspects of the financial crisis in the almost 300 page long CFA Research Foundation's monograph *Insights into the Global Crisis* (Siegel, 2009). Similarly, the terms "emotion", "fantasy", "illusion" and "mania" are employed in total only once in every 30 pages, although there is a chapter on the "Panic of 1907 and the Subprime Crisis" (Bruner, 2009). In parallel, any mention of the "unconscious" or "fantasy" is completely absent in the entire 663 page *Final Report on the Causes of the Financial and Economic Crisis in the United States* (FCIC, 2011), and the words "emotion", "mania" and "illusion" are only used once in every 50 pages; however, "panic" is mentioned 101 times!

[41] The Report itself (pp. xviii – xxv) blamed widespread failures in financial regulation and supervision, and of corporate governance and risk management; excessive borrowing, risky investments and lack of transparency combined with a systemic breakdown in accountability and ethics; the government being ill prepared and inconsistent in its response; a collapse in mortgage-lending standards with mortgage securitisation spreading the contagion together with lack of regulation of OTC derivatives such as credit default swaps which were bundled into synthetic collateralised debt obligations (CDOs) amplifying the crisis; and finally the failings of the credit rating agencies which were "essential cogs in the wheel of financial destruction".

[42] There was a 14 year run of mostly increasing rates of increase in home prices till 2005 (Shiller, 2008, p. 66). In fact, between January 2000 and its peak in June 2006 the S&P/Case-Shiller house price index rose by no less than 125% ; it then rapidly collapsed falling by over a third by the end of 2010.

represented the very satisfying and exciting (pleasurable) phantastic object. The phantasy was that house prices could only go up for ever with apparently "rational" arguments adduced to explain why (see e.g., Shiller, 2008, ch. 4). This lead to the highly dysfunctional lending and borrowing practices with results still being played out. Anxiety was split off and anyone questioning this wish-fulfilling phantasy was contemptuously ignored (e.g., Shiller, 2008, pp. 51–54).

All commentators were clearly aware of the degree of contagious excitement seemingly dominating financial markets in the lead up to the collapse of Lehman Brothers on August 8th, 2008, which seemed to trigger the financial crisis proper. The FCIC (2011) report eloquently testifies how government, central bankers and regulators became caught up with investment bankers and other market participants in basic assumption group "bubble think" euphoria with the apparent belief that there was no downside to speculation. Interest rates were low, risk had been vanquished, and in a process of collective and collusive manic denial any associated uncertainty and anxiety was split off and repressed. In the divided state of mind dominating, highly profitable but high risk subprime lending, adjustable rate mortgages and no documentation loans almost became the norm. House prices could only go one way and borrowers could always sell their houses at a profit if they could not keep up with the payments!

The new credit derivative-based financial products being constructed such as credit default swaps (CDSs) also became represented in investor psychic reality as unconscious phantastic objects with the speculative loans "safely" split off and securitised into complex investment vehicles such as synthetic collateralised debt obligations (CDOs) which spread the risk throughout the financial system. The concurrent ideological deregulatory movement and the lifting of capital requirements on banks by the Securities and Exchange Commission in 2004 were again part of the same illusory thinking (Shulman, 2014).

Financial institutions began to feel almost any risk could be managed. The comforting cover story of "new millennium finance" was rationalised around the idea of a further phantasy. This was that through an apparent magical sleight of hand the omnipotent new masters of the universe, "rocket scientists" with PhDs in mathematics and nuclear physics, had managed to vanquish risk and unpredictability forever with their complex and opaque derivatives products. What was good (the excitement) was kept conscious and what was bad and anxiety generating (potential loss) was split off and repressed. This was even though on one level market participants clearly knew what they were doing as Citigroup's then CEO Chuck Prince's now infamous words highlight: "…when the music stops in terms

of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing." (Nakamoto and Wighton, 2007)

Invariably the euphoric bubble had to burst as the reality of falling house prices and the toxic nature of the credit derivative products that fanned the flame of the bubble could not be kept at bay for ever. What market participants had always known on one level could no longer be defended against and ignored. Excited wishful thinking built on the idea that the phantastic object represented by the idea that risk had been eliminated turned very rapidly to blame with everyone blaming everyone else. Notoriously this list of culprits does not include those who "knew" but didn't choose to know and were caught up in the enormously pleasurable phantasy that the phantastic object was real.

We may speculate whether if the role played by phantasy, illusion and their unconscious needs interacting within broader socio-economic systems in driving the behaviour of economic actors was properly recognised, then better financial and market solutions might result (Tuckett, 2011). However, as Bruner (2009, p. 33) explains "the concept of an emotional market 'panic' challenges fundamental economic assumptions about the rationality of economic decision-makers". In a sense because the implicit idea of certainty, or its equivalent, predictability, is so bound up with such assumptions, questioning these threatens much of the basis on which economists work and, on one level, perhaps even one raison d'etre for economics itself.

5. Emotional finance and the investment industry

Fund managers work in a highly emotionally charged environment and have to enter into ambivalent object relationships with the assets they buy and sell, which can easily let them down, and where future outcomes are uncertain. Anxiety and denial dominate in their attempt to make sense of what they do. Ultimately they are required to split off and repress what they don't want to "know", i.e., "turning a blind eye" (Steiner, 1985).

In this final section before the paper concludes the nature of the fund management industry is analysed from an emotional finance perspective. First, the paradox of the industry being built on the idea it is possible to do something which is not possible is explored; the following sub-section then discusses what really drives asset manager behaviour.

5.1 Fund managers as phantastic objects

Stock markets are environments in which investors' conscious needs and unconscious phantasies are played out. Participants enter into emotionally dependent and ambivalent

relationships with their assets, whether consciously aware of this or not, that render them vulnerable and can easily lead to them being let down. The very nature of the unpredictable environment in which fund managers have to operate and the unreasonable demands placed on them to do something which it is not possible to do lead to emotions which oscillate continuously between excitement (pleasure) and anxiety (unpleasure). Feelings of trust, hope and love (i.e., attraction) are continuously pitted against those of worry, disappointment, fear and hate (i.e., repulsion) (Tuckett and Taffler, 2012, pp. 89–90).

What is not often recognised is how fund managers are being used by the asset management industry to create unrealistic expectations among investors. The industry is built on the idea that at least some fund managers can outperform consistently over time which is what clients, as a result, sign up for. To be able to do this fund managers have to believe they can find phantastic objects, stocks which will earn them high returns with low or no risk which other investors have not yet discovered.

In parallel, fund managers themselves are in some sense being employed as phantastic objects. They are the agents that their clients, employers, financial advisers, investment consultants and the media unconsciously need to believe in to alleviate the anxiety associated with the fact that investment outcomes are uncertain. On one level, the whole industry is unconsciously colluding in basic assumption group thinking in the delusion that it is possible to do something which is very difficult if not impossible. Fund management is an industry built on a divided state of mind in which underlying reality (the improbability of consistently outperforming the market) is held at bay. Unconscious collusion and the strength of group processes inhibit any proper examination of this paradox. What this means is that the important role the fund manager plays in meeting the real needs of his clients in many different ways (see e.g., Tuckett and Taffler, 2012, pp. 95–97) is ignored.

5.2 Excitement, anxiety and denial

According to investment folklore the emotions of greed, fear and hope drive financial markets (see e.g., Shefrin, 2002, pp. 120–121). Nonetheless, this is a poor description of what really animates fund managers. The interviews conducted by Tuckett and Taffler (2012, pp. 94–95) show what motivates real money managers is not greed but a quest for *excitement*, the search for and imagined pleasure in discovering the "perfect" investment (or phantastic object). Also it is not fear but *anxiety* at the prospect of loss which is usually denied and repressed, and thus an even more powerful influence on actual behaviour because it is not thought. Finally, the term hope is used to cover *denial* of the fact that investment outcomes are

uncertain. On some level fund managers "know", but cannot acknowledge the reality that what they are expected to do is extremely difficult if not impossible. Hope veils denial.

Emotional finance thus views investors as not being driven by greed, fear and hope as often unthinkingly believed, but driven by a specific set of excitements, anxieties and denials. An understanding of the key role such usually unconscious emotions play in all investment activity needs to be incorporated directly in any theory that seeks to explain the real world of the fund manager.

6. Summary and conclusions

This paper suggests we can augment the understanding of financial markets and investor behavior provided by traditional financial models and behavioral finance if we are also able to recognize more formally how cognition and emotion are intimately linked. Specifically, drawing on the psychoanalytic understanding of the human mind, this article explores the role unconscious phantasies, needs, and drives play in all investment activity.

The first part of the paper outlines emotional finance theory. It describes how investing provokes conflicting feelings of both excitement and anxiety, and the emotional consequences of the investor having to engage in a necessarily ambivalent relationship with an asset that can easily let him or her down. It further shows how investment decisions can be made in two oscillating basic states of mind termed *integrated* and *divided* with underlying reality respectively either acknowledged or denied, and the undesirable consequences in the case of the latter. How all financial assets can potentially play the role of exciting and transformational *phantastic objects* in investors' psychic reality in day-to-day trading activity, not just in asset pricing bubbles, is next explored. The paper also suggests how markets can be viewed as virtual large groups driven by their own unconscious processes. It is very easy for investors to be caught up in excited and collusive *basic assumption group* behavior involving collective denial of underlying reality with the psychic goal of making everyone feel "good". The following sections then apply these ideas in practice to help explain specific investor and market behaviors, asset pricing bubbles and related phenomena, and the nature of the asset management industry.

First conventional measures of risk used in capital markets are shown also to serve a different purpose in psychic terms, this is that of guarding against the fact that the future is inherently unpredictable, i.e., *real* risk. The key role the ability to trust plays in the investor being able to commit to an asset or a stock when the outcome in uncertain is next considered, together with the inevitable conflict that arises between trust and suspicion. The paper then

explores potential complementary emotional finance-based explanations for why stock market anomalies could exist in practice. Particular focus is placed on market underreaction to bad news events when it takes time for reality to overwhelm investors' unconscious defences against having to acknowledge the emotional pain of loss. The parallels between aspects of stock market investing and gambling are next reviewed with psychic excitement and denial of reality, although in different degrees, inherent in both activities.

The paper also shows how an understanding of the unconscious "meaning" of retirement and associated denial of what it represents may help explain people's reluctance to save adequately for their pensions. Finally, the process by which fund managers are able to generate the conviction to invest when outcomes are uncertain is explored, and how storytelling plays a key role in alleviating the associated unconscious anxiety.

The following section of the paper provides an emotional finance perspective on the dot-com and the more recent and much larger Chinese stock market asset pricing bubbles. The global financial crisis, with seemingly quite similar path dependent processes at work, is also explored. In particular, the paper suggests how both dot-com and Chinese stocks appeared to possess all the desirable attributes of phantastic objects. As prices shot up any downside risk or anxiety was evacuated from awareness in *basic assumption group* market wide collusive denial of reality in an attempt to leave the enormously satisfying wish fulfilment phantasy intact. Ultimately, reality could not be shut out for ever and the process went rapidly into reverse with the phantastic object now hated and reviled. Blame of, and anger with, those felt responsible for the price collapse substituted for manic excitement without any apparent learning by investors about how they had been caught up in the phantasy possible.

In parallel, the paper shows how the acting out of enormously exciting unconscious phantasies associated with the idea that house prices could only continue to go up for ever appears to have played an important role in the genesis of the global financial crisis. In particular, governments, central banks, and regulators seemed to have been caught up *willingly* with investment banks and other market participants in enormously satisfying wishful thinking that there was no downside to speculation as anxiety and risk had been vanquished by the phantastic object represented by "new millennium finance." Emotional finance theory predicts that markets (and economies) in which such unconscious collusive behavior is allowed to dominate, and may even be indirectly encouraged, are inherently unstable.

Finally the paper looks at the investment industry and the paradox it constitutes. Rather than properly recognizing the important role the fund manager plays in meeting investors' real financial and emotional needs, the industry and its clients appear to be treating money managers as phantastic objects with underlying reality held at bay. In parallel, the paper argues it is important to acknowledge that the real emotions driving investment are those of excitement, anxiety and denial, often experienced by market participants on an unconscious level.

The underlying premise in emotional finance is that knowledge of the subtle and complex ways our often unconscious feelings, fantasies and needs determine psychic reality may improve our understanding of both how asset valuations and investment judgments are made, and how markets can break down. Investment decisions are driven jointly by cognition and emotion with most associated mental activity unconscious. Group dynamics also play a vital role in what goes on. This paper draws on a series of examples to illustrate how adopting a complementary psychodynamic perspective could well be helpful and provide additional understanding of financial activity and market behaviors currently not well explained by existing financial paradigms and models. In fact, it is even possible to speculate that in addition to their "truth" value these latter might also be being used unconsciously by investors to alleviate anxiety and help them believe the uncertain future is nonetheless in some sense predictable.

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Figure 1: Dot.com Mania and the Chinese Stock Market Bubble

This figure shows the Dow Jones Internet Index and the Shanghai Stock Exchange Composite Index over the 3½ year period around the peaks of the two stock market bubbles with values rebased and expressed as a percentage of the respective index highs.