‘Emotions and Economic Choice’
Keynote for the ESRC Rationalities and Risk Conference:
Queen’s College, Cambridge, March 29, 2007
Jocelyn Pixley
University of NSW, Sydney, Australia

1. Introduction

The idea that formal rationality is related to emotional factors, and even inseparable in any economic decision, could imply that decisions are therefore trivial or irrational. They are not. To show how emotions are inevitably involved, this paper compares formal rationality with the decisive difference between risk and uncertainty. It then contrasts the standard rational decision model (risk assessment) with several models that I have developed, which take uncertainty and its relevant social institutions into account.

Formal rationality is typically said to exclude emotions, in rational choice theory and, sociologically, in Max Weber’s institutional model of the capitalist conditions of calculability. Both conceptions avoid radical uncertainty. Typically today, the decision-maker faces only risk – not in a sense of dangers – but simply of calculations of probabilities (or odds) of likely outcomes. The problem, insuperable in my view over the argument that emotions can be at least minimised, is that in most economic decisions, we do not know the outcomes. So, formal rationality and its calculations of probability cannot strictly apply. But decisions, since they must be made, are mostly constructed around the very same, step-by-step decision framework as the model for risk. Risk calculations become procedures or cognitive and emotional ‘scripts’ for rationalising away the necessity of emotions.1 In turn, these ‘comforting’ scripts help to minimise perceptions of vulnerability, and uncertainty is only acknowledged in the ceteris paribus escape clause.

These arguments and my empirical investigations of the presence of emotions in financial decisions (Pixley 2004) are supported by Keynes’ and Knight’s approaches to uncertainty, emotions research and some economic sociology. They provide what I believe are convincing arguments that emotions are involved in situations of both risk and uncertainty. Even in a dice game where probabilities can be assigned to each outcome, the actual outcome is unknown. A chasm between the present and future involves taking a punt, and thrills or trepidation perhaps, even in situations of ‘mere risk’.

1 Some coherence to cope with a modern ‘risky’ world was given by moving away from mechanistic, cause-effect laws, and into ‘the universe of probability’. William James and Charles Pierce developed notions of ‘standard deviation’ and ‘risk assessment’ to help make chance ‘inescapable and controllable’ (Fraser 2005: 224), or at least to some extent.
Beyond this ‘objective probability’, whether radical uncertainty pertains is, in the ex ante of beforehand, itself an unknowable. The distinction between risk and uncertainty used here, I argue, highlights first, how formal rationality is attainable if risk does involve known chances, but not so if the condition is ‘radical uncertainty’. Second, in this unavoidable condition, decisions under uncertainty are neither irrational (most simply have to be made) nor are the emotions involved in making such decisions necessarily irrational.

It is irrational to deny emotional projections or to acknowledge uncertainty only in turbulent times, as does happen. That can lead to paralysis or panic, when economic decisions are stalled. Often the state – usually the central bank or treasury – restores the convention that the future will validate, not the past since no-one can do that, but expectations made in the past. Whoever the agent, the aim is to restore the ‘state of business confidence’ and, while overt Keynesian influences are gone, the same policies continue in redirected, less open forms.

According to my work on finance, wherein uncertainty is the neglected norm, emotional factors and imaginative capacities are necessarily dominant over cognitive factors. This takes the argument beyond Keynesian uncertainty, where it is irrational to deny the unknowability of the future. So, it is quite rational to hope that ‘things’ might stay the same in the future (ceteris paribus), and to rely on various emotions (trust, distrust etc, as my decision models show, not merely animal spirits). More importantly, since no-one can predict when ceteris paribus might fail to hold or which ‘things’ must stay stable rather than other ‘things’, emotions like trust (in numbers, in institutions, in organisations etc), and political battles are unavoidable. Anticipatory emotions provide the impetus to decide, to act as rationally as possible, and reactions to outcomes are also emotional.

My view (shared by some others) challenges typical conceptual divisions in economic sociology between emotions and cognition (Beckert & Dequech 2006:582). They are both involved, and in uncertainty and risk, albeit differently in the extent and kinds of emotions. In risk assessment, when probabilities can be assigned, the process seems rational. However, the outcome (ex post) must be waited for, so, whether using ‘subjective probability’ (i.e. one’s preferences, ordered and calculated), the decision and the waiting may induce a blasé attitude, arrogance, bravery or even sleepless anxiety. In the second type of risk assessment, ‘objective probability’, the same process can involve the thrill of a ‘flutter’, even when knowing the odds or alleged ‘risk/return ratios’. Since this is gambling, some people reject its thrills and fears, but such asceticism is not possible in the financial world. Although probability calculations give coherence to financial decisions,
modernity and capitalist institutions are ruled by risks, creativity and unknown chances and so, decisions remain inherently uncertain and inspired by emotions.

Research on how financiers decide shows that emotions play a crucial role in money relations, due to radical uncertainty about the promises of money and vulnerability to losses. Yet all too often, neither is acknowledged. Investment bankers’ refusal to accept such uncertainty and its related need for trust can prompt more or less than prudent levels of risk-taking, usually with other people’s money. Another way of saying this is that money contracts or expands because of bankers’ anticipations. Using my conceptual model of emotions in financial decision-making (Pixley 2004: 67-71; 2002a & b), I explain (briefly) how it differs from other decision models in neuro-economics, behavioural economics, organisational theory in the March and Simons tradition, and Post-Keynesian economics. My models show how the active emotions are the anticipations that ex ante prompt decisions and motivate action.

Reactions to outcomes ex post are different and my model of economic choice (rational and emotional choice), uses attribution theory. The paper will elaborate on that further, because it specifies more precisely than the ‘business cycle’ theory of money ‘expanding and contracting’ over a cycle, how a mania or panic actually gets started. Attribution struggles (as I call them) over whether outcomes are deemed successful or not, feed back to the next decisions. Struggles - over reputations and trustworthiness, even survival – take place at the inter-organisational level. Attributions are a cause and consequence of the reactive emotions to the ex post. Instead of cognitive psychology’s individualist approach to attributions (Weiner 1986; Mieg, 2001; Gibson 1995:35-6), I emphasise organisational blame and praise, inter-firm rivalry and collaboration. The argument is that attributions – whether an outcome is deemed a success or failure – are won and lost in a social context, not in ‘reality’, partly since a short-term result is often different from long-term outcomes.

Moreover, attribution struggles are rarely decisively settled (Pixley 2004: Ch. 6). They are carried out among the august central bankers, down in the trading pits, or arise from so-called ‘mum and dad’ investors. Such struggles are most found at the inter-organisational level – in law suits, in televised charges and corporate AGM claims from the floor, about who is to blame. In turn, the ‘winning’ attribution then influences the emotional climate within organisations (e.g. sackings and promotions, to decisions). Attribution

2 These points are in reviews of my Emotions in Finance by Donald Gibson; also Sir Christopher Ondaatje, who wants me to address a ‘safer future’, which I am attempting to do with the time orientation models.
struggles constitute the organisational feedback to the next round of decisions, such as whether to change course drastically or keep on a ‘steady as she goes’ path. Attributions may shape national or global contexts to social-economic climates or moods like trust and shame. Signs of panic are always played-down by economic leaders – to restore the convention for a national (even global) economy to improve. Often this succeeds. But explanations of ‘irrational exuberance’ or ‘depression’ in the ‘state of business confidence’, after it has begun, do not show how a mania or panic can develop out of attribution struggles.

The way I have described the process shows variations within firms in the Anglo-American financial sector. My current hypothesis is that organisations’ time-orientations also shape the cognitive and emotional ‘scripts’ of the decision process. This expanded conceptual model has three time orientations. Each one is projected into the future: whether from a distant past with many contradictory cases, or within the immediate short-term present (with allegedly many similar cases) or through a long-term future orientation. This third, ‘future-view’ – which is less discussed than the two others – may give rise to precautionary procedures or moral hazard, such as when banks purposefully become ‘too big to fail’, the dark side of relying on the Keynesian convention. The models show how financial institutions use these ‘scripts’ or different cognitive-rules and ‘emotion-rules’, depending on the orientation to time. As well, the possibility arises that the impact of previous attribution struggles will impose changes to a firm’s time-orientation, even to introduce ‘precautionary principles’. Therefore, I suggest that this is a dynamic model of decision-making at organisation and inter-organisation levels, and that the model takes a number of forms.

2. Emotions and Rationality

In exploring the emotions of rational decisions, I assume that organisations are or aim to be rational, and they are emotional and – sometimes – reasonable, empathetic and even altruistic. Organisation research reports

---

3 It sets up global-national comparative models that seek to specify differences and similarities within financial centres, in national policies, and among global and national-local financial firms. For example, global firms include HSBC, Citigroup, ‘MacBank’ and UBS, may be different from purely national financial businesses (eg in Australia, the NAB or Westpac banks are local, following their largely disastrous forays overseas). Also global firms may be forced to modify their operations in each national setting, to survive (rather like McDonald’s cultural turn in ‘cuisine’).

4 Empathy can come in two forms, for good or ill, because part of Adam Smith’s argument was to say that market actors empathise, or put themselves in the shoes of customers or opponents in the business world. But this empathy is often to outsmart the enemy, make a lot of money or in other words, ‘not out of love’ but self-interest or greed and, at the firm level, survival (Pixley 2002). Cut-throat competition may diminish policies of altruistic
anger and conflict in ‘daily run-ins with managers’, and emotions of collective euphoria, to loss arising from demotions, sackings and displacements. Managers and workers may spread misinformation, engage in ‘unreasonable’ debates and deploy divisive emotions, such as ill-founded, exaggerated fear, suspicion, envy, resentment or feelings of superiority – through a ‘disinterested’ interest (Swedberg 2003:263) – like being blasé about underlings’ ‘boring’ work.

People most readily accept that emotions arise in politics all the time. I suspect the number of Australian Prime Ministers who have wept publicly is a possible world record. However, economics with honourable exceptions (like Adam Smith), associates emotions with irrationality. Economy is the home of instrumental rational action. This distinction is completely inconsistent with uncertainty, which for Keynes means that decisions depend on emotions, even though most Keynesians view emotions as irrational (Pixley 2007).

The Keynesian view was revolutionary. Let us compare two models, the Post-Keynesian emotion approach, Figure 1. and mine Figure 2. I look at a dynamic process, using sociology and economics (Keynes 1937, Shackle 1972 and Myrdal (in Shackle 1967), Kemper 1978, and Luhmann, 1979). David Dequech looks at a Keynesian process leading only to expectations. It is very interesting in its stress on knowledge, creativity and the role of confidence, which is relative to how much uncertainty is perceived. A lack of confidence means that uncertainty is recognised. However from a sociological view, it is too individualistic. The model assumes set traits – which in the face of uncertainty and disasters, would be irrational as an invariable ‘optimistic disposition’, like a Dr Pangloss.

Figure 1. Dequech ‘Determinants of the state of expectations’

Copyright @ 1999 by M. E. Sharpe Inc. Reprinted with Permission (in Pixley 2004: 69)

empathy, by externalising social and other costs as far as possible. As Beckert (2005) points out, some firms have socially responsible policies only as a form of ‘Trojan altruism’.  

My evidence (Pixley 2004: Ch. 4 *passim*), refutes this emphasis on set traits such as ‘uncertainty aversion’, first, because learning occurs and somatic markers are important (basic model Figure 2). Although modernity is marked by optimism not fatalism, my evidence shows that people are influenced by past experiences particularly a calamity. Calamities are more likely to leave what neuro-scientists call somatic markers. Second, an Alan Greenspan is described by my informed experts as a dour and pessimistic individual yet as Chair of the US Federal Reserve was optimistic about the alleged revolution from dot.com investments and is a reported party animal in Washington DC. (Official position thus plays an important role, in that it imposes a career life-plan and required public behaviour.) Third, past experiences are influenced by the outcome of attribution struggles, and they feed back in reviews of past and present, which influence ‘the state of expectations’, in an inter-organisational sense. Thus the Dequech model is also not a collective, inter-organisational process, and nor is it dynamic.
Figure 2. Pixley’s Basic model of the role of emotions & attributions in decisions

Graphic Design by Jamil Yamani (College of Fine Arts, UNSW, Sydney).

Both emotions and rationality play a role in decisions, due to a revolution in debates on emotions in sociology, and other fields (Gibson 2007). Economic debates about emotions are also flourishing. Behavioural economics, for example, undermines rational choice theory, to some extent, but not as far as the Keynesians. This is the reason that Dequech’s economic model is more promising. Behaviourists focus on ‘what people really do’ when making investment decisions (but usually in laboratory experiments: Zinn & Taylor-Gooby 2006). They find ‘many people’ willingly violate rational axioms, and fail ‘to infer basic investment principles from years of experience’ (De Bondt 2005: 165).

But violations are surely the main game and motive of speculating, and laboratory experiments cannot ‘test’ the influence of social attributions about outcomes, which foster risk aversion or its opposite. Mark Twain used to swing between radical subversion of Wall Street practices, say, in defining a mine as ‘a hole in the ground with a liar standing next to it’, to extreme personal gullibility and massive losses. His bleak experiences gave rise to his umbrella theory of banking. All the main financial centres have switched
between cupidity and depression.Behavioural economists mostly focus on self-confidence and other individual traits, although some actually conduct surveys on gut feelings and sweaty palms (eg Shiller’s 1987 ‘pre-crash’ survey). In Shiller, his division between ‘smart traders’ and ‘diffusion investors’ – that is, ‘dumb’ mum and dads – does not square with his own evidence that smart traders were no different to ‘dumb’. Despite the overwhelming evidence to show that stockbrokers are as prone to error (in predictions) as personnel selectors and surgeons, far more than weather forecasters (Mieg 2001), behaviourists still maintain that predictions are possible with the correct human behaviour. They compare those who worry about the future with people who see themselves as leaders, who allegedly worry less. As De Bondt says (2005: 164), ‘mental frames’ which help decision makers are typically frugal, but they often mislead or are ‘demonstrably false’. Although De Bondt insists rightly that ‘culture matters’ and mental frames are socially shared (citing greater caution in European investors than Americans), the question of uncertainty is not at the forefront of the analysis of mistaken decisions. It is, rather, anomalies and ‘irregular perceptions’ (De Bondt 2005: 165) or, as Greenspan and Shiller proclaimed, ‘irrational exuberance’. A financier once asked me what, then is rational exuberance?

Neuro-economics tries to explain this irrationality in decisions, not by looking at uncertainty, but at the human brain. This is a mixed literature which invariably frowns on the risk-averse (because aversion reduces sources of investors). Emotions play a major role, for some in providing imaginative capacities and – with the hormone ‘oxytocin’ that is said to produce social bonding from trust to love – to reduce people’s aversion to loss. For others, experiments on people with brain damage to emotional regions show they took bigger gambling risks than those without brain damage. This proves, for them, that emotional capacity and heightened imagination leads to inferior decisions (i.e. to loss aversion). The major problem with this literature is that it seeks to explain mistakes people make in neurological terms (or implicitly recommends either ‘trust and love’ hormones for all, or in complete contrast, lobotomies to remove emotions!). But, surely, uncertainty cannot be overcome. Emotions of trust (for future gain) or fear of future loss arise because most ‘mistakes’ are due to the unknowable nature of the future. It is, in these above senses, pointless to pretend that humans can rise above or use emotions in the modern hope for control.

---

6 Cited in Fraser 2005:131; I cite Walter Bagehot elsewhere (2004); see Kindleberger 1989. Twain’s umbrella theory is that banks lend all their umbrellas on a sunny day and recall them urgently at the onset of rain, just when actually needed. Or, in other words, money expands and contracts at the wrong stage.

7 Cassidy, J. 2006 ‘Mind Games’ The New Yorker September 18:30-37.

8 Part of the problem lies in self-attribution struggles! The common experience is to say, later, ‘if only I’d thought of that possibility’ when, one cannot predict any possibility.
Uncertainty is not conquered within organisations, either. As Gibson says, it is often taken for granted that organisations, if rationally designed, exclude emotionality. But the organisation literature refutes this. Rational organization, if anything, produces emotionality of a heightened sort. At the same time, it paradoxically structures itself to portray emotionality as aberration and neutrality as the norm’ (Gibson 1997: 229).

If emotions are as prevalent as rationality, our understanding of decision-making would be improved by acknowledging them. My aim, as Gibson also suggests (1997:212) is not to explore what emotions tell us about ‘society’ or ‘culture’, such as Arlie Hochschild’s theme of an imputed ‘commercialisation of feeling’. Even less is it to make a division between whether ‘social structure produces emotions’ (Theodore Kemper) or whether emotions and rationality produce social structure, or draw artificial divisions between ‘culture and reason’. These are false divisions because each emotion must be differentiated, as one distinguishes kinds of self-interest (eg future-oriented, or short-term). Anticipatory emotions can create structure because they prompt decisions, action and changed situations. Reactive emotions are responses to those changes and outcomes of decisions, also to existing situations, and may incite action: the social shaping thesis cannot explain change, nor its motivations through rational emotions.

Therefore, the question here is to seek the best theoretical model about decision-making or economic choice. I start, then, with the following assumptions:

a) emotions and reason may be better seen as a combined set of processes, given that reason surely accepts uncertainty in life, in contrast to rational choice or ‘formal rationality’ in the Weberian sense;
b) uncertainty prevails over risk, particularly in financial choice;
c) attribution struggles over the outcomes are also important, and create a feedback loop to the next round of decision-making.

The next section compares uncertainty with formal rationality. Those who defend rationality assume that decisions can be based on calculations of outcomes. Stability is the background requirement, seen in Weber’s work and the Keynesian ‘convention’ theory of decision-making. But for Keynes, stability is merely assumed in extrapolating the past into the future. The risk model, with its probability estimates about each different outcome, may give decision-makers a comforting sense that outcomes can thereby be known: it is an emotional and a cognitive script. I will show that emotions are involved in reason and in rational choice, and reactions to past outcomes drive the next estimates and expectations.
3. Formal rationality: risk and uncertainty – and emotions

Orthodox economic theory reduces all uncertainty to ‘weak uncertainty’ or calculable risk. The difference between risk and uncertainty, however well-known here, is crucial in my alternative models. These demonstrate how ‘[e]motional factors supply the drive necessary to make choices and are often implicated in the process of choosing’ (Zinn & Taylor-Gooby 2006:55). The models show how rational-emotional processes, under uncertainty and under risk, are in fact more rational than the orthodox model. My models are not ‘scripts’ because aspects are often below the threshold of awareness, certainly at moments of important decision-making. Vaguely positive moods are not consciously felt as a rule; past or future time-orientations switch often imperceptibly until later reflection.

As we know, the key economists who distinguish risk from uncertainty are Frank Knight and Maynard Keynes, because they highlight how formal rationality is attainable if risk is indeed the situation, but not so if the condition is radical uncertainty. Neither situation refers to mistaken errors (the focus of behavioural economics, we saw) and in either situation, emotions are involved, even when risk clearly does apply. Moreover, these emotions are not ‘irrational’, although they are undoubtedly unpredictable (and, contra ‘emotion management’, largely uncontrollable). The emotions of active risk-taking are mostly ‘modern’ because fatalism is not a cultural trait today, rather risk and trust predominate (Luhmann 1988). The exceptions are all the old ‘passions’ and the thrills and anxieties of gambling, which are pretty old. Even life insurance began as a gamble on other people’s lives (Clark, 2002).

Whether and ‘if’ radical uncertainty pertains is, in the ex ante of the beforehand itself an unknowable – usually – unless it’s a time of great turbulence. These are the times when conventional financiers and politicians publicly admit that ‘now’ is uncertain and, ergo, unpredictable. For example, Greenspan during S11 took up this refrain (Pixley 2004: 75). But to prevent business spirits deflating to paralysis or a social outbreak of panic, uncertainty is often camouflaged, as in the convention of central bankers, when they don’t know whether inflation will go up or down, to call it ‘upside and downside “symmetrical”’.⁹ Here I reverse the convention in formal rational risk calculations that stability prevails, with its ceteris paribus escape clause. Although social actors can hardly act at all without assuming

---

⁹ Authorities, especially those facing an election, tend to camouflage financial uncertainty (or blame their opponents), partly because we all prefer stability, and they can do this because of our ignorance about money. Financial literacy is so low among the Australian population, that only five per cent claim that they know ‘a lot’ about the central bank, monetary policy or the stock exchange (Pixley forthcoming 2007).
that some stability will continue into the future, the problem is that other things in finance are rarely ‘equal’ in the future, and no-one has ever predicted an economic collapse. For all the near-collapses that may have been forestalled by precautionary measures (but we can never know), there are thousands that simply broke out unpredictably (in various ways, usually internal to the financial world). Orthodoxy rarely admits to this endogeneity.

Knight and Keynes held very different political views, Knight being a part of the early Chicago School who influenced Friedrich von Hayek. Even so, the two men tacitly agreed that uncertainty is very different from risk (Pixley 2004:35). Risk must comprise a set of known chances to be measurable. Anything that is unmeasurable is a true uncertainty (Knight 1964: 231). According to some, there are shades of uncertainty, such that the weather is ‘only moderately uncertain’ compared to the unpredictability of finance (Keynes 1937: 24). In qualifying uncertainty, Keynes himself entertained the slide from uncertainty to mere risk, which was developed into a huge post-war research programme by the Keynesian maths and probability boys, and ‘two-armed economists’.

There are two types of risk, subjective and objective. Probability can be assessed ‘objectively’ by comparing invariant factors, such as all the possible throws of two dice. A probability distribution can be assigned to each outcome, which can be known in advance, by counting all the cases to predict the odds. Two-up usually has only two possible outcomes, so the odds are 50/50 of ‘same or different’ (or, three: two heads, two tails or one of each: 33%). ‘Come in spinner!’ was the cry to begin the game, although ‘deft’ spinners could ‘butterfly’ a coin so it doesn’t turn over. The chant ‘Fair Go’ in front of the spinner, suggests cheating was prevalent.

‘Subjective probability’ is the entry point of rational choice theory and the neoclassical economic theorem of expected utility maximisation (Pixley 2002; DeMartino 1993). Utilities are subjective preferences, about which agents are allegedly able to evaluate and also, according to rational choice theory, are able to render judgements about the probability of each future outcome. Probability measures the confidence that an actor has in a ‘likelihood’

---

10 See Craig Freedman 2006. Hayek, aka the Austrian ‘school’, Schumpeter and chaos theorists, are the other major schools in economics which accept uncertainty with almost all Keynesians. Knight and Henry Simons taught Milton Friedman, but he gradually dropped all reference to Simons, for example, and sought predictions.

11 One of my Zürich finance experts said he always asked his economists to be ‘one-armed’ because he knew that things might turn out terribly, but he didn’t employ an economist to tell him that, he wanted strong views, not timid, sycophantic views (see Werner Frey in Pixley 2004; Silbermann 2000)

12 Thanks to Clive Kessler for looking two-up in The Australian Language, 1945, by Sidney J. Baker (Sydney: Angus & Robertson). Two-up is also called ‘swy up’ after the German zwei.
estimate. This is what the emotion of confidence means in Keynesian economics (i.e. it is not ‘self-confidence’ as a trait, but about gradations of perceived uncertainty, as Dequech shows clearly: Fig. 1). Decisions are deemed rational and, in the ‘positive account’, people actually do deliberately maximise expected utilities (Beckert & Dequech 2006:584). Milton Friedman argues that successful predictions prove the worth of ‘positive economics’. He claims that positive economics is ‘independent of any particular ethical position or normative judgements’ (Friedman 1953:4) and it is successful if it ‘yields sufficiently accurate predictions’ (1953:15).

In the ‘normative account’, such rationality should apply (the position of rational choice: Pixley 2002: 73-7) or people act ‘as if’ they were maximising without performing calculations (cited in Beckert & Dequech 2006:584; Guseva & Rona-Tas 2001: 642), because the information is ‘too costly’ to find, as rational choice theory suggests or, because rationality fails.

According to rational choice, rationality fails only under two conditions, the first is due to the intrusion of emotions (‘irrationality’) and the second is from ‘indeterminacy’. The latter can be when two options are equally good - ‘indifference’ - or when one cannot make up one’s mind between two ‘incommensurable’ options, such as brands of car (Elster, cited in Pixley 2002: 75). The overall assumption is that each future outcome can be weighed by its probability. Jon Elster (1999) even suggests that stockbrokers are sufficiently skilled to do this. If outcomes are indeed measurable, in the sense that there is a known distribution of outcomes, probabilities can be assigned. For example, insurance can compensate the ‘risks’ of inevitable, statistically known numbers of deaths in any year, by spreading the risks against monetary loss (even while insurance firms may neglect monetary uncertainty when over-extending during an asset boom: Pixley 2004: 142-4).

Figure 3 shows a variation on my ‘basic model’ which is the cognitive script for the probability rules. Emotions, as will be seen, play a role at the moment a decision is taken, until the outcome/s. To continue our simple analogy with two-up, even here, the outcomes can mount up. Those who do not know probability well, can be conned by those who do – whether to take the ‘gamblers’ curse’, for example. If someone says that your bad luck must change soon, which is statistically possible but not inevitable, a broken gambler may throw their last pennies away. The fatalities in the gamblers’ curse saw the end of Barings Bank in 1995, and nearly took the National Australia Bank (NAB) and Allied Irish Bank in 2003-4.
What are key problems, that are inherent in subjective probability? It requires a huge number of past observations to give reliability; all the cases must be the same or standardised, to provide validity to probability. But, validity also crucially needs the past to continue exactly the same into the future. The basic projection – extrapolating the past into the future – applies legitimately to the ‘objective’ dice game: uncertainty is properly reduced to risk for those who play that precise game honestly, and has its thrills and losses. In an interesting sociological example comparing the US credit-card market to that in contemporary Russia, while standardisation of the millions of US credit-card customers does apply, it is more problematic to say that ‘the American economy’s stability allows for inferences from the past to the future’ (Guseva & Rona-Tas 2001:626). These authors are comparing America to the very real lack of stability and (I would add) lack of financial safeguards in Russia at present. They also rightly stress that their example is not a situation where it could be ‘as if’ rational decisions were being made. Rather, the possibility to transform uncertainty into risk is not an individual action.
Instead, it depends entirely upon a ‘social capacity’: that is, stable institutions make economic calculation possible (2001: 642).

Even so, it is a leap of faith (and trust) to project past stability into the future because, although some countries are more stable than others, a drop in housing prices and the associated calamity for household debts – including credit cards – cannot be predicted. This is so even if bearish predictions mount up saying collapse is inevitable. As long as enough bulls continue to buy, a collapse will not take place. One problem is that it is not possible to quantify the probability in the tails in the distribution, which can whip up unpredictably: the tails refer to extreme events. Another is an imperceptibly rising lack of caution in the bell part of the distribution, the typical events. Only in the past 10 years in the USA, this was typical of the dot com inflation (and bust of 2000) and now in Wall Street’s securitisation of questionable mortgages. As one report has it in March 2007, the major participants are ‘holding their breath and hoping that the spring season for home sales will reinstate what had been a go-go market for mortgage securities’.

Far more fraught, therefore, are most other cases than statistical projections of the number of deaths in any one year, or indifference curves about choosing a car. However, the convention of extrapolating the past – a mere convention for Keynes – is, for Weber, a definitive social process of rationalisation of actions and organisations in the historical development of capitalism. Weber is not known for being a financial speculator, whereas Keynes made a fortune for Kings College, Cambridge through speculation when the Bursar. He knew the finance world and made fun of it.

In Weber, however, formal rationality means that the chances of success of each outcome can be calculated. Many economic sociologists, who look beyond narrow neoclassical views, often highlight how Weber insisted that social stability (capitalist institutions) is a condition of calculability (eg Aspers 2006: 5). They are usually arguing that social contexts, chains of inter-organisational dependencies, conflicts and cooperation underlie all market actions, like Weber. In addition, Weber insists, correctly, that a firm’s orientation is to profit (not subjective ‘preferences’ or utility) because capitalist firms are locked in a structure of competition for profits, and collapse without good profit numbers.

Yet, problems appear if we look briefly at Weber’s hundred-page discussion of money in Economy and Society. This shows what one of our best cultural and economic sociologists (and a marginalist to an extent) says about predictive or

---

14 Weber obviously witnessed stock exchange activity, as various passages make clear.
formal rationality. All ‘rational calculation’ in a market economy, ‘especially of capital accounting, is oriented to *expectations* of prices and their changes as they are determined by the conflicts of interests in bargaining and competition’ (Weber 1978: 92, my emphasis). Rationality ‘presupposes the *battle of man with man*’ – clearly Weber does not shrink from sociological issues such as brutal social struggle, while defending capitalism against the political threat of state planning at that time of 1920 (the year that Weber died). There is none of classical economics’ harmony or equilibrium (Wiley 1983). Weber outlines the conditions for rational capital accounting, which are more predictable (‘formal rationality’ meaning ‘exact calculation’: 1978: 111) than a planned economy. Conditions are the ‘appropriation of the means of production by individual units’, that is, by “property” (1978: 93) and, while profits (the aim of the enterprise) depend on consumers’ ‘effective demand’ (not wants or demand: p. 108), the ‘highest possible degree of calculability’ is gained from conflicts in the market, such as the whip of hunger to make worker productivity predictable. The outcome of these battles and compromises is, Weber relentlessly goes on to suggest, ‘decisively influenced by the ability of persons who are more plentifully supplied with money to outbid the others, and of those more favourably situated for production to underbid their rivals on the selling side’ (Weber 1978:93). Thus, outcomes are predictable provided that we are armed with knowledge of the wealth and power distributions.

In these passages, we can see that Weber’s *systemic and cultural interpretation* of capitalism – including his unjustly neglected treatment of money – avoids uncertainty. Norbert Wiley notes Weber’s different theoretical rival (Marx) to Keynes’ classical rivals, and Weber’s interest in the problems of genesis. Although Weber did not experience the Great

---

15 Ingham, on Weber’s debate with von Mises, makes this valuable point in another theoretical context (2004: 213) about deriving the value of money from ‘the methodology of supply and demand, marginal utility etc.’ That is, in its ‘value in exchange’, money is seen as a ‘commodity’ rather than, for Ingham, an ‘institutional fact’ (2004: 80); like Weber’s view and Joseph Schumpeter’s.

16 In this and a later passage (1978: 108-9), Weber admits that effective demand is a purely ‘formal rationality’, ‘indifferent’ to ‘all substantive postulates’ (such as ‘the actual distribution of goods’) and in that sense, showing ‘the ultimate limitation, inherent in its very structure, of the rationality of monetary economic calculation’. ‘What is to be produced is thus determined, given the distribution of wealth, by the structure of marginal utilities in the income group which has both the inclination and resources to purchase a given utility’. The ‘indifference is absolute if the market is perfectly free’ (p 108). However, some stability in workers’ ‘minimum subsistence’ pay could, he thought, and was at that time, giving greater predictability – i.e. that formal and substantive rationality could ‘coincide to a relatively high degree’ (p 109). However, this had to be combined with ‘shop discipline’ or domination, and the ‘whip of hunger’ to enforce predictable productivity increases and stability to the value of money or, in neoclassical terms, the lash of unemployment.
Depression, given his death nine years' earlier, even so, Weber's major difference with Keynes was in his *temporal orientation* (Wiley 1983: 39).

Weber outlines brutal struggles *not only* between capital and labour, but also between debtors and creditors, *speculators and rentiers*, banks and the state. In another, recently translated fragment, Weber also argues (2000: 369) that money is a *major modern conflict* between the large banks and the industrial (and service) sector firms. But Weber looks back to past outcomes and, obviously, these are known. The future, unpredictable outcomes of these struggles mount up. Since the outcome is always uncertain, how ‘rational’ (calculable) can expectations be? Money is valued in terms of ‘delayed obligations’, Weber rightly says, and credit is ‘oriented to the probability that this future transfer will actually take place’. This is an exchange of ‘an expected future’ and the action is *rational* where ‘both parties expect an improvement in their position’ (Weber 1978: 80-1, my emphases). True, and they may expect short-term losses and gains, and do not act according to values, traditions or emotions but pure interest. But what if expectations prove incorrect all round even if they are formed through *rational self-interest*?

In one highly relevant aside in *Economy and Society*, Weber looks severely on certain ‘outside interests’ who see their share-holdings in firms ‘as a means of making a purely short-run speculative profit’. He says that leads to ‘substantive irrationality’. He even goes so far as to say that the ‘influence exercised by speculative interests outside the producing organizations themselves on the market situation, especially that for capital goods ... is one of the sources of the phenomenon known as the “crises” of the modern market economy. This cannot, however, be discussed here’ (Weber 1978: 139-40).

What a refusal. Speculators, according to Weber, are not *rentiers* interested only in an income and therefore concerned in the ‘long-term’ profitability of a firm. He cites the damage from what we would call today ‘shareholder value’ where current stock prices, and less so dividends, predominate. With Weber, economists of the Keynesian tradition call this speculation, but Keynesians also stress that precautionary motives can suddenly switch to speculation: if dividends decline rentiers may invest in property, it may prove speculative. But Weber assumes that formal rationality can be attained because stable conditions render calculation possible, to the exclusion of emotions of uncertainty. Instability as ‘crises’, Weber says, he cannot discuss.

---

17 This is a major plank in Geoff Ingham’s masterful move to develop a properly sociological theory of money. In his latest text *The Nature of Money* he draws attention (2004: passim and see note p. 213) to this much-neglected, lengthy segment of Weber’s *Economy and Society* (1978: esp. 79-82; 92-3; 107-9). Note also how Roth’s Introduction to the 1968 edition only mentions its ‘dry definitions’ and Weber’s involvement in political reconstruction after World War I (Roth in Weber 1978: ciii).
Moving on to uncertainty in economic choice, let us look at how Hyman Minsky, a Keynesian, described the ‘paradoxical’ American stability of the 1960s-70s, which shows Weber’s neglect of the ‘business cycle’. The paradox (implicitly entailing emotions) is that instability arises from stability or ‘tranquillity’ of success (in Minsky’s words), which affects ‘long-term expectations’, the views of the uncertainties involved and the ‘willingness to finance debt’. Stability itself has an impact on ‘permissible liability structures’. ‘Stability in a world with a cyclical past and capitalist financial institutions is destabilising’ (Minsky 1985: 36-7). Profits are the key link to time. Thus ‘the extent to which present profits validate decisions taken in the past affects long-run expectations’ (1985: 41). What is ‘normal’ in a capitalist economy is tranquillity and ‘success’ – namely that the future validates expectations made in the past – although what is also normal is that these are not ‘self-sustaining states’. Increases in capital asset prices lead to ‘a rise in acceptable debts’ and a change from ‘an initially robust financial structure into a fragile structure’ or Ponzi situation (1985: 50), particularly with the destabilising impact of a Wall Street.¹⁸

Minsky takes a future-oriented view, informed by a long-term past and by experience – an a priori Kantian kind of knowledge where concepts like time are unknowable (unlike the dice throws which are known in advance). Subjective probability (rejected by Minsky) involves the a posteriori convention of calculations of the past, based on relative frequencies of empirical observations. Without similarity of cases, and ways to validly classify instances where the distribution of outcomes is known, ‘actors must resort to “estimates”’ (Knight, cited in Beckert 1996: 807; Guseva & Rona-Tas 2001:626). This is uncertainty: it is not possible to form a group of instances because the situation is unique. How is anyone to know where/when ‘fragility’ will arise in the future? Speculation builds up, and, where Weber neglects the cycles of ‘manias, panics and crashes’ (Kindleberger 1989), Keynes’ time-orientation is able to ‘disallow’ formal rationality because investors lack all information of the future.¹⁹

G. L. S. Shackle understood the scientifically revolutionary nature of Keynes and the ‘high theory’ in the 1920s such as Gunnar Myrdal. This theory showed that uncertainty is prevalent in most economic decisions. Decisions involve imagining incompatible (dissimilar) and unknowable futures that cannot be weighed or compared – how can an opposite outcome, for example,

¹⁸ Later, I pick up the question of attributions over whether the future does validate expectations.
¹⁹ Wiley 1983: 40-1. Wiley also notes Keynes’ ‘dim view’ of the substantive rationality of capitalism in the depression, and the emotional underpinnings of investment decisions. Interestingly, he says that Weber’s idea of ‘formal rationality was actually the “definition of the situation”’, a ‘fabricated rationality of those who face uncertainty’: Wiley 1983: 41.
be half as likely or a quarter as likely? Not only is there the problem of infinite regress (noted by Guseva & Rona-Tas 2001), but Shackle highlights how decision-makers are here condemned to dip into a ‘bottomless bran-tub’ of possible outcomes and never arrive at a decision (1972: 22).

Knightian and Keynesian uncertainty also says that where the parameters of likely outcomes are known (e.g., the weather outcomes are sun, rain, hail, tempest and so on and back to sunny), even they are relatively uncertain, unlike the measurable parameters of ‘objective’ outcomes - namely known and similar chances played in a game in the ‘here-and-now’ – where risk applies. This is because, with weather, we never usually know when the weather will do what (until ‘it’ is about to happen). Yet the weather itself cannot be attributed with rational self-reflective thought and the human ability to react to a forecast (and even change it, in the unpredictable reverse to a self-fulfilling prophecy).

Rationality and, preferably, reason can and does play a role in decisions but only by accepting the future is inaccessible. In practice this is hard to do yet refusal is, surely, an irrationality. The opposite case, in arguments that sociologists of risk see all uncertainties as ‘disasters’ (cited in Guseva & Rona-Tas 2001: 625), raises another major point about uncertainty. Whether uncertainty does equal danger is in the eye of the beholder. A non-religious institution is not concerned about the certainty of god or pray about the fickle weather. As Mieg (2001) points out, uncertainties are only important under the spectre of vulnerability. Uncertainties – widespread in monetary economies (in historically diverse past cases which do not ‘tell us’ anything but that unknowable events happen unpredictably) – are here not trivial but ‘matter’ in vulnerability to poor outcomes.

Risk assessments are unsatisfactory for financial decisions (and every case of uncertainty with vulnerability), yet the treatment of uncertainty as risk remains a hope, even among proponents in the financial industry who claim to draw on Keynes’ work on uncertainty. For example, in an article called ‘Great expectations devoid of emotion’, a CEO and Chief Investment Officer of Legg Mason Capital Management argues that people ‘systematically misprice risky assets because of what is called myopic risk aversion’. He argues that in today’s ‘climate’ it can be difficult to ‘distinguish between beliefs which spring from emotion’ and beliefs which he calls ‘warranted’. For

Central bankers, such as Alan Greenspan, constantly use the phrase ‘history tells us’, but history cannot predict if today’s as yet unknowable problem is a bad or good case. A clear example is the use of the appeasement of Hitler to justify the Vietnam War and the invasion of Iraq in 2003. But history only ‘tells us’ that these may be World War I or Boer War situations, not the justifiable World War II situation, and worse, that we will not know until after the event.
him, ‘emotions are fickle ... but warranted beliefs are more stable and more reliable’. Warranted beliefs include ‘absence of excesses, mergers and acquisitions and corporate buybacks, ... subdued inflation and interest rates ... and valuations that are not demanding’. For him, ‘adding value involves forecasting changes in what Keynes called the state of long-term expectation, which involves trying to narrow the cone of uncertainty that inevitably widens as you extend time horizons’.²¹ Keynes never thought the long-term could be forecast, but this speaker is not extending time horizons but shortening them. Myopia is an orthodox term that attempts to refute Keynesian uncertainty (Williamson 1993: 460), ill-chosen because I have perfect myopic short-sight but distant views, like the future, are hazy.

4. Uncertainty in money

Money is a particularly under-recognised source of uncertainty (Pixley 2002a: 199). This is partly because in particular eras memories become shorter and tranquillity reigns as the dominant mood. The potential dangers in finance find little place in today’s public imagination. Gunnar Myrdal demonstrated one source of uncertainty in money before Keynes. One of many attractions of money beyond the ancient passion for having lots of it, is that money allows organisations and individuals to defer making decisions. But a deferred decision, as Myrdal pointed out, cannot be known by anyone (cited in Shackle 1967:91-2).

This form of uncertainty is what Keynes implied in his concept of the ‘liquidity preference’. Keynes is right, because even if we see a deferred decision as a non-decision it is, nevertheless, a decision not to act due, Keynes insisted, to emotions like a decline in ‘business confidence’ and its incapacitating depression. It still involves an action, which may be stuffing money under a bed. The idea of a deferred decision which is made possible by holding money, moves beyond the usual purview of organisational theory and economic sociology. That is partly because uncertainty has, since the work of March and Simons, been regarded in organisation theory mainly as an issue of ‘bounded rationality’ (March 1978), where the concept of decision-makers merely ‘satisficing’ is ascribed to the practical limitations of gathering knowledge and human’s computing capacities, which Simons alleged could be overcome by technology (Beckert 1996: 822). Such a view completely circumscribes the problem of uncertainty. Even if deferral is a ‘decision’, it is nevertheless a decision not made and so, as Stewart Clegg suggests (1989), its rationality is ‘bounded’ only by the infinitude of its non-decision making potential.

²¹ Dunstan, B 2006 ‘Great expectations devoid of emotion’ Australian Financial Review 3 November:35
5. Rational emotions in expectations

Shackle gives a full examination of Keynesian expectations. Expectations consist in ‘imagination and hope’ about future values or, in richer terms, ‘all those expectational, emotional, superstitious, straw-grasping and star-gazing psychic eddies and turmoils of the investor’s mind’ (Shackle 1972: 432). This is not, in my view, necessarily irrational since, in a money-using economy, unpredictability and the ever−‘present’ insufficiency of data is all we face. Time passing will not bring ‘better information’ but delay can save the seller from the necessity of a decision of when and what to buy at the moment of exchange (Shackle 1972:160). As money enables decisions to be deferred, and deferred decisions cannot be known by anyone, uncertainty is endemic (Shackle 1967:91-2). Such ‘fundamental uncertainty’ for Keynes and Myrdal, or, in Minsky’s words (1985) ‘unbearable uncertainty’ can only be ‘nonprobabilistic’ (Davidson 1990).

Expectations and conventions lead economic actors to a decision or not, in this view. A price is conventional simply if it is left undisturbed (Shackle 1972:222). Indeed any thing or ‘state’ that stays the same over time forms the basis for the ‘convention’ of extrapolating the past into the future, through imaginative, anticipatory projection. If conventions seem irrational, we could be paralysed by uncertainty without them, so how irrational are conventions? There are many cases of conventionalism, Shackle notes, and it lies at the heart of speculation too. Keynes dismisses ‘the state of long-term expectation’ as a fruitless path of inquiry, since valuations on the Stock Exchange are made by speculators looking for quick gain, not long-term investors trying to assess the remote prospects of companies: their prospects depend on short-term speculative valuations. Speculators are only trying to guess what the opinion of a majority of fellow-speculators will be by the afternoon or the next day where ‘each fluctuation of the value’ of any of the assets is ‘the apex of a pyramid of guesses about guesses about guesses’ (Shackle 1972:223). This Keynes calls a conventional market valuation of assets. The principle on which valuation is based is one part, the other is the characteristics of a market judgement arrived at, on that principle. The principle is the search for the opinion of the majority, about what their opinion will be tomorrow, the majority being those with more ‘power or wealth’. Once the ‘eddies’ of the surging crowd appear purposive that ‘will in fact shortly become the Direction of general, “conventional” movement’ and judgement (p. 225). This ‘convention’ is hard to define, as there are few boundaries ‘between today’s opinion of what will be tomorrow’s opinion, and

---

22 This may be a situation where there are few rivals in some product market and they tacitly agree not to raise or reduce prices – ‘kinky oligopoly’ (Shackle 1972:222), or a monopsonist buyer like the state.
the actual prevailing opinion which has *anticipated tomorrow* by being generally adopted today’ (Shackle 1972:225).

6. The basic or possibly Anglo-American model of emotions

Emotions used in arriving at decisions are the active, future-oriented emotions that *produce structure*: the mere expectations or anticipations. Here we look at how financiers make decisions ‘in practice’, given there is always uncertainty. In fact, it is not the case (or not in all cases, according to my qualitative research) that there is a pretence that people act ‘as if’ the decision were simply rational choice and risk.

What seems to occur (see Figure 2: basic model) is that actors make a rational choice and an emotional choice. They may play down the emotional component by calling it ‘intuition’ and prognostications (eg. central bankers) or ‘consulting gut feelings’ (eg. financiers). Others will talk, especially if they are retired, openly about fear and distrust, trusting no firm, no accountant’s evaluation, nothing. Emotions involved are *anticipations*, namely of optimism and pessimism, confidence (in an outcome being ‘certain’) or lack of such confidence and finally, at the moment of decision, trust, distrust or fear, as fed by *imagination and knowledge*: the latter two are crucial (compare unimaginative personality types, or brain damaged people).

In Kemper’s exploration of ‘anticipatory emotions’ (1978), optimism or pessimism are treated as emotions generated by *past* experience and conditions, whereas confidence and lack of confidence arise from positive and negative indicators in the *present*. The variations in these anticipatory emotions are thus considerable: for example hope can emerge from high optimism over past events, but a *lack of confidence* about present unattractive indicators can augment the *dangers in hope*.23 Outcomes result in different emotional states.

If dangerous hope is met with an unfavourable outcome, mild disappointment is likely, whereas a favourable outcome brings mild satisfaction and relief. That is, hope is a feeling accompanied by a painful anticipation of likely disappointment and, if reflected upon, is a rational emotion. In contrast, if high levels of both optimism and confidence end in a poor outcome, ‘consternation’ is the result and the financial press describes the panic. Low levels of both produce an anticipation of hopelessness which can, if met with a good outcome, result in ‘astonishment’ (Kemper 1978:74-5). Depending on

---

23 This is drawing on Ernst Bloch, eg Pixley forthcoming: ‘Utopianism and hope in finance’. It is dangerous to hope because hope cannot be ‘talked down’, Bloch said in a discussion with Theodore Adorno. This is true of utopian social movements and of love and trust, whether collectively experienced or more believably, individually felt.
the extent that ‘guesses must be made’ (Shackle 1972:193) as the basis of decisions, the resulting emotional states generate further rounds of confidence, optimism, panic or mild satisfaction.

7. Attribution theory

The feedback comes after the outcome, which involves the reactive emotions. Attributions are significant because of the emotional feedback (Weiner, 1986) involved in attributing responsibility for any particular outcome. Social psychological theories of attribution are useful for explaining how organisational definitions of ‘success’, skill and ‘reliability’ are due to feedbacks from external perceptions. The ‘cognitive appraisal’ theorists of emotions suggest that individual office holders are confined to specific emotional responses (Gibson 1995:35-6), blame bringing anger, sadness arising from a situation out of anyone’s control. In contrast, I emphasise organisational and inter-organisational factors, with their conflicts, since attributions – whether an outcome is deemed a success or failure – are won and lost in a social context, not in ‘reality’. Many decision-makers attempt to say that ‘nothing could be done’, when they made a huge mistake. What I call attribution struggles are rarely decisively settled.

Studies on professional judgements show that stockbrokers have poor performance ratings as do physicians and personnel selectors (like the global head-hunting industry in finance). They cannot provide good predictions, whereas weather forecasters and chess masters have better performances. The main difference is between expert predictions about things or human behaviour (Mieg 2001: 30-1). Harald Mieg argues that the poor performance of stockbrokers is surprising. He stresses that their success is easily shown in price differences, and the research on financial investment is extensive. This is true, but uncertainty is also extensive. Attributions play a major role in assessing outcomes. The extraordinary amount of ‘gossip’ in the financial world are a part of the attribution struggles. Whispers and rumours may be investigated by the press, traders or analysts. Financial firms and central banks, in face of negative attributions, attempt to silence critics. Immediate outcomes are re-analysed for their long-term benefits, and later outcomes subject to further debate.

Depending on the outcome ex post, attribution processes move in various directions. For all those occasions when the outcome was expected ex ante, whether good or bad, the convention appears to be merely confirmed and there is usually little effort undertaken to search for causes. This also happens when the result is a surprising gain, an unusual win, an inconsistent rise in profits, because it is comforting. Slightly less search for likely causes is promoted in such success whereas investigation is extreme
amidst the anger and embarrassment from an unexpected defeat or failure (Weiner 1986: 32-3).

A strategy that is deemed to be successful creates a feedback loop where tranquillity can set in. An attribution of ‘success’, and how it fosters further confidence (higher motivation to succeed the same way) is a recurring process. In the case of central banks, their concern for reputation and credibility means that if they seek accolades from the market, this feedback exaggerates their concern for credibility. Whenever credibility means acting in a predictable fashion to the markets, the problem then arises that asset inflations can become uncontrollable. Then the problem becomes one of trying to ‘avoid the odium’ if a collapse occurs, with central bankers blaming market actors for irrational exuberance, for example. The struggle is a continuous juggling act among constituencies assessing the effectiveness and reputation of a central bank or a firm. Where self-congratulation amidst millions of ‘winners’ leads to implausible claims of sagacity, prescience and claims of the benefits of positive economics (successful predictions), after a collapse central banks make every policy move predictable, to restore the validity of expectations and conventions. Predicting the timing is also hazardous: if central banks come with aid too much, too soon, market actors may be lulled into moral hazard. If they act as lender of last resort too little, and too late, the innocent private banks may be dragged into collapse (Pixley 2004: chapter 6 passim).

Unexpected outcomes that are failures or disasters, give rise to colossal efforts to find the causes and heightened attribution struggles than unusual wins. The impact on subsequent behaviour in an organization can be extreme. With the unexpected disaster, the kinds of attributions made become far more focused and precise distinctions are made, which are always contested. Organisations will look at whether a cause of failure is internally or externally located, and on how stable and controllable the cause may be. Thus, if success or failure is ascribed to internal sources such as skill and competence (stable positive factors) or to lack of effort or the incorrect strategy (unstable internal factors), there is a greater hope for building a positive potential for success in future. If a firm is deemed highly competent but chose the incorrect strategy, it can look to better strategies. The attribution keeps a door open to reform by the organisation. However if success or failure is set down to mere luck (an unstable, external factor) or to complete incompetence and lack of skills and ability – stable internal factors (Weiner 1986: 175-6) – it is more likely that a negative, pessimistic feedback loop will be established, and a firm may take drastic measures or paralysis can set in. The feedback varies according to the attribution – with a successful outcome, the emotion may be confidence, gratitude, guilt (if success was only from good luck), happiness, pride, relief, surprise or
satisfaction. After poor results, the emotional response can be anger, pessimism, disappointment, disgust, fear, guilt (if attributed to stable effort), resignation and gloom (Weiner 1986: 124 – 5).

These variations are important for the dynamism that feedbacks give to the decision-making model. However social psychology deals less with the social processes of attribution, as it is concerned with later motivational effects. An impersonal reputation – whether for ‘credibility’ of a central bank or trustworthiness of a financial firm – relies on feedback: also a reputation ‘earned’ can lead to protection of reputation and more, to the management of reputation which can turn into a strait jacket or become a con game. My question here, then, is which attribution prevails?

In a large world of organisations, there are diverse agents of attribution. If the ‘outside world’ of the press, the stock prices and analysts, regard a good outcome as the result of stable or invariant factors which are located internally in the organisation, such as skill and competence, these attributions foster stability and confidence in a controllable and predictable world (Mieg 2001:60). Internal agents like the directors can emphasise their skills and determination. In the case of Enron, early accolades and internal self-praise stifled all criticism but now, debates continue about who was to blame. The company explained that it was engaged in multiple partnerships but few read its long reports before Enron collapsed.24 In the case of external locations of causes, insiders may identify their outside, unstable environment, while outsiders suggest that success was due merely to a lucky environment. Insiders may blame stable situations where tasks are highly difficult, perhaps due to the policy environment or actions of other organisations.

Depending on the attribution that prevails over other potential attributions, there is then a chain of feedback loops to the organisation. It is not possible to know the outcome of attribution struggles in advance: for all the firms that ‘won’, some fail to win at a later point and losers make a come-back. If the convention is confirmed, new effects on confidence, even smugness, or on collective gloom and resignation can, after the next round of decisions, affect the credibility of the organisation.

8. Emotions and attributions in organisations

There is no shortage of evidence about emotions in organisations. Typically, managers focus on the ‘appropriateness’ of emotions that may be displayed,

---

24 Pixley 2004; Gladwell, M. 2007 ‘Open Secrets’ The New Yorker 8 Jan; The Mail, The New Yorker 22 Jan. 2007. Social psychology offers insights that are as applicable to organizations as to individuals.
and hence their ‘management’ (Bryant & Cox 2006:116). Workers are often reprimanded for displaying ‘negative emotions’, preferring the sycophantic. This is shown in Jackall’s *Moral Mazes*; Silbermann points out in *Grovelling and Other Vices: A sociology of sycophancy* (2000), such behaviour is as common today as it ever was.

In regards to decision-making, a constant finding in the organisation literature is that negative mood and pessimism are linked to an ‘accurate assessment of situation’ (Jordan et al 2006: 142-6). Although Barsade & Gibson (2007) cite clinical studies where ‘positive mood inductions’ produce more careful decisions and encourage creativity, they and others, however, stress that ‘the sad truth’ is that pessimism and some ‘emotionalism’ are related to good outcomes (Jordan *et al* 2006: 142). Squeaky wheels are ignored for their lack of optimism, which is natural in that capitalism and the entrepreneurial spirit depend on optimism and animal spirits. Yet Gibson (1995) highlights the perils for a firm to favour sycophancy and optimism, and to ignore emotions of say, anger from whistleblowers, and other cases of stifling pessimistic voices.

External attributions about past outcomes are important to pessimism or optimism within an organisation. These feedback loops offer the potential of either controllable or uncontrollable future situations. Attributions of ‘success’ from skill and competence may give rise to optimistic sentiments (*esprit de corps*) which influence subsequent decisions. If success is set down to mere luck, it may give little ground for further optimism. The highly unexpected, poor outcome gives rise to the most contested attribution searches, and may foster inability to act, constant public questions, even regulators, congressional inquiries and public shame.

No organisational reputation is possible without a social, regulatory and legal structure which frames or supports the attribution processes. Attributions of reputation are analogous to those about professional domains and expertise. As debates suggest about expertise (Mieg 2001: 56), so too, credibility or trustworthiness is a ‘social form’ through which an organisation is attributed as trustworthy. Moreover, ‘what counts’ as credibility is socially contingent (Mieg 2001: 178). The social forms through which the institutional reputations of central banks or financial firms are assessed emerge from attribution conflicts between organisations. Attributions change as time passes, and in a homologous manner to Hirschman’s model of exit, voice or loyalty, ‘voice’ here is carried out not by lone individuals (the whistleblower) but in inter-corporate competition. For example, with press barons, if a scandal about, say, Maxwell sells papers, then a proprietor can find ‘deep pockets’ against libel cases. Similarly, if shorting stock makes money, then Enron will be talked down, or vice versa! Therefore, a ‘successful’ outcome, so
deemed at one point, may not look so after further relevant events occur which bring blaming or shaming. These can lead either to a ‘damn the torpedoes, full steam ahead’, or to flight (Pixley 2004; Davidson 1991). Few could deny, even from cursory reading of the financial press, the conflicts involved. CEOs make counter-claims about their competitors; law suits are waged to defend a reputation; analysts raise questions or bestow praise; stock values rise and fall; public protests occasionally have an impact; hedge funds may short a stock; private equity firms criticise the takeover target which responds in kind. Inquiries are held; government officials intervene; public relations firms defend clients against other firms; management consultants are hired to change a firm’s structure; credit-rating agencies pronounce on a firm’s credit-worthiness; accountants value firms. Each sector has its seasonal ups and downs, with less impact on attributions after a run of failed assessments. Attribution struggles, therefore, are socially contingent, waged all the time and are the cause of booms and busts (or the business cycle). But the actual moment when attributions coalesce into uniformity is unpredictable, yet that moment is decisive in downward and upward swings.

9. Time orientations – further hypotheses

Uncertainty cannot be overcome although it usually cannot be thought either, in the fast pace of decision-making. So, major economic decisions are made by relying on expertise, institutions and norms, habits and conventions, organisational structures, path dependencies and power relations. These all serve to reduce the extent of choice, in a functional sense. This is economic sociology’s claim (successful in my view) against rational choice (Beckert 1996: 827-30). Beckert also rightly argues that innovation could not occur without uncertainty and choice. On one hand, a reduction of choice can ameliorate the extent of perceived uncertainty, and on the other, choice must exist to innovate, under inevitable uncertainty. While stable institutions do not invariably reduce actual uncertainty, decision-makers have to imagine and trust that their actions will be validated in the future (whether aware of possible failure or not). Attributions about past outcomes influence their pessimism or optimism. So too will the predominant orientation to time in an organisation.

---

25 Shorting stock is selling a security that is not owned (or not paid for, ‘as yet’), in the ‘belief’ that it will fall in price (hedge funds do this in ‘hedging’ whether, in general they are either bearish, bullish or usually both, to hedge). Stock is re-purchased later if the price is ‘right’. Bears used to be despised in the 19th century for making money out of others’ misfortunes, whereas bulls tend to talk up the gullible to join, usually too late (Fraser 2005). Note also, in the decision-making literature, many, eg Davidson’s witty metaphor above, draw on sea-faring analogies to driving a ‘ship’: often to ignore the wider social and institutionalised sea in which firms are enmeshed.
The question of whether the past, the present or the future is emphasised in an organisation’s outlook towards the future is sorely neglected, particularly that there are two long-term views, not merely a short-term and a long-term. ‘Time’ is a-political, although conservative, anarchist (and Chiliast) and liberal or socialist utopias, for Mannheim (1936), are respectively past, present and future oriented. Yet time is an inescapable concept in framing views. What is the impact of time-views on economic decisions?

In comparing the following three diagrams, time-orientations are significant and, although the present-oriented might seem the more ‘political’, this is not so. First, even the most cautious bankers report a relentless pace where each decision must be made in 30 seconds. Second, studies by Jens Zinn and colleagues (Bonß & Zinn 2005) demonstrate conclusively that shortening the time frame is a common strategy for dealing with uncertainty, as in the metaphor of the sounding rope: when the rope is scraping the rocks, the ship is lost, if not, all is well. Third, previous ghastly experiences (somatic markers: Damasio 1994) are highly influential but politically arbitrary.

**Figure 4. Influence of past time-orientation on expectations, decisions and outcomes**

Pixley’s model further adapted.; see previous references and Mannheim 1935. Graphic Design by Jamil Yamani (College of Fine Arts, UNSW, Sydney).
In the case of a firm being *past-oriented*, rational decisions are formed by extrapolating the past: here it stretches way back. Because there are so many different, negative and positive cases, the convention that the future resembles the past/present is difficult to simplify. Is this a 1929 case or not? What were the crucial factors in 1996? Are they the same today? Paralysis can set in and there may be a tendency to ‘cling to Nurse/for fear of finding something worse’. Even so, a firm might refuse to engage in certain activities if the past gives a sense of foreboding, and prefer engaging in financial activities for which the firm has high competence. It can require bravery to ignore the most fashionable finance instruments of the day.

In a *present-orientation*, only recent outcomes of millions of cases are counted: firms must also look alike. Such a model copies the cognitive rules of statistical probability. The ‘convention’ that the future resembles the past is radically simplified by narrowing the time-span to give an appearance that a probability can be assigned to each outcome, and to imagine that risk management and insurance are possible. Decisions here are quick, short-term, sometimes reckless and at great cost to society. Memories are short, particularly if the previous attribution struggles were won. In finance, the ascendancy of rational choice and rational expectations promotes a present-orientation but it is also found among Buddhists who merely live for each day and make no attempt to ascertain the future whatsoever.
A future-orientation is more prone to accept uncertainty, like the past-view but not expecting that history 'tells us' what the future will be. Here, history only 'tells us' that there is uncertainty. In finance, as elsewhere, this view would – if open about uncertainty – slowly and publicly propose precautionary measures against unknowable dangers. There would be acknowledgment of past failures and successes, and study of the present data, but these are acknowledged as mere guides. The major focus is on the current decisions to be made. These need open debate and publicity to counteract short-term losses under the contemporary competitive financial regime. For example, 'corporate social responsibility' tries to show that this is more profitable in the long-term.
There are, however, two types of future orientation. One type of firm acts as if it were present-oriented, in competitive operations with other firms. However with the increasing rate of acquisitions and mergers, and in the financial sector this is most obvious with Citigroup after it took over Travelers, there appears to be an implicit long-term future orientation. That is, there is an acceptance of uncertainty but not in public. This, some fear, is about developing such large financial firms that they become ‘too big to fail’. These firms are therefore acting on a long-term, unstated assumption that the state will arrange a bail-out if ‘something happens’.

Keynesian policies tried to trick enough businessmen by ‘allaying anxieties, inspiring confidence’ (Wiley 1983:45), and governments hoped that enough firms would invest and therefore create a rosy future. Financial firms were strictly regulated. In contrast, the new orthodoxy inspired confidence in the market. The cognitive rules and extrapolations from the past operations and strategies under Keynesian rules all had to change to validate the convention that the future will resemble the past. Cast adrift into new uncertainties of competitive market rules, decision-makers in finance turned to distrust: accountancy firms and credit-rating agencies went global to allay distrust. As I show (Pixley 2004), distrust created trust in controllable future actions and
the time-horizon shortened. Yet today’s largest financial firms implicitly accept uncertainty and, by becoming ever larger, engage in moral hazard.

Another type of future-oriented firm accepts uncertainty and, in public, could urge precautionary measures for the long-term survival of the firm and defence of the public goods aspect of the money created through loans. Greater regulation of global liquidity might be demanded. However, that is difficult where highly competitive rules are in place.

**Conclusion**

Formal rationality is not possible in the sense that calculations cannot be made about the unknowable. The processes of formal rationality are recreated each time the rules of the financial game are changed: as Wiley puts it, we only have ‘cognitive wrappings’ to put around uncertainty and simply make leaps of faith (Wiley 1983: 42;40). This paper has shown that cognitive and emotional rules take a number of forms, in different assessments of past, present and future.

Major economic decisions are made rationally under the motivation of specific emotions. The neglect of uncertainty is a source of irrationality, whereas emotions – as influenced from feedback of the attributions about past outcomes – give direction and motive to decisive action. Although emotions are not controllable, and are unpredictable, trust and distrust in the social institutions and conventions that reduce our perceptions of uncertainty are not irrational. Nothing new would happen, gains and losses would not occur, if our world were predictable. My hypothesis about the impact of time-orientations is the next direction of my research. The social institutions which demonstrate how uncertainty implicitly prevails are the attribution conflicts after unexpected outcomes, the time-orientations which are unavoidably part of decisions, and the political struggles to control sources of unpredictability. In Anglo-America the past twenty years of policies attempting to control ‘product-price inflation’ removed that uncertainty but meanwhile, asset-price inflation has gone ‘through the roof’. 26 Squeeze uncertainty in some places and it pops up, unpredictably in others.

Attributions are an everyday influence on decisions because, given uncertainty, there are only debates and competing claims about the past outcomes, with which to face the future. When attributions coalesce, they play a major role in creating a boom or bust, but the timing of such unanimity cannot be predicted. The same unpredictability is present in time-orientations. We may see an increase in short-termism, or a long-term future-oriented view in large firms, that implicitly relies on a bail-out at public

---

26 Alan Greenspan’s terms used in 1996 (cited Pixley 2004: 111)
expense, may predominate. Even so, the larger financial firms may urge precautionary policies. As we do not know, that cannot be ruled out.

References

Fraser, S. 2005 Wall Street: A cultural history London: Faber & Faber
Friedman, Milton 1953 Essays in Positive Economics Chicago: University of Chicago Press
Luhmann, N. 1979 Trust and Power, Chichester, John Wiley & Sons
& Economics 36, April: 453–86.
& J. Zinn (eds) Risk in Social Science Oxford University Press