RATIONALISING IRRATIONALITY: THE SCOPE OF KEYNES' CONVENTION

Shachi Amdekar¹

Centre of Development Studies University of Cambridge Email: sda32@cam.ac.uk

I. INTRODUCTION

The urges of human nature constantly seek to compensate for future uncertainty by consciously or subconsciously constructing an edifice of expectations, upon which judgements of relative likelihood are applied and decisions made. Yet lacking information on future outcomes, choice of action cannot in general depend on any set of quantitatively established, ranked possibilities; as such, expectations are inevitably constructed by means other than deduction.

In Keynes' General Theory (1936) and his 1937 publication 'The General Theory of Employment' in the Quarterly Journal of Economics, Keynes develops a theory of how rational agents make decisions under uncertainty. In doing so he essentially deconstructs the Neoclassical assumption of perfect information and separates it from that of rational agents' expectations by depicting short-term pursuit of economic decisions as falling back upon a rationalised contingency plan or "convention" (Keynes, 1936; Ch.12, IV) when faced with evident and habitual failure of the perfect information axiom assumed in economic models². Keynes considers that this type of 'rational irrationality' is such that overall the state of long-term expectation is determined, on the whole, quite rationally given imperfect conditions of endowment. Yet given that expectations cannot be purely deductive, in doing so Keynes can be - perhaps legitimately - criticised for stretching the term 'rational' beyond its scope for the sake of his economics analysis. Shackle (1967) for example considers Keynes' treatment of expectations for making investment decisions to be non-rational at best. Certainly short-term reliance on convention (Carabelli and Cedrini, 2012) in the face of uncertainty brings influence of abstract, "unreasoned elements" (Meeks, 1991: 19) into the decision-making process³. However, the following theoretical paper focusses on the micro-level factors and processes that rationalise these unreasoned, irrational elements. The argument makes the case that Keynes' argument

¹ The earliest version of this paper was written in 2013 in partial fulfilment of the MPhil in Development Studies, University of Cambridge for Paper 14: Philosophical Issues in Economic Development under the guidance of Dr. Gay Meeks. Her comments on this revised piece have been most helpful, as have those by Dr. Shailaja Fennell. However, the usual caveat applies: any mistakes and misunderstandings are all mine.

² Keynes (1937) notes that economics as a discipline traditionally idealises and relies on assumed availability of all decision-relevant information for "abstracting from the fact that we know very little about the future" (ibid: 215). Crucially this permits "pretty...polite" (ibid) prediction of economic outcomes based on statistical expectations and parameters such as interest rates, thus bringing "definite and calculable form; [with]...risks...capable of an exact actuarial computation" (ibid: 213).

³ It should be noted that this is a short working paper and closely follows Keynes' own material from *The General Theory* (1936) and 'The General Theory of Employment' in QIE. The vast and impressive body of recent literature on these texts, including those of Carabelli (2002; with Cedrini, 2012), Dow and Dow (2011), Hoover (1997), Meeks (1991; 2013), Marchionatti (1999), Lawson (1985; 1993), Ruche (1990) and Zappia (2015) is not discussed here in depth.

might be strengthened in impact, coherence and internal consistency if he were to take the term 'rational' even further in a more general theory of economic expectations beyond the remit of investment decisions.

II. THE SHORT-TERM: SOURCES OF IRRATIONAL INFLUENCES

The inclusion of abstract, irrational influences is contextualised in Keynes' reiteration of the "extreme precariousness of the basis of...[predictive] ...knowledge" (Keynes, 1936: Ch.12 III) concerning future investment outcomes. Facing these investment scenarios under uncertainty, Keynes proposes a human tendency to fall upon the second best behavioural pattern as a contingency plan or "tacitly agreed... convention" (Keynes, 1936: Ch.12 IV), when unable to precisely calculate future predictions. Convention is a longterm construction, defined hereunder by the inductive assumption that the existing state of affairs continue indefinitely, unless there is definite reason to deviate (Keynes, 1936). This is later argued to represent as Keynes intended, a reasoned best response to the uncertainty problem in investment decision-making. Yet when examined closely, the immediate process of formulating this rational response of convention itself invites three interdependent sources of irrationality – or at least non-rationality – when contemplating short-term future decisions. In increasing order of abstraction:

- i) The Basis for Predictability: Most patently, if we disregard the context of limited information, the dependence on the use of inductive convention of extrapolating past experiences could appear in itself non-rational. We might cite here, as does Meeks (1991), Bertrand Russell's allegory of the unfortunate chicken who finds one day, at his expected feeding hour, his neck wrung in the hands of the farmer who would have 'normally' fed him. This Humean analysis⁴ of Keynes would emphasise the role of habit and custom to have influenced Keynes' conceptualisation of convention. As the fate of Russell's chicken demonstrates, there *should* be no reason to believe that the comfort of habitual experiences can have predictive power. An individual's ability to form any predictive expectations at all is limited by the number and variety of his or her past experiences. The frontier of possibility is necessarily determined thus. But even then, there is no reliable reason to believe previous variations of possibility should resemble future ones.
- The Basis for Constructing Expectations: Notwithstanding the potentially nonrational dependence on convention, more abstractly the consequent impulse to assign levels of probable likelihood to unknown, unpredictable future forecasts is irrational. This appears to arise from the perhaps self-centred tendency to relate oneself to events that occur. As Keynes indicates when discussing expectations of market prevalence, there is establishment of false correlation, such that existing valuations are irrationally deemed to be "uniquely correct" (Keynes, 1936: Ch.12 IV) and to be causally linked to our existing knowledge of facts thought to affect investment yield. This gives the ability or at least, impulse, to construct a set of expectations. It implies that if this knowledge base increases or indicates change, the yield is immediately expected to "change in proportion (Keynes, 1936: Ch.12

⁴ See Meeks (1991; 2013) on the comparisons of sequential thought between Hume and Keynes, and Carabelli and Cedrini (2012) for a fuller discussion on the direct influences of Hume on Keynes.

IV) to reflect this, even though there can be no rational assurance of this, given our degree of ignorance.

iii) The Basis for Expected Payoff from Forward Decision-Making: From the very outset, the motivation for forming expectations - namely the future reward incentive for constructing expectations upon accepting risks - might be interpreted as irrational. On the one hand we accept the existence of systematic future uncertainty, and hence recognise future certainty as a purely theoretical concept, rendering risk inevitable. On the other hand, belief that correct predictions under uncertainty should at all yield rewards beyond that under certainty, and thus incentivise taking risks - is non-rational in an abstract, non-market context. The latter scenario of certain "future futures" (Russell, 1912; Meeks, 1991: 29) is defined only in the retrospect, as a theoretical benchmark. As such, it might appear that the rational basis for indulging in any uncertain decisions - investment or otherwise - can be questioned.

As shown above, it can be seen that from the outset the application of Keynes' convention introduces elements of non-rational behaviour to short-term activity at the most abstract, microeconomic level. It is these that leave Keynes' theory open to critics, seemingly undermining Keynes' apparent rationalisation of decision-making practices under imperfect conditions.

III. RATIONALISING IRRATIONALITY I: LONG-TERM COMPENSATORY FACTORS

Despite Keynes' emphasis on how irrational and non-rational factors are introduced into short-term decision-making, his use of the word "convention" gives recognition to a long-term phenomenon that determines the state of long-term expectations. By refuting the statement that "everything depends on waves of irrational psychology" (Keynes, 1936: Ch.12 VII), Keynes implies that the short-term behavioural fluctuations created by the irrational psychological influences described above, have associated "factors exert[ing] ...compensating effects" (Keynes, 1936: Ch.12 VII). These fluctuations therefore need not determine long-term expectations, which are conversely "often steady" (Keynes, 1936: Ch.12 VII). We can broadly consider these compensatory factors to be either or both:

- i) Those exogenous to decision-making that promote long-term stability, and,
- ii) Those endogenous to individual decision-making that minimise short-term risk.

By making this distinction, we can illustrate how both types of factors optimise uncertain situations, to "somewhat mitigate...effects of our...ignorance" (Keynes, 1936: Ch.12 VIII)⁵. Keynes' analysis indicates that economic decisions we make under uncertainty have some endogenous means of "legitimately encourag[ing]" (Keynes, 1936: Ch.12: IV) ourselves that we can minimise the risks associated with our ignorance. Primarily, these factors rest on Keynes' 'convention' of extrapolating present conditions being widely adopted, and the general assumption that this following of convention "holds good...[and

⁵ See Zappia (2015) for an analysis of "impolite techniques" to achieve a similar effect, upon reinterpreting Keynes' *Treatise on Probability* (1921).

makes the investment] ...reasonably "safe"" (Keynes, 1936: Ch.12 IV). We then only risk change in immediate news, which can be monitored and expectations formulated under conditions of uncertainty, such that decisions such as investments may be revised, or perhaps reversed according to sentiment. Frequent revisions or reversals of expectations can, in a sense, counterbalance an individual's relative irrationality in short-term decision-making so may not have a large aggregate impact.

Propensity for herd mentality limits the impact of outliers in long-term movements, as hedging risk involves following general consensus. This is perhaps a more direct consequence of assuming that past experiences hold true; the wisdom of the collective is a powerful enforcer. For example, when settling into a new town, it is habitual to call upon and befriend neighbours, not only for social interaction but also for essential guidance on social norms in that town - e.g. which doctors to register at, the general opinion on whether the local councillor has done a good job, and so on. On this basic level - and with no other knowledge or point of reference – it would be perfectly rational to take on this wisdom. The popular use of websites that permit customer reviews demonstrate the importance of the collective for making what we might call 'informed' purchase decisions. Indeed, so prevalent is public participation in markets that even professional investors now anticipate the expectations of the average opinion, as a proxy to anticipating actual investment yields. Keynes' famous analogy of the beauty contest embodies this concept. Keynes (1936) further likens this risk-minimising phenomenon to that of a 'safe' player in Musical Chairs, who consistently secures a seat. Those who do not accept the safety of consensus face higher risks and opportunity costs of strategy, "jeopardising...[their]...predominance" (Keynes, 1936: Ch.12 V) in determining longterm market valuations.

Keynes' investment example also adopts more intuitive micro-level risk-minimisation measures. Linked with the idea of falling back on herd mentality and the underlying appeal of collective wisdom, is the notion of personal trust in the expertise, ability or influence of that collective. Moreover the wisdom of the collective may rather be the wisdom of the individual - the critical mass of that collective is variable and thus scalable in its scope, according to levels of trust. Outsourcing decision-making problems to a network of trust, however large or small, wherein social capital and human capital intersect, will have this risk-minimising effect. Early investment decisions emphasise personal trust as assurance against short-term risk; Keynes describes large-scale, longterm investments habitually made in one's own enterprises or that of one's associates, rendering outcomes "governed by...abilities and character of the manager" (Keynes, 1936: Ch.12 III). Taking a more macro-level approach, this example can be likened to Lucas' intuitive, albeit simplistic explanation of why more capital flowed to poor countries during the colonial heyday than in the 20th century: the increased risk of being unable to enforce long-term contracts without the reassuring influence of expansionary foreign policy (Lucas, 1990).

Modern, evolved markets demonstrate how the sheer volume of economic decisionmaking can dilute perceived levels of risk of individual decisions. For example, picking a dinner of an ordinary evening need not be an especially taxing decision to make; dinners, after all, take place each day and the volume of decisions to be made over time becomes great. A new recipe chosen at whim is easily risked, and if the meal is unsatisfactory on one day, the next day that decision can be revised. A rather heavier weight, on the other hand, is placed on that same decision taken by a prisoner condemned to death in choosing his or her last meal. Such a decision more likely to be risk averse and based 'conventionally', on historical favourites, because of the weight of finality and exclusivity of this single, free, and never-to-be-replicated occasion. The Keynesian concept of liquidity-preference to alleviate risk, as Stock Exchanges regularly revalue investments, enables the punter to easily "revise his commitments" (Keynes,1936: Ch.12 III) and so increases willingness to pursue a greater volume of short investment terms. Thus Keynes argues that short-term investments are retractably liquid for the investor, while the enterprise maintains long-term illiquidity.

To reinforce the compensatory impact of the factors already discussed, the existence of an appropriate institutional context for decision-making processes is important, and may be constructed if lacking. These institutional enforcements not only compensate an individual's perceived levels of risk to counter-balance irrational influences, but from a regulatory perspective, also keep check of actual levels of the same to maintain long-term stability. In this sense, Keynes' policy prescriptions are arguably themselves an exogenous institutional factor to further protect financial markets from becoming a "whirlpool of speculation...[with]...the activities of a casino" (Keynes, 1936: Ch.12 VI). The idea of the state taking "greater responsibility for directly organising investment" (Keynes, 1936: Ch.12 VIII) - for example transaction taxes to discourage the prevalence of speculation over actual expectations of yield – indicates Keynes' concession that a limit exists to which irrational short-term decisions may influence the state of long-term expectations. While imminent speculative decisions "may do no harm as bubbles on a steady stream of enterprise" (Keynes, 1936: Ch.12 VI), they must at some stage be curtailed for long-term stability. Such measures might include socially advantageous investments in public utilities, promotion of prolonged investments like construction, establishment of distinct property rights, and supporting legal institutions for lengthy contracts that permit "continuity and security" (Keynes, 1936: Ch.12 VIII), thus stabilising trends in long-term expectations.

We have argued so far that falling back upon Keynes' convention and assuming induction from past to future includes influences to investment decisions that may be rendered irrational under abstract scrutiny. Yet Keynes' presentation of this convention as a contingency plan under uncertainty permits these unreasoned elements to influence short-term decision-making in a way that is more justifiable overall⁶. The compensatory factors Keynes describes – including the propensity for herd mentality, trust in personal relationships, volume of decision-making processes, and the existence or construction of appropriate institutional conditions – gives the perception of rationality, and thus motivates rational agent behaviour.

IV. RATIONALISING IRRATIONALITY II: ENDOWMENT, COMPENSATION, AND KEYNESIAN RATIONALITY

Accompanying the existence of compensatory factors that Keynes describes (as explained above), are what we might call conditions of endowment in Keynes' chapter on the state of long-term expectations. Endowment in this context refers to the processes involved in

⁶ Meeks considers, "crucial though Keynes thought the impact of uncertainty on action and especially on the investment decision...he did not view the resulting behaviour as unreasonable...rather the reverse." (1991: 19)

all decision-making under uncertainty that Keynes defines as given, or axiomatic⁷. These are *a priori* conditions, in contrast to the compensatory factors defined in section III, which may or may not apply to the decision-making process depending on the situation. As far as Keynes' theory is concerned, there are two conditions of endowment:

- i) The first is, most plainly (giving rise to the discussion above), the immediate need to make justifiable decisions in the face of imperfect – or indeed no – information. Tempted as we are to deem our decisions to be wholly logical, informed and rational, Keynes argues that we only "...[save]our faces as rational economic men" (Keynes, 1937: p.214) by following a common blueprint, convention, or contingency plan for economic decision-making. We are thus first endowed with the condition of having to reluctantly eliminate "depend[ency] on strict mathematical expectation" (Keynes, 1936: Ch.12 VII) thus giving motivation for using convention.
- ii) The second condition of endowment that Keynes describes is the urge for activity rather than inactivity, described famously as "animal spirits" in Keynes' analysis of consumer confidence; so strong is this urge that the willingness to make decisions and act is not impeded by mere lack of information. This, Keynes describes as the "innate urge to activity" driven by "spontaneous optimism" (Keynes, 1936: Ch.12 VII), such that the decision to make decisions at all is upheld, despite the whole process having irrational elements⁸. In this sense, the decision-making processes underpinning Keynes' example of investment behaviour can be likened to the willingness to enter into a gamble, as he alludes to an almost evolutionary human instinct.

Though Keynes' convention introduces irrational influences as outlined in section II, the combination of long-term compensatory effects described in section III and the conditions of endowment explained above can together formulate a persuasive argument to rationalise these. That is to say, the three irrational influences that are brought in by the use of Keynes' convention can be argued to be establish in three perfectly reasonable – or even rational – trails of thought, given how compensatory factors work on conditions of endowment. In the context of this discussion, we interpret them using examples as follows:

 The Rational Basis for Predictability: Animal spirits, or the optimistic urge to form expectations and take decisive action permits us to ignore our inherent ignorance and justify decision-making. Moreover, the compensatory factors have a forceful effect. To take animal spirits more literally, in the case of Russell's chicken it may be argued that the chicken would have felt some sort of personal trust or affinity for the farmer, and thus essentially outsource its fate to him. It may have witnessed other chickens being fed each day, and this effect of herd mentality would further rationalise its expectation. Depending on the age of the chicken, the expectation of being fed daily would be a decision made in some volumes. Lacking understanding of future probabilities – and in the chicken's case, presumably also future possibilities – it is rational

⁷ Perhaps 'endowment' is not the ideal word for capturing this concept, for the element of positive or financial capability it implies. This is certainly open for discussion – but lacking a better alternative so far, 'endowment' is used for the purposes of simple conveyance of this concept.

⁸ See Ackerloff and Schiller's (2009) full discussion on whether and how the irrationality of these animal spirits can be adequately captured in modern macroeconomics.

to assume that prevailing conditions in the closest period to the future (i.e. the present) are a "serviceable guide" (Keynes, 1937: 214) to forming expectations. Albert Einstein is commonly quoted to have defined insanity as the process of doing the same thing over and over again while expecting different results. Such an observation, though undoubtedly influenced by physical laws (which are somewhat more reliable), would rather imply that it would be irrational for the said chicken to expect anything other than food. The chicken, as far as it has come to know, is in a closed model with norms seemingly as certain as the physical laws to which Einstein refers; any other expectation would be arguably more whimsical, more imaginative, and more irrational.

- ii) The Rational Basis for Constructing Expectations: We accept the current state of affairs until informed otherwise. At this point we may construct expectations of future prospects based on prevailing conditions, with no point of reference other than personal experiences, whim and sentiment. Yet analysing opportunity cost indicates a rational method to this apparent madness. For example, when a skilled skier takes on an unfamiliar run, he or she places personal trust in the accumulated inductive knowledge from personal experience to cope with the present situation, and constructs expectations on difficulties faced in the past, including changes in the gradient, snow depth, or any obstructions. Though he or she has no predictive power to foresee, for example, a hidden cliff edge (unless inductive knowledge has informed of the gloomy fate of the skier ahead), constructing various immediate expectations on the basis of fear would be rational in grappling with the situation. Such an example demonstrates how when endowed with animal spirits, necessity⁹ can be a reasoned justification for establishing levels of expectation. Yet on the other hand the process a professional investor might attempt in trying to forecast long-term prospects of a business can be, according to Keynes, "intolerably boring" (Keynes, 1936: Ch.12 V) if he lacks the gambling instinct that leads to a different sort of 'game'. Animal spirits would perhaps rather take us elsewhere, to more exciting places: for example, we could speculate over tomorrow's weather all day, or just wait for it and enjoy more interesting conversation.
- iii) The Rational Basis for Expected Payoff from Forward Decision-Making: Given the first condition of endowment, we accept that our judgements which not derived from deductive reasoning, are shrouded in doubt. Yet upholding the notion that we are nevertheless rational, we might still try so far as we could to reduce our risk and increase our long-term reward (which may equate to long-term stability). However, it is important here to give the institutional context due consideration. For example, the recruitment of a football manager for a major team is often a big decision. The supposedly better managers would be those with what might be called a 'proven record' of turning around teams perceived to be poor. This consideration cannot however, take into account numerous other more important factors (including the quality of the team and its rival, luck, weather, etc.) that impact who actually wins games; herein lies a basic irrationality. And yet, because the institutional set-up of competitive sport involves high stakes and perhaps the highest of animal

⁹ This is an idea explored in Kahneman's 'systems' of thought, according to the necessity of each (Kahneman, 2011).

spirits amongst a large group (or herd) who need to be collectively satisfied, it would be reasonable or even rational to hire the perceived better manager in whom there is more personal trust. We thus rationally believe in the magic of people – rationalising irrationality. As such, the principle by which we come to expect a payoff is a direct consequence of convention, and of the economic and/or social institutions we have constructed. For Keynes' analysis, the ease of and emphasis on payoff that a stock market commands is such that convention deems our optimism to be rational. If the market structure did not have payoff incentives, we would arguably be less inclined to need to form expectations on the future.

Thus in the context of economic decision-making, the justifications for taking an inductive approach and assuming the convention can be 'made' rational. Combining Keynes' compensatory factors with the conditions of endowment, each of the three seemingly interdependent sources of irrationality that Keynes' convention introduces can be established in rational, or at least reasonable trails of thought on the microeconomic level.

V. THE CASE FOR EXTENDING KEYNES' RATIONALITY

So far we have demonstrated using examples and relevant principles the idea that Keynes' conceptualisation of decision-making under uncertainty is in a sense both irrational and rational; he is argued to depict the process of rationalising irrationality. Given conditions of endowment and compensatory factors (polite, or as applied to the irrational influences, the latter are rendered – or at least perceived – to be more rational than they perhaps truly are in the most orthodox sense of deduction. At least, they are certainly not derived from any sort of first principles. This seems consistent within Keynes' broader framework, if we consider the importance given to perception in his beauty contest analogy. However, those critical of the Keynesian notion of decision-making under uncertainty argue that Keynes stretches the term 'rationality' too far, by claiming inclusion of irrationally-influenced convention in the short-term can be deemed collectively rational in the long-term. Taking this well-documented perspective ¹⁰, there are undoubtedly certain complications with the account Keynes presents, which indicate the concept of rationality is manipulated.

Nevertheless, critics of Keynes' argument on convention chiefly challenge the idea that imprecision in definition, application and ideological scope of the term 'rationality' are seemingly accepted by Keynes, in explaining investment decisions. Yet by his own admission, his intent in presenting this argument is to analyse not the larger context of decision-making, but rather the "comparatively simple fundamental ideas which underlie...[his]theory" (Keynes, 1937: 212). That is to say, the presented sequence of Keynes' argument was developed to underpin his argument about investment decisions. Hence, we consider hereunder how if these points of criticism were to be applied to broader, non-investment examples, a new compensatory factor enters the equation and increases the perceived rationality of irrational elements (and thus the appeal of convention). This is namely the reassuring quality of retrospection following decisionmaking, defined as the propensity to assess past decisions with a rose-tinted bias where binary outcomes do not exist, such that:

¹⁰ See Shackle (1967), for a prominent example of this argument.

- 1) A past decision made under uncertainty (regardless of the irrational or whimsical influences that went into it) that turned out to be beneficial can always be lauded. This may include, for example an investment that rose in value.
- 2) For past decisions made under uncertainty that came to be unequivocally bad (such as a bad investment, commensurately signalled by monetary values), hindsight is, as they say, always 20-20. The same decision will not be repeated due to the regret it brings.
- 3) However, past decisions made under uncertainty may yield uncertain results the result may not be easy to perceive. Keynes alludes to this principle with the remark that, "The actual results of an investment over a long term of year very seldom agree with the initial expectation" (Keynes, 1936; Ch.12 IV). This remark concerns the particular case of investments held over long periods of time. It is worth noting, however, that such a situation can indeed be quite usual with noninvestment decision-making situations, where is not easy to create a binary system of category (without the signalling mechanism of price) to assess good versus bad decisions. Where decisions can be defined neither good nor bad, there is a tendency to see them as 'fair enough', 'fine', or else write them off as 'an experience' because they led to the present point of time, regardless of the evident disutility they brought. Retrospect, in this sense is biased towards the creation of a narrative, often guided by nostalgia, in non-monetary contexts of decisionmaking. That is to say, where decisions are not flagrantly bad and marked by regret, there is a tendency to take the reassuring view that past decisions were simply 'the way that it was supposed to be'. Attitudes toward going back in time, and the concept of the butterfly effect perhaps add to this idea. In this sense changing even one small element of the past is recognised to mean that the present becomes a redefined unknown; on a personal level, an individual may feel defined by the past and behave accordingly.

The introduction of this new factor can relate to modern literature on conformation bias in cognitive science. Taking the introduction of this new element when dealing with nonmonetary decisions under uncertainty, we thus seek to address specific points of criticism by applying these concepts to non-investment examples, relating these to Keynes' compensatory factors and the conditions of endowment, as well as the introduction of retrospective analysis as a new factor. The case is made that the universally relevant relationship between abstract individual behaviour and long-term aggregate behaviour indicates that we might smooth any problematic inconsistencies and imprecisions by considering whether Keynes may have reflected upon a broader system in his notion of 'rationality'. This would suggest that Keynes' argument may have a larger scope in its definition and application, and include investment (and other monetary decisions) alongside non-monetary decisions.

i) Criticisms of Definition: On the one hand there are discrepancies in the dynamics of Keynes' convention and spontaneous optimism. A key issue lies in the lack of definition of convention, what Carabelli and Cedrini define as the "central organizing concept" (2012: 17). Davis (1997), for example, argues that Keynes was unclear about how conventions are adopted, practiced and evolved over time. In this case, together with Keynes' idea of spontaneous

optimism, the process by which there is a supposed urge to act may be seen as contrived: do we actually constantly seek inductive expectations when uncertain, having accepted our ignorance en masse? There are exceptions, where we take 'fun' economic decisions of equiprobability, with neither rationality nor necessarily economic incentive at all, like playing Heads or Tails or hoarding our savings to avoid investment decisions; sometimes 'ignorance is bliss' in making mindless decisions. As such Keynes' application of rationality is open to some criticisms, being arguably less defined and more inclusive than reality might permit.

Yet on the other hand, broadening the definition of convention should, as Carabelli and Cedrini (2012) argue, permit the concept to encompass any technique at all, to overcome ignorance and make decisions. As such the process as Keyes describes it is an organic one, and indeed by backward, retrospective-justification, himself uses a detailed, explanatory narrative. We might argue that 'fun' economic questions like a game of Heads or Tails relies wholly on irrational elements like superstition or whim and driven by animal spirits, but the decision to actually play is more certainly one of convention and bolstered by this being a social norm in which people partake. Similarly, the idea of 'spontaneous optimism' might permit the urge for laziness or inaction as a decision itself. Much like speculating over the weather, necessity or lack thereof can determine the extent to which convention is relevant; this is, as Meeks notes, "not inconceivable" (1991: 29). If action is urged, however, it need not take the form of merely investment decisions. Keynes' use of rationality can be applied to other economic activities like consumption, where a gamble is made under uncertainty for an expected utility return. Removing imprecise definitive boundaries here makes Keynes' concepts of convention, endowments, and compensatory factors more powerful when brought together, and any dynamic inconsistencies more reasonably accounted for.

Reliable Relevance of Convention: Even in our definition of convention ii) induction under uncertainty - Keynes can be argued to stretch the term 'rationality' by overstating dependence on extrapolating present conditions to the future. Meeks emphasises that Keynes' idea of convention centres on an inductive process, in which we do not "really believe" (1991: 29), as experience informs us this is unlikely. For instance, when faced with recurring risks, the might routinely overcome inductively-constructed idea that we beliefs/stigmas, is not adequately addressed in Keynes' argument. Keynes and Russell are similar in this sense – Russell's chicken, upon death, never faces his particular uncertainty again so we cannot be sure how he will now behave. However, recurring risks highlight the importance of habit, guiding our belief in the inductive process. For instance, a student routinely eats bread past its expiry-date, picking off any mould, with the view that nothing bad had ever happened. When he experiences a stomach upset, he may take more care with expiry-dates for a few subsequent days, but before long takes to his old ways. In this sense, Keynes' attachment of rationality or irrationality to the inductive process can be considered fruitless; we might not fall upon this undefined convention at all, by 'getting over' the past.

Yet lack of belief in the convention of forming expectations on induction, is based on induction itself, in noting that "we know this to be most

unlikely...[from experience]" (Meeks, 1991). This idea then itself represents an expectation based on extrapolating past experiences, indicating this Keynesian propensity to subconsciously form expectations lacking certainty in future knowledge. Again, expanding the term 'convention' to cover any type of long-term social pattern can aid Keynes' use of rationality. Indeed, even the act of 'getting over the "collapse of part regularities" (Meeks, 1991) is a trend or convention that social pressures and herd mentality create. Some mistakes, like playing with fire, are to be learned from and not risked again. Yet social pressures irrationally dictate that other experiences, like personal relationships going sour, should be to some extent forgotten in the long-term, even though statistical induction demonstrates otherwise. If a woman's beloved husband dies in his mid-30s, she is not encouraged by any modern social convention, to believe that any man she then marries will soon die. It is more likely that with the reassurance of retrospect she will weigh up the experience of knowing him against the tragedy of losing him and with her endowed optimism, eventually (perhaps with support of those around her and their collective wisdom) take strength in this. The personal nature of convention creating irrational behaviour is emphasised alongside the personal nature of the compensatory factors; Keynes' defence that some prospects are beyond probability calculations, is rendered reasonable. Comparing probability is like utilities beyond rational assignment of likelihoods from inductive argument.

iii) Whose Rationality?: There is a case for suggesting that Keynes does not adequately clarify the scope of applying his theory, which in practice exacerbates the "precariousness" (Keynes, 1936: Ch.12 V) of his convention¹¹. As financial markets are publicly formalised they become increasingly thus liquid, the "inducement impersonal and to spend...[a seemingly]...extravagant sum" (Keynes, 1936: Ch.12 III) is rationalised as risk appears mitigated. While Keynes concedes this brings "altogether excessive" (Keynes, 1936: Ch.12 V) fluctuations and "mass psychology...of ignorant individuals...[create] ...optimistic and pessimistic sentiment" (Keynes, 1936: Ch.12 V), the dangers of accepting this white noise are not expounded upon. Nor is the idea of such an argument setting a dangerous precedent. Keynes precariously assumes we speak only of average citizens, whether professional investors or not; the idea of policymakers taking up Keynes' mantle justifying ad hoc government economic decisions made on whim, as rational – would undermine the stability concept of democratic representation.

Yet Keynes can justify lack of defined scope in applying his theory, in its broad generality and the ideology that underpins it. The theory of accepting that we build irrationality into something more ordered, and more rational, implicitly encourages the flow of information as a form of liberal and autonomous progress, such that we can better make these types of decisions¹². Concerns about the impact of an ignorant public or parliament can be eased with better risk alleviation offered by improvements technology and open information.

¹¹ Pech and Milan (2009) use a comparison with behavioural economics to highlight the idea of precariousness in Keynes' theory in this sense.

¹² For more on this, see Dow and Dow (2011) on how policy can target, and perhaps where appropriate, tame animal spirits.

The open source movement is a shining example of this type of dialogue. For the case of investment decisions this may mean access and availability of vast research, by companies like Hargreaves and Lansdown and other investment analytical firms in financial markets (with full disclosure on potential risks), while financial policymakers may be encouraged to speak openly to public via a free press over the commitments by political leaders to justify economic decisions that represent the public. Then, Keynes would arguably quite justified in advocating his theory on short-term decision-making, to support freer information flow from the top-down.

Conceding Irrationality: Crucially, through Keynes' overall message that iv) tendencies toward speculation are a "scarcely avoidable" (Keynes, 1936: Ch.12 VI), rational response to uncertainty may be considered implicit acceptance of a long-term ideological problem, which is vindicated under Keynes' broad definition of 'rational'. While Keynes' use of 'rational' is useful to explain how irrational factors are brought into economic decision-making, it may be considered somewhat defeatist to justify and accept the problems that Keynes explains over this behaviour. The prevalent shift from constructing genuine investment expectations, to predicting mass short-term preferences indicates a shift from maximising returns from economic decisions, to minimising risks that accompany these decisions. It may be of concern that by broadening the term 'rational', Keynes implicitly condones the intellectual depletion in our predictive understanding of investment yields as a logical (and thus technically acceptable) move, as simplistic third-degree speculation of peer behaviour is favoured for its relative ease to pander to the private objective of investment today, and perhaps 'pass the buck' to less skilled investors.

This is perhaps the most valid criticism of Keynes' theory, and yet in itself strengthens Keynes' message, which is indeed one of policy prescription to create institutional stability and trust. Keynes' account is a generalised theory of rational decision-making given endowments and compensatory factors to irrational influences. In presenting this, he shows how the role of uncertainty determines prevailing situations of speculation; this is in turn associated with instability, which should (and perhaps can only) be mitigated by the role of the state (Dow and Dow, 2011). However, the sole application to investment decisions and wealth creation renders it a part of a more general theory, as he explicitly addresses his argument to only one facet of economic decisionmaking. There may be a case for giving the role of the state the mandate to be concerned with 'perfect information' beyond the rational notion of it - and thus be able to cope with both rational agent behaviours under systematic uncertainty concerning future events, as well as addressing all sources of risk from existing and future information asymmetries. Then stretching the 'rational' further to convince on a general scale, policy prescriptions arguably need to be even stronger to protect the irrational individual and public.

To conclude, we have demonstrated how irrational elements come into the decisionmaking process, and discussed how compensatory factors can seem to rationalise these. Keynes' presentation of decision-making under uncertainty thus may on one hand be criticised for stretching the term 'rationality' in his theory and using the term liberally in discussing the applications of his convention concept and its limitations. However, we have presented an analysis of Keynes' sequence of argument and argued that while this was developed for the purpose of underpinning his view of investment decision-making, there is a case for generalising that framework for non-investment and non-monetary decisions. Keynes' argument, which uses both investment and non-investment examples itself, is nonetheless as comprehensive as he requires for his general economic theory, regardless of whether he had in mind a broader framework for this. However, were the scope to be broadened, it would have more applications for day-to-day decision-making as well as for policymaking, which do not have binary implications, are thus complex in their associated conventions, and include compensatory impact of retrospective analysis. A broader application of Keynes' principle, can be said then, to strengthen the impact, coherence and internal consistency. The need to regulate this, however, brings a crucially "sombre" (Meeks, 1991), prescriptive and significant message with the argument.

BIBLIOGRAPHY

Ackerloff, G., Schiller, R.J. (2009) Animal Spirits. Princeton University Press., Princeton, New Jersey.

Carabelli, A.M., Cedrini, M.A. (2012) 'On The Appeal of Chapter 12 of The General Theory: Complicating Remarks on the Keynes-Hume Connection and the Presumed Novelty of the Analysis of Financial Markets in *The General Theory, Universita di Torino Working Paper Series*, No.02/2012.

Davis, J.B. (1977) 'J.M. Keynes on History and Convention' in Harcourt, G.C. and Riach, P.A (eds) *A Second Edition of the General Theory*, Vol. 2, London: Routledge, pp. 149-162.

Dow, A., Dow, S.C (2011) 'Animal Spirits Revisited' in *Capitalism and Society* Vol. 6, No. 2, Article 1.

Hoover, K.D. (1997) 'Is There a Place for Rational Expectations in Keynes' *General Theory*?' in Harcourt, G.C. and Riach, P.A. (eds) *A Second Edition of the General Theory*, Vol. 1, London: Routledge, pp. 219-237.

Kahneman, D. (2011) Thinking Fast and Slow, London: Allen Lane

Keynes, J.M. (1936) 'Chapter 12: The State of Long-Term Expectation' in Keynes, J.M, *The General Theory of Employment, Interest and Money*, obtained online at www.marxists.org, accessed on 10/04/2013.

Keynes, J.M. (1937) 'The General Theory of Employment' in *The Quarterly Journal of Economics*, February 1937.

Lucas, R (1990) 'Why doesn't Capital Flow from Rich to Poor Countries?' in *The American Economic Review*, Vol. 80, No. 2, pp.92-96.

Lawson, T. (1993) 'Keynes and Conventions' in *Review of Social Economy*, Vol. 51, No. 2, pp. 174-200.

Marchionatti, R. (1999) 'On Keynes' Animal Spirits' in Kyklos, Vol. 52, No.3, pp.415-439

Meeks, G.T. (1991) 'Keynes on the Rationality of Decision Procedures Under Uncertainty: The Investment Decision' in Meeks, G.T (ed.), *The Thoughtful Economic Man*, Cambridge: Cambridge University Press.

Meeks, G.T. (2013) 'Post-Keynesian perspectives on some philosophical dimensions of Keynes's economic thinking', in Harcourt, G.C., Kriesler, P. (eds.), *Handbook of Post-Keynesian Economics*, Vol. 3, pp.100-123, Oxford University press.

Pech, W., Milam. M. (2009) 'Behavioural Economics and the Economics of Keynes' in *Journal of Socio Economics*, Vol. 38, No. 6, pp. 891-902

Ruche, J. (1990) 'Keynesian Uncertainty and the Weight of Arguments' in *Economics and Philosophy* Vol. 6, pp. 275-292.

Shackle, G.L.S. (1967) The Years of High Theory, Cambridge: Cambridge University Press.

Zappia, C. (2015) 'Whither Keynesian Probability? Impolite Techniques for Decision Making' in *The European Journal of the Economic Thought*