

The 'Credit Crunch' from a Critical Rationalist Perspective

Rod Thomas

Uses Sir Karl Popper's philosophy of critical rationalism to examine the discussion of the UK 'credit crunch' as presented by the public record of the UK House of Commons Treasury Select Committee's investigation. Identifies various philosophical doctrines that acted to shape that investigation and the testimony presented before it. Presents those doctrines as prejudicial to the advancement of knowledge, learning and rationality. Concludes that the philosophy of critical rationalism is relevant to the problems of modern society.

What marked out man from other species was his unusual capacity for learning from his errors. Today that talent is blocked.¹

Introduction

E.H. CARR FAMOUSLY PROPOSED THAT the historian must blend facts about the past with an interpretation of their significance, and by that process history is created.² One of the more compelling recent episodes of relevance to business and management history was the testimony of several leading British bankers to the House of Commons Treasury Select Committee's investigation into the banking crisis, or the so-called 'credit

1 William Krehm (2002) *Towards a Non-Autistic Economy – A Place at the Table for Society*, Toronto: Cromer Publications, p.98

2 Edward Hallett Carr (1962) *What Is History?* London: Macmillan (cf. "The facts speak only when the historian calls upon them: it is he who decides which facts to give the floor, and in what order or context." p.5)

crunch'.³ Since that time, both expert and popular opinion has busily occupied itself in considering the implications and causes of the crisis. In E.H. Carr's terms, history has thereby been created. Indeed, the mountain of commentary devoted to the banking crisis is second only to the mountain of debts that underlie it.⁴ For publishers, the crisis has created a new genre of popular economic and business literature, offering opportunities for all kinds of historical connections, explanatory theories and hypothesized reform arguments to be explored.⁵ What might this paper add to these many musings?

This paper examines the credit crunch in a manner that is cognisant of E.H. Carr's proposal: it aims to be attentive, not only to 'the facts', but also to that framework that assesses the significance of those facts through their linkage together in the history proffered. That objective creates a higher-order problem: a need to be critically minded about the tracks that the train of thought itself is running on, or a need to be critically minded about what one might call *reason in practice*. As Carr noted, the answer to the question 'What is History?' requires a philosophy.⁶ This is as true of a committee's investigatory report as it is of the work of a popular historiographer.

By that light, this paper is unapologetically philosophical. It examines the Treasury Select Committee's investigation, as presented by its published reports and the public record of its sessions of evidence,⁷ from the perspective of Sir Karl Popper's (1902–1994) philosophy of critical rationalism.⁸ The goal of the paper is to identify those philosophical

3 House of Commons Treasury Committee, *Banking Crisis Volume 1 Oral Evidence* HC144-1, London: Stationary Office, 1 April 2009, available at: <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/144/144i.pdf> (accessed 16 July 2009)

4 One of the several House of Commons Select Committee reports involved 17 evidence sessions and 800 pages of written evidence. Over 5,000 emails were submitted by members of the general public suggesting questions to the principal witnesses.

5 These studies range from a narrative story of the banking collapse in Alex Brummer's *The Crunch: How Greed and Incompetence Sparked the Credit Crisis* (London: Random House, 2009), to a rehabilitation of Karl Marx's analysis of the dynamics of capital accumulation in David Harvey's *The Enigma of Capital and the Crises of Capitalism* (London: Profile Books, 2010) to exculpatory personal memoirs such as the epilogue to Alan Greenspan's *The Age of Turbulence* (London: Penguin Books, 2008).

6 Carr, op. cit., p.13

7 House of Commons Treasury Committee, *Banking Crisis: dealing with the failure of the UK Banks* HC416 London: Stationary Office, 1 May 2009, § 2, available at: <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/416/416.pdf> (accessed 18 June 2009); House of Commons Treasury Committee, HC144-1, 2009, op. cit.

8 For a review of some of Popper's contributions to intellectual life, especially to the philosophy of science, see Chapter 1 of David Miller's *Out of Error – Further Essays on Critical Rationalism* (Aldershot: Ashgate, 2006). For a short guide to Popper's philosophy, see Mark Amadeus Notturmo's *On Popper* (London: Wadsworth, 2003). Karl Popper's principal works are: *Conjectures and Refutations* (London: Routledge Classics Edition, 2002a); *The Logic of Scientific Discovery* (London: Routledge Classics Edition, 2002b); *The Open Society and Its Enemies Vol. I. The Spell of Plato* (London: Routledge Classics Edition, 2002c); *The Open Society and Its Enemies Vol. II. The High Tide of Prophecy Hegel and Marx* (London: Routledge Classics Edition, 2002d); *The Poverty of Historicism* (London: Routledge Classics Edition, 2002e); *Unended Quest* (London: Routledge Classics Edition, 2002f); *Realism and the Aim of Science* (London: Hutchinson, 1983); *Objective Knowledge An Evolutionary Approach* (Revised Edition, Oxford: Oxford University Press, 1979).

dispositions that permeate the discussion of the credit crunch and its aftermath, especially as presented by the public record of the Select Committee's investigation. If it is possible to detect such philosophical content, and it will be argued that it is indeed so, then the *reason in practice* that imbued that investigation, and the testimony that was presented to it by some of the United Kingdom's leading bankers, might well have shaped the public's view of those historical events. The philosophical content that is identified, and the view that it quite possibly shaped, will be contrasted with that which might have been created had the philosophy that informed it been of a different kind; that is, the view that the investigation might have supplied had it been shaped by the theories of knowledge, learning and rationality that are associated with the philosophy of critical rationalism.

Critical Rationalism as Three Problems Solved

Over the course of a long career, Karl Popper considered many philosophical problems and criticised many philosophical prejudices.⁹ He argued that a philosophical prejudice is especially significant because it might well be derived from an unconsciously held theory about a philosophical problem – hitherto unexposed to critical examination – but nonetheless of great potential significance to thought and practical action. Indeed, the critical examination of such theories was Popper's Socratic-style apology for the existence of his professional craft; a reason for professional philosophers to critically examine what one might call *reason in practice*.¹⁰ In the compass of this paper, only three problems that seem to be especially pertinent are considered: the problem of learning, the problem of knowledge and the problem of rational justification.¹¹

The problems of learning and knowledge may be summarised by two questions: *how* can we learn from experience and *what* can we know through experience.¹² This is their modern, more generalised rendering. In the first half of the twentieth century, when Popper began to write about them, they were referred to as the problem of induction and the problem of demarcation respectively.¹³

9 For Popper's views on the nature of philosophical problems, see Popper, 2002a, Chapter 2. For a discussion of philosophical prejudice, see Chapter 13 of Karl Popper, *In Search of a Better World – Lectures and Essays from Thirty Years* (London: Routledge, 1996a) and Popper, 1983, Part I, Chapter 1, § 1.

10 Popper, 1996a, Chapter 13

11 Popper is, of course, famous for his views on the problem of how to demarcate science from pseudo science, logic and metaphysics. But his proposal that scientific laws, as universal statements, are those that are logically falsifiable by basic statements that report experience is a specific aspect of how we can learn from experience and what we can achieve with it. These connect to the general problem of the critical analysis of the appeal to the authority of experience. See David Miller, *Critical Rationalism A Restatement and Defence* (La Salle: Open Court, 1994) and Miller, 2006.

12 Miller, 2006, Chapter 4, cf. Appendix 1 of Popper, 1979

13 Miller, 2006, Chapter 4 (See, for instance, the beginnings of Popper's debate with the Vienna Circle's logical positivists in his letter to the editors of *Erkenntnis*, Volume 3, 1933, p.426 reprinted in Popper, 2002b, Appendix *1.)

The problem of induction denotes a logical contradiction: a principle that only experience can decide upon the truth and falsity of a factual statement cannot be reconciled with the invalidity of inductive inference. It is a problem of considerable importance. Firstly, there is the implication that David Hume recognised: that the invalidity of inductive inference means that a scientific law, as a strictly universal statement, cannot be positively verified and justified by experience because it has a wider reference than those experiences on which it is reputedly based.¹⁴ Secondly, there is an additional implication that Popper highlighted: that theories that do not have the character of a strictly universal statement, but simply assert some singular fact or other, cannot be positively verified and justified by experience if they make use of universal concepts that transcend experience.¹⁵ Yet, despite these problems, it is commonly demanded that the rational acceptance of a theory depends upon it being founded on experience.¹⁶ The demand that knowledge be positively justified by experience is often referred to as the philosophy of 'positivism'.¹⁷

On the other hand, the problem of demarcation, as its name suggests, is the problem of demarcating those knowledge claims that are open to empirical inquiry from those that are not. The problems of induction and demarcation are not only closely related, they also unearth a third problem, what Popper called "the main problem of philosophy... the critical analysis of the appeal to the authority of experience".¹⁸ This latter problem came to be called, largely as a result of the work of one of Popper's most brilliant students, William Warren Bartley III, the problem of justification, or the problem of how to rationally justify a theory or belief.¹⁹

Popper's analysis of this trinity of problems unveiled several presuppositions that are prejudicial to making any progress toward their solution. For instance, the problem of demarcation cannot be resolved if it is approached in an *uncritical* manner; empirical investigation is not advanced by uncritically marshalling the empirical evidence that supports a knowledge claim, for as Popper noted, it is easy enough to find some event or other that verifies an astrologer's horoscope.²⁰ On the contrary, what ought to count in favour of the empirical status of such a claim is whether it *prohibits* any conceivable experience. Hence, the principle of empiricism is recast: knowledge is not based on experience, it is experience,

14 David Hume (1964) *A Treatise of Human Nature*, London: Everyman's Library Edition, Volume 1, Book 1, Part III, § XII

15 For example, a statement like 'here is a glass of water' includes the concepts of 'glass' and 'water' and these characterise the law-like behavior of these things. Hence the assertion cannot be experientially verified without the aid of some invalid inductive logic. See, for example, Popper, 2002b, Chapter 5, § 25 and Appendix *x.

16 For a discussion of these problems, see, for example, Popper, 2002a, Chapter 1.

17 See, for example, Popper, 2002b, p.75

18 *Ibid.*, p.30

19 Popper, 1983, Part I, Chapter I, § 2 – For Bartley's development of this problem, see William W. Bartley III 'Rationality versus the Theory of Rationality' in M. Bunge (ed.) *The Critical Approach to Science and Philosophy* (New York: Free Press, 1964).

20 Popper, 1983, p.162

or, more precisely, planned observation, that may critically test statements of empirical knowledge, and it represents a principle only because such planned observation may be easily checked.

But that insight has repercussions for the problem of induction, for that problem involves the prejudicial presupposition that knowledge is what is *created* by experience. Popper's revolutionary insight was that the whole problem situation looks rather different if one views experience as that which enables the critical *test* of a knowledge claim.²¹ For in the empirical investigation of strictly universal statements, this replaces the invalidity of inductive inference with the validity of deductive logic. Similarly, if "ordinary singular statements are always interpretations of 'the facts' in the light of theories",²² then their empirical investigation may entail the deduction of further singular statements which may, in turn, be tested against the reports of further experience. Taken together, if a claim is empirical it ought to be possible to subject it to empirical investigation, by deducing from it a statement of some possible experience that it prohibits. This is a solution to the problem of demarcation. But if a knowledge claim is falsifiable in that way, then it can be tested by experience, or at least by the statements that report experience. If it fails that test then we have learnt that there is something amiss in the deductive system of statements or with the testing method. That opens the possibility of *learning from error* and the possible revision of the original knowledge claim. Hence knowledge advances out of error – that is the solution to the problem of induction.²³

What about the problem of rational justification? For Popper, this too is solved. For theories cannot be positively justified by experience. They are forever conjectural – it is up to us to probe, test and criticise them, searching for error. That is all that logically valid argument permits. If we can't find any evidence of error, despite our very best critical

21 See, for example, Popper, 1979, Chapter 1

22 Popper, 2002b, p.444

23 Popper's interest in solving these problems resulted in him being often labelled a 'positivist', much to his obvious annoyance. See, for example, Popper, 1996a, p.89. Given that his criticism sought to demonstrate the impossibility of founding knowledge on sense experience and of demarcating empirical science from metaphysics by reference to a principle of verification, both central to the approach of logical positivism, the label does seem rather misplaced (cf. Peter Munz, *Our Knowledge of the Growth of Knowledge Popper or Wittgenstein?* London: Routledge & Kegan Paul, 1985, Introduction). Indeed, his criticism may be formulated as the denial that the purpose of empirical investigation is the positive confirmation of theories or beliefs (cf. David Miller, 2006, Chapter 2). On the other hand, any attempt to advance a universal ahistorical account of what empirical investigation can offer to knowledge is labelled by some as 'the positivist strategy' – see, for example, Alan Chalmers, *Science and its Fabrication* (Milton Keynes: Open University Press, 1990), p.4. Equally, it may be argued that a reliance on empirical data, as the means to criticise closed systems of self-validating theory, is a common theme to both Popper and positivism (cf. Ernest Gellner, *The Legitimation of Belief*, Cambridge: Cambridge University Press, 1974, Chapters 8 and 9). Today, the label 'positivist' seems to be used to classify any kind of research with an interest in logic, explanation or empirical data, but this probably reflects a decline in scholarly standards, especially the accurate citation of the origin of ideas, as opposed to describing a particular approach to solving these problems. Ultimately, one might acknowledge Popper's recommendation to "Never let yourself be goaded into taking seriously problems about words and their meanings" (Popper, 2002f, p.15).

efforts, then that's that until someone perhaps does a better job, for this means that the theory is yet to be refuted. Why not therefore continue to entertain it as potentially true?²⁴ Rationality therefore equates to criticism and irrationality to its absence.²⁵

Critical Rationalism as Six Implications for Reason in Practice

What are the wider implications of Popper's solutions to these three problems?²⁶ There are six of relevance to the forthcoming examination of the credit crunch and its aftermath. They may be stated in a fairly dogmatic fashion (in contrast to the spirit of the critical rationalist philosophy itself):

First, the deductive invalidity of a positive method on which to found empirical knowledge makes for the denial that 'truth is manifest'.²⁷ Knowledge is fallible and conjectural: 'No man's authority can establish truth by decree'.²⁸ It is criticism that advances knowledge and the more open a society is to criticism, the better its disposition to support the growth of knowledge.²⁹ That is counter to much commonly held *reason in practice*, which, for instance, views error as undesirable and knowledge as that which is epistemologically justified on the authority of some infallible method or person. But that has been born of a philosophical prejudice as to the logical role of reason in rational argument.

Second, if conjectural empirical knowledge precedes empirical criticism then our empirical observations must be preceded by a particular interest, question or problem: "observation is always observation in the light of theories."³⁰ And if empirical criticism precedes learning then *we learn from experience* only when conjectural knowledge changes.³¹ If conjectural knowledge informs our expectations of the outcome of observation and action, then its empirical disappointment *may* lead to its correction: this is 'learning'.³² If nothing changes, nothing has been learnt. Thus experience can only lead to the rejection of knowledge; it plays a negative role. This is counter to much commonly held *reason in*

24 "Valid inferences... make no attempt to explore the world, but only to explore the conjectures that we already entertain about the world." (Miller, 2006, p.69) Cf. one of Bertrand Russell's criticisms of pragmatism: "we neither accept a truth nor go without it, but entertain it as an hypothesis." (Bertrand Russell, *Philosophical Essays*, revised edition, London: George Allen & Unwin, 1966, p.84)

25 William W. Bartley III, 1964, Chapter 1

26 Popper's philosophy has generated an enormous secondary literature. For a collection of papers that are critical of his philosophy, including his replies, see, Paul Arthur Schilpp (ed.) *The Philosophy of Karl Popper*, The Library of Living Philosophers, Volume 14, Book I&II, La Salle: Open Court, 1974.

27 Popper, 2002a, p.6

28 Ibid., p.39

29 Cf. Popper, 2002d, Chapter 24

30 Popper, 2002b, p.37, fn1

31 Biologically speaking, this implies that some conjectural knowledge or expectation is innate (see Popper, 1979, Appendix 1).

32 Ibid.

practice, which, for instance, ignores that observation is always impregnated with theory and presents learning as the accumulation of observations. Or alternatively, one in which the intellect somehow penetrates through the appearance of things and events and unveils the true ‘essence’ that subsists in those things and events. But these ideas have been born of a philosophical prejudice that knowledge is induced from experience and is the terminus of learning.

Third, if empirical observations are always impregnated with theories then no historian can write a definitive history of the past: “Historians often do not see any other interpretation which fits the facts as well as their own does”.³³ This is in accord with E.H. Carr’s answer to the question “What Is History?”³⁴ but it is counter to much commonly held *reason in practice*, which, for instance, classifies history as a definitive account of ‘the turn of events’. But that has been born of a philosophical prejudice as to the source of historical knowledge.

Fourth, if conjectural empirical knowledge, as represented by a system of statements, is that which prohibits possible experiences, then the more it forbids the more it says.³⁵ The statement of its implications may be called its objective ‘logical content’ and the statement of all that it prohibits may be called its objective ‘information content’.³⁶ The objectivity of knowledge therefore resides in it being formulated in theories, arguments, proposals and propositions that are open to criticism.³⁷ Empirical propositions can therefore be empirically tested; their logical consequences can be tested against statements that report experience. Other kinds of proposition may also be subjected to critical scrutiny using appropriate arguments.³⁸ That is counter to much commonly held *reason in practice*, which, for instance, assumes that knowledge is founded on the accumulated subjective experience of a knowing subject. But that has been born of a philosophical prejudice that knowledge is induced from experience.

Fifth, logically it can be demonstrated that an empirical theory contains in its objective information content all of the theories that are incompatible with it, even if those theories have yet to be conjectured.³⁹ In this way, present theories strangely contain future conjectural knowledge – that which is yet to be discovered. The full consequences of our present theories are therefore unfathomable, even to their creators.⁴⁰ The potential for the accessed logical content of a theory to change is one reason why the subjectively determined economic value of objects is subject to change.⁴¹ For instance, refined crude oil has

33 Popper, 2002d, p.266

34 Carr, 1962

35 W.W. Bartley III (1990) *Unfathomed Knowledge, Unmeasured Wealth: On Universities and the Wealth of Nations*, La Salle: Open Court, p.35

36 Popper, 2002f, § 7 – Popper here employs the ideas of the logician Alfred Tarski.

37 Popper, 1979, Chapter 3

38 See, for example, Popper, 2002a, Chapter 8

39 W.W. Bartley III, 1990, Chapter 2

40 Ibid.

41 Ibid.

the potential to fuel some energy systems but, if our theories about its behaviour under certain conditions had yet to access statements about that fact, then its economic value would be considerably different to what it is. On the other hand, some of the accessed information content of a theory may well be the logical content of an extant rival theory. When presented with such rival theories, those who are epistemologically and methodologically rational in the Popper–Bartley sense, will critically consider the merits of the rival theories in an attempt to decide the truth of the matter. Such criticism may change their outlook, action and decision making and, as such, there is no reason to adopt some ethic of Stoic fortitude in our attitude to reality.⁴² This is counter to much commonly held *reason in practice*, which sometimes considers that what the future holds is pre-determined, in some deterministic sense, by the past, and that we must simply reconcile ourselves to it, rather than influence it by our own critical endeavours and through the exercise of our autonomy.

Sixth, but one ought not to assume that someone who forecasts the economic value of a theory's logical content, and acts on it in a market, is irrational if he has failed to criticise the truth of the theory in the light of alternatives. He *is* irrational in terms of the Popper–Bartley solution to the problem of rational justification. But there may be factors, other than the search for truth, that are of relevance to his instrumental decision making:

In critical discussion we may distinguish such questions as: (1) The question of the truth of an assertion... (2) The question of its relevance... and of its significance... vis-à-vis various extra-scientific problems like the problem of... the acquisition of personal wealth.⁴³

It may, for instance, be more economically rewarding to act with a false theory, especially if the economic costs of it being false arise in the longer term and have to be borne by other people. Indeed, postulating what the relevant factors are, and how they might interact with people's aims to inform action, is the method by which we could explain that action in a deductively valid system of argument that is satisfactory through not being circular or ad hoc.⁴⁴ Indeed, for Popper, "the fundamental problem of both the theoretical and the historical social sciences is to *explain and understand events in terms of human actions and social situations*".⁴⁵ This would seek to render behaviour intelligible in terms of what Popper called "situational logic". This entails a conjectural reconstruction of the problem situation that confronts an agent; one that postulates their aims, knowledge and resources and incor-

42 Cf. Ernest Gellner (1985) *The Psychoanalytical Movement*, London: Paladin, Chapter IV; Popper, 1996a, Chapter 10

43 Popper, 1996a, p.73 (emphasis removed)

44 See, for example, Mark A. Notturmo (1998) 'Truth, Rationality, and the Situation', *Philosophy of the Social Sciences*, Volume 28, Number 3, pp.400–21; I.C. Jarvie (1967) *The Revolution In Anthropology*, London: Routledge & Kegan Paul, Chapter 1; I.C. Jarvie (1972) *Concepts and Society*, London: Routledge & Kegan Paul, Chapter 1

45 Karl Popper (1996b) *The Myth of the Framework In Defence of Science and Rationality*, M.A. Notturmo (ed.), London: Routledge, p.166 (emphasis in original)

porates the relevant social institutions that may facilitate and constrain their action.⁴⁶ Such a system of explanation can be animated by a premiss that Popper called the “principle of rationality”;⁴⁷ a principle that “people act appropriately to the objective situation in which they find themselves”.⁴⁸ Such situational analysis is counter to much commonly held *reason in practice*, which, for instance, sometimes accepts logically unsatisfactory explanation that is invalid, circular or ad hoc. Or it invokes a metaphysical doctrine that explanation depends upon bridging a gap between ‘appearance’ and ‘reality’ via the intellect penetrating a veil of illusions.

The Credit Crunch and Its Aftermath

The United Kingdom is presently in an awful financial predicament. It has a monumental level of indebtedness at a time when its national income is stagnant or even shrinking. In the pre-budget report of December 2009, the last one presented by Gordon Brown’s government before it was electorally replaced by a new administration, the UK economy was estimated to have contracted by 4.75% over the course of 2009.⁴⁹ This contraction occurred when the UK public-sector net debt for 2008–9 was estimated at 43.9% of GDP.⁵⁰ But in the pre-budget report, this stock of borrowing was estimated to steadily rise to 77.1% of GDP by 2013–14. These estimates *excluded* any liabilities and unrealised losses from the multi-billion-pound public intervention that the government made in support of the UK banking sector during the course of 2008.⁵¹ In that regard, in 2008, for the second year running, UK private personal debt exceeded 100% of UK GDP.⁵² The scale of the deficit has resulted in the new government initiating a massive programme of public expenditure cuts.⁵³

How did this economic predicament arise? The UK banking industry is central to the country’s debt-laden predicament, both in its creation of the money to fund the personal debts described and as participants in the international market for liquidity that is required

46 Ibid., Chapter 8

47 This is quite distinct to the Popper–Bartley solution to the epistemological problem of ‘rational justification’.

48 This does not foreclose the analysis of situations where people act inappropriately to their situation, or ‘irrationally’; this can be accommodated by the principle that “people act in a manner appropriate to the situation as they see it” (which may be different to an historian’s reconstruction of how the situation actually was). See Popper, 1996b, p.183, fn. 19

49 H.M. Treasury, *Pre-Budget Report December 2009*, Cm 7747, available at: http://www.hm-treasury.gov.uk/prebud_pbr09_repindex.htm (accessed 11 January 2010)

50 H.M. Treasury, *Latest Public Finances Databank*, 4 January 2010, available at: http://www.hm-treasury.gov.uk/psf_statistics.htm (accessed 11 January 2010)

51 Ibid.

52 Grant Thornton, ‘UK personal debt exceeds UK GDP for second year running’, available at: http://www.grant-thornton.co.uk/press_room/uk_personal_debt_exceeds_uk_gd.aspx (accessed 12 July 2009)

53 HM Treasury Spending Review 2010, Cm 7942, London: Stationary Office, October 2010, available at: http://cdn.hm-treasury.gov.uk/sr2010_complereport.pdf (accessed 21 October 2010)

to fund these loans. On the other hand, the UK government's fiscal and public spending policies, involving a prolonged period of deficit financing, even during periods of relative economic growth, account for the level of the public-sector net debt. Both aspects converge if the UK government takes responsibility for the lending of some of the UK banks, which, as we shall see, has happened. Unsurprisingly, it was the banks that occupied centre stage of the investigation by the House of Commons Treasury Select Committee.

Money and Banking: A Critical Rationalist Perspective

Fundamentally, the Select Committee's investigation concerned the workings, administration and regulation of money and banking. From the perspective of the aforementioned philosophy of critical rationalism, understanding this system requires a theory of money and an analysis of the situational logic of the business of banking.

Money is the product of cultural evolution.⁵⁴ The inconvenience of bilateral barter exchange will cause a natural gravitation for people to exchange things for those products that are in most demand; these will, in turn, offer a greater flexibility to a trader.⁵⁵ Such products may be consumed, but they also become the de facto *money*, the means to exchange, regardless of any collective intention for this to be so.⁵⁶ This explains why merchant seaman leave port with cartons of cigarettes in a quantity far in excess of what they can personally smoke. However, the emergence of *paper* money seems to involve the imposition of a function to an object that does not rely upon the object being able to perform that function by virtue of its physical structure. The paper has value *only* by virtue of a community's shared attitude toward it.⁵⁷ Moreover, if its value, when viewed in the light of our subjective desires, is not inherent in the paper money itself, then *holding* paper money implies a theory that the shared attitude toward it will *endure*. As J.M. Keynes crucially emphasised, "Money... is, above all, a subtle device for linking the present to the future".⁵⁸

By a similar logic, cultural evolution can account for the emergence of organised banking and, with its deposit-taking function established, the emergence of bank lending.⁵⁹ When a bank offers a new loan, the loan becomes the bank's asset, the money that is created in the recipient's bank account becomes its liability and the interest payable on the loan

54 F.A. Hayek (1991) *The Fatal Conceit. The Errors of Socialism*, W.W. Bartley III (ed.), London: Routledge

55 Cf. Carl Menger (1963) *Problems of Economics and Sociology*, Louis Schneider (ed.), Francis J. Nock (trans.), Urbana: University of Illinois Press

56 An example of what Adam Ferguson and later F.A. Hayek termed "the results of human action but not of human design". See, for example, F.A. Hayek, *Studies in Philosophy, Politics and Economics* (London: Routledge & Kegan Paul, 1967, Chapter 6).

57 John R. Searle (2007) *Freedom and Neurobiology*, New York: Columbia University Press, pp.85–9

58 John Maynard Keynes (1946) *The General Theory of Employment Interest and Money*, London: Macmillan, p.294

59 See, for example, John Kenneth Galbraith's *Money Whence It Came, Where It Went* (London: Andre Deutch, 1975, Chapters II–III). As Galbraith notes in his inimitable style: "The process by which banks create money is so simple that the mind is repelled" (*ibid.*, p.18).

becomes the bank's reward for its knowledge and enterprise, since the initial money that it lent out almost certainly belonged to someone else. This is the bank's economic niche: the knowledgeable intermediary.

This system will be dynamically stable only if the bank succeeds in managing the amounts and the timing of its various components; if the depositor demands money that has been lent out, then the bank must have other money in reserve, or else borrow it from other banks on a wholesale market for money. But, as to the latter, we should note that not all banks can do this at the same moment in time. Alternatively, the bank might call in the loan, but that raises the question of whether it can be repaid quickly – its liquidity. Alternatively, the title to the loan asset might be sold on to another party, transforming its liquidity status to the bank, but that relies on a market in which such relatively illiquid assets can be traded for liquid cash, with trading counterparties with a different appetite for liquidity to that of the bank. Ultimately, the bank, if it is unable to use any other means of meeting the depositor's demand, might borrow, at a penal rate of interest, from a lender of the last resort: a nationally based central bank whose function is to counter such a liquidity crisis.

Similarly, if the borrower fails to repay the loan then the depositor whose money was lent cannot now demand it, unless the bank has other money that it can use as a reserve, or borrow wholesale, or from the lender of last resort. But if the loan cannot be recovered at all then the bank's assets may no longer cover its liabilities, in which case a liquidity crisis for the bank escalates into an insolvency crisis. Of course, the more a bank leverages its deposits into loans, the greater the potential for problems – for only a small proportion of the loans need to go bad to make it insolvent.

This theory of money and banking may be used to construct a hypothesized situational logic for the practice of banking – a general conjectural model as to how bankers might operate. Several principles of practice may be conjectured. Perhaps the following:

The first principle is that it is perfectly possible to become wealthy using *other* people's money. The second principle is that this must involve being a knowledgeable intermediary with a fine sense of timing. But the third principle is that the more aggressively a bank pursues that goal, or the more it loans out as a ratio of its deposits in order to garner interest, the finer its sense of timing must become and the greater the potential for things to go wrong. The fourth principle is therefore to have a plan for this eventuality and for that plan to entail the endurance of money. Cigarettes *must* remain the source of some of the *other* people's money, alongside all of the other goods and services people produce to exchange; but if the plan can appropriate their inherent *future* value to rectify all that's *presently* gone wrong with the money at the bank, then so much the better for the *reason in practice* of the plan. For that would entail a 'bail-out' and that 'we are all in this together'. But for such a plan to insure the endurance of money, *other* people must endure being deprived of their future cigarettes (or whatever), and they must accept that loss, as if, for instance, it were akin to an act of God, like a blight on the tobacco crop. Or as if what they were to lose had never existed at all, akin to the revelation of a reality that had previously been obscured by a mysterious veil of illusion.

Can the situational logic and the principles so derived be connected to the history of the banking crisis as it was presented by the Select Committee's investigation?

The Select Committee Investigation: A Critical Rationalist Perspective

In April 2007, nine banks constituted the banking sector of the FTSE 100 all-share index and they had a market capitalisation of £316.9 billion.⁶⁰ Two years later, only five of the banks remained in the index and two of these five were largely in public ownership. Moreover, the sector was worth only £138.1 billion.⁶¹ A major segment of the UK market economy had simply disappeared. The reason for this evaporation of value was a crunch point that was encountered in September 2007 in the liquidity and solvency of several UK banks: the so called 'credit crunch'.

International trade imbalances and the savings ratios of Asian countries formed the backdrop to the lending of the UK banks.⁶² These factors acted to depress interest rates and supplied savings that could be recycled by the banking system to Western borrowers. Since funding the loans, via the money markets, was relatively cheap, it became possible to lend to anyone who passed a credit test; a test which for some lenders seemingly involved the criteria: 'Is the prospective borrower breathing?' For instance, one of the Select Committee's reports revealed that 20% of the lending of Bradford and Bingley Plc, was to borrowers who self-certified their income.⁶³

The Select Committee revealed that the leverage of the UK banks was an important ingredient to the crisis; the UK banks almost tripled their assets between 2001 and 2007.⁶⁴ But this was not accompanied by a stepwise increase in their capital reserves. The reason for this was emphasised by Sir Tom McKillop, the former Chairman of Royal Bank of Scotland (RBS); it captures how the situational logic of banking is partly composed of an institutional framework:

[It] is a kind of given, that [shareholders] would always be pushing the organization to perform better... the drift from most institutional shareholders was to increase the dividend, share buybacks, return capital, do not sit on capital and run a very efficient balance sheet.⁶⁵

60 House of Commons Treasury Committee, HC416, 2009, § 1

61 Ibid., § 1

62 Ibid., § 2

63 Ibid., p.17

64 Ibid., § 2

65 Ibid., § 2

In 1998, UK bank lending roughly equated to the sum of money that was received in deposits.⁶⁶ But by 2008, the funding gap equalled £625 billion. For instance, the Halifax Bank of Scotland (HBOS plc) was reported to have a loan-to-deposit ratio of 180%.⁶⁷ This funding gap had been closed by short-term borrowing on the international markets and by adopting an ‘originate and distribute’ business model in which relatively illiquid loan assets were securitised and sold as relatively liquid ‘collateralised debt obligations’ (CDOs) to international investors.⁶⁸

In August 2007, market conditions in the trading of the CDO securities and expectations of further property price inflation in several countries began to alter. In the terminology of critical rationalism, market acceptance of the information content of the ‘originate and distribute’ theory was shifting and the economic value of some of its products was evaporating.⁶⁹ When this happened, the funding gap for some UK banks could no longer be closed. In critical rationalist terms, the market had revealed a contradiction between the logical content of the ‘originate and distribute’ theory and its experienced consequences for liquidity. The first UK bank to experience liquidity problems was Northern Rock Plc. These were amplified when press reports of its difficulties resulted in retail depositors instigating a ‘run’ on the bank.⁷⁰ This created a positive feedback system that rapidly diminished its liquidity. In critical rationalist terms, another slice of the information content of the ‘originate and distribute’ theory had been accessed and once again it contradicted experience: claims that the theory offsets the risk of illiquidity are not corroborated by media images of depositors queuing in the high street to withdraw their money.

In 2008–9, several UK banks sought support in order to continue their operations. In some cases this was required in order to avoid outright insolvency. In terms of the situational logic earlier presented, the back-up plan for ensuring the endurance of money and banking had to be enacted, although it seems doubtful whether the bankers foresaw the scale of the equity transfer that this would require. For instance, HBOS Plc reported a loss before tax of £10,825 million in 2008 and was subsequently acquired by Lloyds Banking Group.⁷¹ In turn, the combined group required support from the UK Government to the tune of £17 billion, representing a 43% stake in the group.⁷² At RBS, the pre-tax losses for 2008 amounted to a monumental £25.5 billion. A series of government-led interventions, to

66 Michael Fallon, ‘A sorry parade of bankers cannot put this right’, *The Sunday Telegraph*, 15 February 2009 – Michael Fallon MP is the deputy chairman of the House of Commons Treasury Select Committee, a post that one would assume puts him in a position to know about these things.

67 Ibid.

68 A derivative product that groups individual loans into an asset which can then be traded.

69 For if there is no exchange market, economic value effectively becomes nil.

70 House of Commons Treasury Committee, *The Run on the Rock: Fifth Report of Session 2007–08, Volume 1*, HC56-1, London: Stationary Office, 26 January 2008, available at: <http://www.publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/56/56i.pdf> (accessed 16 July 2009)

71 House of Commons Treasury Committee, HC416, 2009, § 3

72 Ibid., § 3

the tune of some £45.5 billion, left the public with an 84.4% stake in the group.⁷³ Moreover, RBS at one point insured potential losses on some £282 billion of its high-risk assets with the taxpayer.⁷⁴

The Select Committee's diagnosis of the origin of this crisis, as it became more analytical, considered the complex financial products generated by CDOs. For the banks, such products supposedly distributed the risk inherent in any 'sub-prime' lending. Other issues relevant to the situational logic of the bankers were also identified. The 'bonus culture' of the financial services sector and its corporate governance merited a separate report.⁷⁵ The contribution of the tripartite regulatory authority for UK banking – comprising H.M. Treasury, the Bank of England and the Financial Services Authority – was also examined in the committee's hearing of oral evidence, if not in its final report.⁷⁶ In particular, their deficiency, as Alistair Darling, the then Chancellor of the Exchequer, put it, in "spotting problems that are building up".⁷⁷ Similarly, as has been the case in every corporate collapse in recent memory, the role of accounting standards and statutory auditors merited dedicated sections of their own in one of the Committee's final reports.⁷⁸ Into this mix were added the credit rating agencies who rated the risk of default in the securitised products.⁷⁹

At this juncture, it is worth recalling a key ingredient of Popper's solution to the problems of knowledge, learning and rationality, "Popper's methodology... insists that, if we are seriously searching for the truth, we should submit any hypothesis proposed to the most searching barrage of criticism, in the hope that if it is false it will reveal itself as false."⁸⁰

So what of the theory of CDO securitisation? Unfortunately, whatever critical barrage the bankers had levelled against it, the reach of the thinking did not encompass the metaphorical question of: 'How will people react when they learn that there are rotten eggs in some, but not other, omelettes?' In critical rationalist terms, the accessed logical content of this theory and its critical scrutiny was utterly inadequate. But the situational logic of how securitisation – now revealed to be such a flawed theory – had come to dominate banking practice was largely left unexamined by the committee. For instance, the potential conflicts of interest between retail banking (taking deposits and making loans), investment banking (trading securities) and fund management (investing client's wealth) loomed largely in the *background* of the Committee's investigation. In place of a detailed examination of such 'universal banks', essentialist philosophical doctrines were invoked, such as when the

73 *Daily Telegraph Business*, 'Shake-up to alter high street banking', 4 November 2009

74 *Ibid.*

75 House of Commons Treasury Committee, *Banking Crisis: Reforming Corporate Governance and Pay in the City*, HC519, London: Stationary Office, 15 May 2009, available at: <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/519/519.pdf> (accessed 14 July 2009)

76 House of Commons Treasury Committee, HC144-1, 2009

77 *Ibid.*, Ev 3

78 House of Commons Treasury, HC519, §§ 6–7

79 *Ibid.*, § 5

80 Miller, 1994, p.7

adequacy of the Oxford English Dictionary's definition of a bank was debated with the leading bankers.⁸¹

In this regard, we should note that conflicting objective propositions as to the merits of securitisation as a business model, and the stability of the so-called 'universal banks', were in currency many years prior to the crunch. Consider, for example, William Krehm's book entitled *Towards a Non-Autistic Economy – A Place at the Table for Society*, published five years before the crunch. Here are some brief quotations from this book; they illustrate how many of the propositions, supposedly revealed through the experience of the crash, *à la* the inductive logic of positivism, were objectively proposed long before the reports of the Select Committee were prepared, and long before the UK economy had crashed from orbit. Krehm documented how "an unending series of improvisations were depended upon to fuel the... boom at the expense of the real economy".⁸² Amongst the prescient list that he supplied:

The influx of cheap commodities and industrial products from... emerging countries... contributes to the deflation of the real economy in the developed lands... The economies of the First World have thus become double-tiered: in the real economy entire industries are depressed by Third World competition and can survive only on the abundance of illegal immigrant labour. The financial sector, however, thrives on the relatively low interest rates warranted by deflated commodity prices.⁸³

...banks have changed their food chain... they did more borrowing on the money market in recent years... and depended less on deposits made with them... gambling by institutions – especially when they have piped into the government treasury – is an addiction... never do they walk away from the gambling table reformed. Instead the order of the day is cover up and the arranging of bailouts to permit them to do better next time round.⁸⁴

...the fire walls erected... between banking and... other risky investments were razed. That made available the enhanced money creation... And the quality... of the assets... increasingly deteriorated.⁸⁵

...the history of... 'securitizations' is full of disasters... The banks that put the deals together cut their exposure... and the (investors) find their investments inadequately

81 The chairman of the committee asked leading bankers whether their banks had lived up to the definition of "An organisation offering financial services, especially the safe keeping of customers' money until required and making loans at interest" (House of Commons Treasury Committee, HC144-1, 2009, EV 222)

82 Krehm, 2002, p.96

83 Ibid., pp.103–4

84 Ibid., p.96

85 Ibid., p.97

supervised... But not all the problems... can be ascribed to shenanigans and bad faith. Some of it stems honestly from the incredible surprises that the future holds for us in any field. All the more reason for not parcelling up that future and taking for granted that it can be capitalized at the highest imaginable price.⁸⁶

Unfortunately, the Select Committee did not call William Krehm as an expert witness; it did, however, consider the testimony of the bankers themselves. How did they explain the logic of their own situation? Overall, they sought to paint the picture of an unfortunate turn of events that caught out some banks and their regulatory authorities. A turn of events that had revealed the banks as overly innovative in creating products whose real risk profiles were poorly understood, as if obscured by an illusion. When the veil of illusion was lifted, a systemic contamination that undermined confidence was initiated. Those banks that were worst affected, so the picture has it, were those that were most dependent on the money markets for maintaining their liquidity. This picture is summarised, in a nutshell, by the testimony of the principal people involved:

We are profoundly and, I think I would say, unreservedly sorry at **the turn of events**.⁸⁷

I am very sorry about what has happened at HBOS; it has affected shareholders, many of whom are colleagues; it has affected the communities in which we live and serve; it has clearly affected taxpayers; and we are extremely sorry for **the turn of events** that has brought it about.⁸⁸

I think, to be honest, it is an admission that **at the level of the whole world** there was a failure to see enormous risks developing in our financial system. I think in retrospect... it is clear that the world for many years was on a boom of credit extension which **turned out** to be unsustainable.⁸⁹

Hence the principal witnesses attest to a mysterious 'illusion' that gripped not only them but the whole world. But it was an illusion that is now, with the benefit of experience, recognised as such, because of a turn of events that few, if any, could have reasonably foreseen. In critical rationalist terms, this is a rich soup of philosophical prejudice. It seems to harbour the peculiar Aristotelian philosophy in which experience enables the mind to apprehend the self-evidence of an essence that subsists in the events themselves.⁹⁰ The implication of

86 Ibid., pp.102 and 108

87 Lord Stevenson of Coddendam, former Chairman HBOS plc in his evidence to the House of Commons Treasury Committee (House of Commons Treasury Committee, HC144-1 1, 2009, EV 221, emphasis added)

88 Andy Hornby, former Chief Executive HBOS plc in his evidence to the House of Commons Treasury Committee (ibid., EV 221, emphasis added)

89 Lord Turner of Echchinswell, Chairman of the Financial Services Authority, in his evidence to the House of Commons Treasury Committee (ibid., EV 2, emphasis added)

90 For a discussion, see Popper, 2002d, Chapter 11

this *reason in practice* is that what had happened had subsisted in or been pre-determined by the past, rather than influenced by the bankers' own actions. All that we could expect of the bankers, so the underlying *reason in practice* implies, is that they display their sorrow at this 'turn of events'. But they too had suffered because they had pursued desires that were incongruent with reality as now revealed. Now, in the light of experience, they knew that contentment depends upon a kind of Stoical acceptance of reality – now that a veil of illusion had been lifted.

Hence, the *reason in practice* imbued in this testimony had done its work: the final principle of the earlier proffered situational logic of money and banking had been secured. There was a necessity for a 'bail-out', it had been revealed, and the world must now come to accept this with a Stoic fortitude.

The Committee's final conclusion hardly disputes this picture:

Governments, politicians, regulators and central bankers in the UK and across the world share a **responsibility for sustaining the illusion** that banking growth and profitability would continue for the foreseeable future.⁹¹

When the decision-making of the senior executive management of the failed banks was briefly assessed, it was their presentation skills, as opposed to their situational logic, that formed a not inconsiderate element of the scrutiny. This meant that, whilst they were charged with 'failure', there was little in the way of explanation as to what, precisely, they had failed to do or why. From a critical rationalist perspective, in place of an explanation in terms of human actions and institutions, a circular explanation was offered: that their failure to manage successfully their bank was caused by their failure to manage risk, or basically, that they weren't very good bank managers:

The apologies we have heard... had a polished and practised air. These witnesses betrayed a degree of self-pity, portraying themselves as the unlucky victims of external circumstances... it is self-evident that some banks have weathered the storm better than others... These facts alone make the **charge of management failure impossible to resist**. Banks have failed because those leading and managing them failed... The banks' boards must... take **their responsibility for failing in their duty to establish... risk management**.⁹²

Of course, from a critical rationalist perspective, one might conjecture that no-one in the failed banks, or within their supposed regulatory bodies, was rational in the Bartley-Popper sense. That is why they failed. But that is refuted by the evidence of Mr Paul Moore, the ex-Head of Group Regulatory Risk at HBOS Plc. What he revealed was that those who were so inclined were shown the door. Consider his evidence on the collapse of HBOS:

91 House of Commons Treasury Committee, HC416, 2009, § 2 (emphasis added)

92 Ibid., § 4 (emphasis added)

even non-bankers with no 'credit risk management' expertise... would have known that there must have been a very high risk if you lend money to people who have no jobs, no provable income and no assets. If you lend that money to buy an asset which is worth... less than the amount of the loan and secure that loan on the value of that asset purchased... you must be pretty... delusional... You just need common sense. So why didn't the experts know? ... I strongly believe that the real underlying cause of all the problems was simply this... a completely inadequate 'separation' and 'balance of powers' between the executive and all those accountable for overseeing their actions... HBOS had a **cultural indisposition to challenge**.⁹³

In his evidence, Mr Moore detailed how he had raised his concerns about the risk exposure of the bank with the HBOS Board only to be subsequently dismissed from his post by the HBOS Chief Executive Officer.⁹⁴ Given this, from a critical rationalist perspective, one might therefore conjecture as to why the situational logic of the HBOS executive management, as they perceived it, necessitated such a cultural indisposition to challenge. After all, the crash implies a catastrophic fallibility in the practice of institutional management and an irrational response to the problem of justification. We all make mistakes, but errors of the magnitude made by some of the UK banks surely merit more serious scrutiny. For instance, might the *mystique of leadership*,⁹⁵ promulgated by Business Schools, be a key component in this crashed system? Are the prejudicial doctrines that the "truth is manifest" and that "man's authority can establish truth by decree" promulgated by such ideas?⁹⁶ It is notable that the chief executives of several of the crashed banks carried a reputation for a brand of heroic, charismatic leadership that drives transformational strategies and policies.⁹⁷ This seems to fit squarely into the notions of 'transformative leadership' championed by so many University MBA programmes.

But in place of an investigation into whether that is so, the Committee pursued other questions. For instance, the role of non-executive directors was examined; especially their level of banking qualifications and their ability to scrutinise policy and strategy making given their part-time status and lack of secretarial support.⁹⁸ As if somehow an extra secretary or two was the lynchpin to explaining the logic of the situation. Closely following this was an examination of the role of the media, especially the BBC business correspondent, Robert Peston. The hypothesis that Peston's reporting had exacerbated the crisis was

93 House of Commons Treasury Committee, HC 144-1, 2009, EV 434, § 2 (emphasis added)

94 Ibid.

95 Karl Popper (1988) 'The Critical Approach Versus the Mystique of Leadership', *Human Systems Management* 8, pp.259-65

96 Cf. Popper, 2002a, Introduction

97 See, for example, this investigation into the executive management of the Royal Bank of Scotland: 'Special Investigation: The RBS Crisis', *Sunday Telegraph Business*, 6 March 2011 (cf. H. Gerth and C.W. Mills, *From Max Weber*, London: Routledge Kegan Paul, 1957, Chapter IX; Arthur Schlesinger Jr., 'On Heroic Leadership', *Encounter*, December 1960, pp.3-11).

98 House of Commons Treasury, HC519, §4

explored, together with the proposal that a case could be made for the control of the media in such crisis situations. As if somehow suspending or censoring the critical institutions of the *Open Society* was the lesson to be learnt from the crunch. Indeed, the role of the media in reporting the crisis to the British public received five pages of consideration, over half as much as that devoted to the management of the banks themselves.⁹⁹ In critical rationalist terms, the Committee expended a considerable effort investigating the reports of experience. But what they ought to have done is investigate why the bankers had so uncritically accepted the contested knowledge claims that experience had now so effectively refuted.

Conclusion

It is some sixty six years since Popper famously sought to champion the idea of an open society, free from “the tutelage of authority and prejudice”.¹⁰⁰ This paper has demonstrated that this idea continues to be fresh and relevant to the problems of modern society. It has sought to expose various philosophical doctrines that acted to shape the *reason in practice* of the Treasury Select Committee’s investigation into the banking crisis and the testimony presented to it. Those doctrines, so it was argued, are prejudicial to the advancement of knowledge, learning and rationality. Consequently they are potentially supportive to the very institutional arrangements that produced the crash.

As an epistemological and methodological position, critical rationalism does not search for a definitive history of the banking crisis, for under its lights no such definitive history is possible. It does, however, entertain a request for an explanation of the *kind of events* represented by the crisis. By its lights, such an explanation would emphasise the logic of the situation that the failed bankers operated within and would explore why aspects of their management practice seemed to be dominated by an authoritarianism and critical irrationality, especially with regard to the objective knowledge claims on which UK banking practice relied. The Select Committee had an opportunity to investigate these issues. That opportunity is now lost.

If the historical capacity of the United Kingdom’s institutional framework to evolve and learn from error is not to be blocked, such opportunities ought to be grasped. History may yet hold the real disaster of the credit crunch in store; this might occur if the nationalised banks are privatised and the remorseless logic of an unreformed situation is set in train again. The future remains open to learning *something* from the crash.¹⁰¹

99 Ibid., § 8

100 Popper, 2002c, Preface

101 A previous version of this paper was presented at *Philosophy of Management 2009*, St Anne’s College, University of Oxford, UK, 23–26 July 2009. I am grateful for the comments that I received at this event.

ROD THOMAS

Rod Thomas has previously examined the relevance of critical rationalism to management studies and practice in *Philosophy of Management* 9(1). He presently teaches at the Newcastle Business School, Northumbria University, UK.

Email: rod.thomas@northumbria.ac.uk
