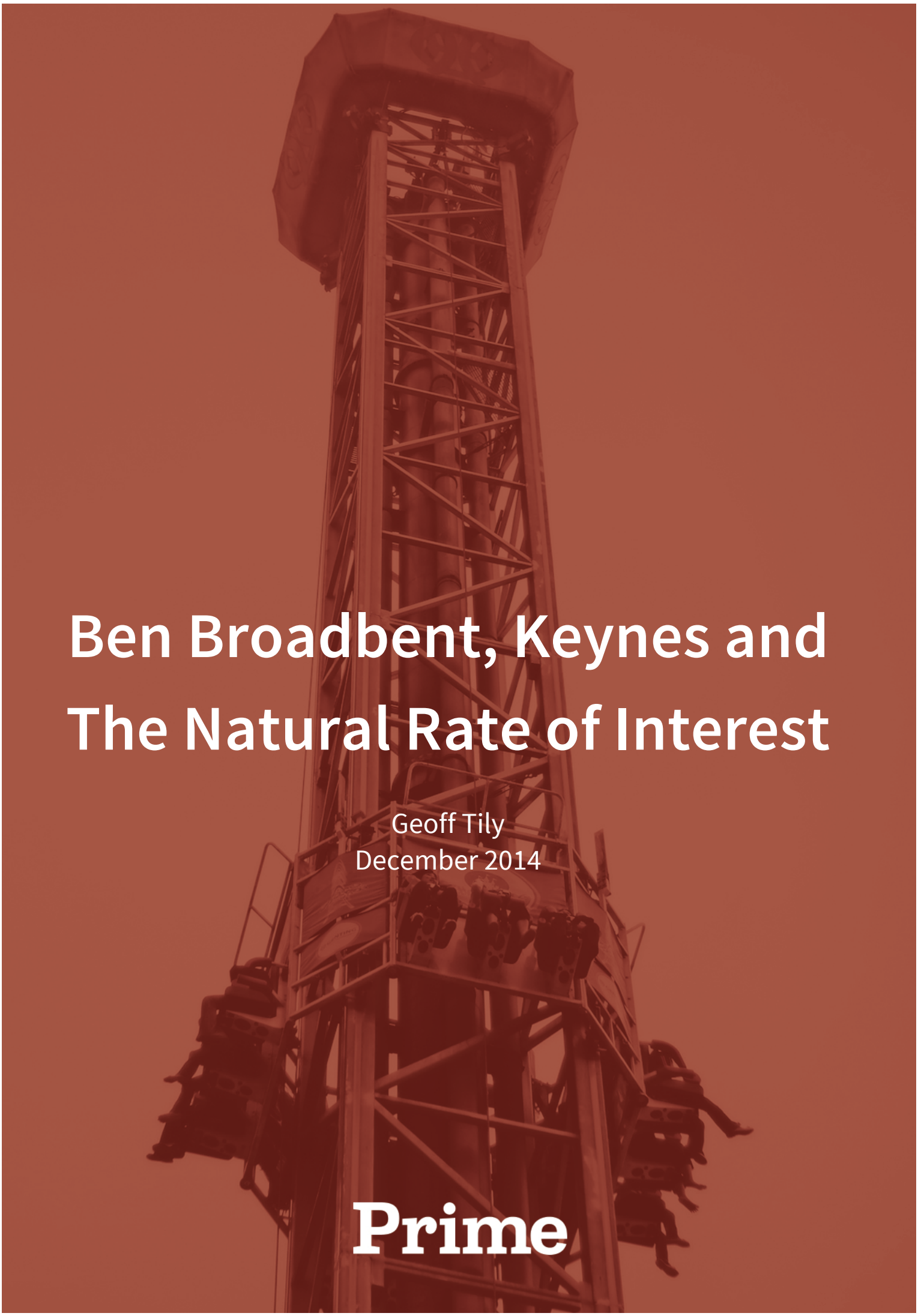

Ben Broadbent, Keynes and The Natural Rate of Interest

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Prime

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1. Introduction

In his latest speech, 'monetary policy, asset prices and distribution'[1], Ben Broadbent (the Bank of England's Deputy Director for Monetary Policy) returned to the theme that the natural rate of interest has been reduced and is expected to remain lower than normal for some time. In support of his case, he deployed Keynes writing in December 1930 in the *Treatise on Money*:

> We cannot hope for a complete or lasting recovery until there has been a very great fall in the long-term rate of interest throughout the world… Yet [that] is likely to be a long and a tedious process, unless it is accelerated by deliberate policy. Of specific remedies two [are] appropriate. The Bank of England and the Federal Reserve Board might reduce the rate of interest to a very low figure, say ½ per cent. At the same time these institutions should pursue open-market operations *à outrance*. That is to say, they should buy long-dated securities either against an expansion of Central Bank money or against the sale of short-dated securities until the short-term market is saturated. [p. 386]

The recognition that Keynes's work might be relevant to present monetary policy discourse is incredibly welcome given the normal desire of the profession to contain his contribution in a box marked fiscal policy and the state. In this extended piece I want to argue however that Broadbent captures Keynes's position at too early a stage of the evolution of his theory. Within less than two years he had taken the main steps to his *General Theory*. While the practical importance of reducing the long-term rate of interest remained paramount, he had discarded outright the neoclassical theoretical notion of a natural rate.

I proceed by giving the context for Keynes's remarks, explaining how his views evolved, and then applying (what I see as) his *General Theory* position to economic outcomes across the post-war world. I have attempted to be as brief as possible, so the argument is massively condensed. A fuller discussion of my account of his monetary theory of interest was published by the Bank for International Settlements [REF].[2] The full story can be found in Keynes Betrayed (Tily, 2010).

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[1] "Monetary policy, asset prices and distribution", Speech at the Society of Business Economists Annual Conference, 23 October 2014, available at http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech770.pdf

[2] 'Keynes's monetary theory of interest', Threat of fiscal dominance, BIS Papers No 65, May 2012,

2. Policy backdrop

From the point of view of monetary policy, the importance of the *Treatise of Money* marked the start of Keynes's shifting emphasis from Bank rate to the long-term rate of interest. His preoccupation with the gold standard amounted in great part to his understanding that exchange conditions would lead to Bank rate action inappropriate to domestic conditions. But the great depression demanded a deeper explanation than Bank rate alone. He effectively recorded his emerging thoughts as he completed the *Treatise* (a few pages ahead of the passage cited by Broadbent):

> I am writing these concluding lines in the midst of the world-wide slump of 1930… Thus I am lured on to the rash course of giving an opinion on contemporary events which are too near to be visible distinctly; namely, my view of the root causes of what has happened, which is as follows. The most striking change in the investment factors of the post-war world compared with the pre-war world is to be found in the high level of the market-rate of interest. (CW VI, p 377)

[NB all references are to the different volumes of the *The Collected Writings of John Maynard Keynes*.]

Two fuller accounts came very shortly afterwards; the first in an exchange about the completion of the Macmillan Report, and the second in an *Economic Journal* symposium on 'saving and usury' motivated by debate on the *Treatise*:

> This memorandum brings home to me what I was beginning to forget, namely that I have nowhere introduced into my draft chapters in any clear or emphatic form what I believe to be the fundamental explanation of the present position. My fundamental explanation is, of course, that the rate of interest is too high, – meaning by the 'rate of interest' the complex of interest rates for all kinds of borrowing, long and short, safe and risky. A good many of Brand's factors I should accept as part of the explanation why interest rates are high, e.g. effects of the War, post-war

instability, reparations, return to gold, mal-distribution of gold, want of confidence in debtor countries etc.

Next comes the question of how far central banks can remedy this. In ordinary times the equilibrium rate of interest does not change quickly, so long as slump and boom conditions can be prevented from developing; and I see no insuperable difficulty in central banks controlling the position ... The drastic reduction of the whole complex of market-rates of interest presents central banks with a problem which I do not expect them to solve unless they are prepared to employ drastic and even direct methods of influencing long-term investments which, I agree with Brand, they had better leave alone in more normal times. ... But I should not be surprised if five years were to pass by before hard experience teaches us to get hold of the right end of the stick. (7 April 1931, to Robert Brand of Lazrads, CW XX, pp 272–3)

Personally I have come to believe that interest – or, rather, too high a rate of interest – is the 'villain of the piece' in a more far-reaching sense than appears from the above. But to justify this belief would lead me into a longer story than would be appropriate in this place. (March 1932, CW XXIX, p 16)

With the suspension of the gold standard on 21 September 1931, Keynes's views on monetary policy had already begun to take centre stage. The exchange equalisation account was the practical manifestation of his currency management proposals. Under this scheme, the sterling exchange was managed by central bank intervention in the market rather than through the discount rate. Freed to be aimed at domestic purposes, Bank rate was fixed at 2 per cent from 1932 to 1951.

Focus soon moved to the long-rate, but rather than the open-market operations discussed in the *Treatise*, the authorities implemented a conversion operation. Holders of the colossal 1918 War Loan were effectively forced to exchange 5 per cent gilts for 3½ per cent gilts. In parallel an embargo on overseas loans was implemented, i.e. capital control. Keynes prepared a commentary that was published in the September 1932 *EJ*; he emphasised the importance of "psychological factors" and

looked to changes to debt management policy: "It is important that the market should be supplied with securities of different types and maturities in the proportions in which it prefers them" (CW XXI, p 115).

3. The *General Theory*

Undoubtedly these practical initiatives were critical to the development of his theoretical thinking, which was also evolving as a result of his colleagues' vigorous challenge to his book.

It is essential to see these developments as centred on the theory of interest. The action in the *Treatise* concerned movements of market rates of interest relative to the natural rates of neoclassical theory, as in Broadbent's assessment. In the *General Theory*, this approach was rejected, as he emphasised just over a year before publication in *The Listener* of 21 November 1934.

> There is, I am convinced, a fatal flaw in that part of the orthodox reasoning which deals with the theory of what determines the level of effective demand and the volume of aggregate employment; the flaw being largely due to the failure of the classical doctrine to develop a satisfactory theory of the rate of interest. (*CW* XIII, p. 489)

He deconstructed the classical saving–investment equilibrium into three components based on 'psychological propensities':

- *Liquidity preference*, which with the supply of money gave the long-term rate of interest
- Which, along with the *marginal efficiency of capital*, gave the level of investment
- Which gave the aggregate income (in nominal terms) via the multiplier, a function of the *marginal propensity to consume*.

The first critical step to this theory was the rejection of the equilibrium relationship between saving and investment. In a monetary economy (as defined in a recent Bank of England paper [REF]), aggregate saving is determined by aggregate investment and the macroeconomic relation between the two is an identity, not an equilibrium.

> S = I at all rates of investment. Y either definable as C+S or as C+I. S and I were opposite facets of the same phenomenon they did not need a rate of interest to bring them into equilibrium for they were at all times and in all conditions in equilibrium. (CW XXVII, pp 388–9)

And second a wider rejection of the unique equilibrium on which neoclassical theory was founded; this is first seen in notes for lectures dated 14 November 1932':

> On my view, there is no unique long-period position of equilibrium equally valid regardless of the character of the policy of the monetary authority. On the contrary there are a number of such positions corresponding to different policies. Moreover there is no reason to suppose that positions of long-period equilibrium have an inherent tendency or likelihood to be positions of optimum output. A long-period position of optimum output is *a special case* corresponding to a special kind of policy on the part of the monetary authority.

With the *General Theory*, the neoclassical idea of a unique equilibrium was rejected, as were all notions of natural rates. The former has recently been re-asserted by Roger Farmer, writing in the Bank of England *Quarterly Bulletin*.

Central to the new theory was the theory of liquidity preference. Keynes saw that the long-term rate of interest was not a reward for saving, but the reward for parting with the liquidity of savings (or wealth). The theory led to the fundamental conclusion that this reward was a psychological factor, entirely under the control of the authorities; just as they had forced the holders of the War Loan to accept lower terms, the whole spectrum of interest rates could be under their control at all times. The trick was to switch from existing policies which forced the public to hold instruments according to the choice of the authorities, namely (then as now) long-dated gilts. Under these conditions the authorities' liquidity preference was enforced and the public set the price. Keynes saw that the authorities could set the prices if they issued gilts across a range of maturities (including Treasury bills) to quantities determined set by the public. So if the public did not fancy a three per cent gilt, they could retreat into a (short-term) treasury bill; eventually, however, so long as the authorities meant business, they were likely to come round. In terms of the familiar liquidity preference schedule, the authorities' aim was to shift the schedule rather than excessively manipulate the supply of money.

4. From interest to activity

From the perspective of the Great Depression, it was blindingly obvious where this monetary and debt management policy should be aimed. As the saying went, Keynes was a cheap money man. But his prescription was more far reaching than commonly understood. According to the *General Theory*, there were no natural conditions that predetermined output, employment or interest, instead these conditions were dictated by the actions of policymakers, in particular the rate of interest that was allowed to prevail.

Plainly a lower rate would foster higher investment and employment, but he also understood that higher rates were the root cause of the extreme volatility that was had led to the Great Depression. The essential point is contained in a June 1931 diagnosis of this crisis:

> The leading characteristic was an extraordinary willingness to borrow money for the purposes of new real investment at very high rates of interest – rates of interest which were extravagantly high on pre-war standards, rates of interest which have never in the history of the world been earned, I should say, over a period of years over the average of enterprise as a whole. This was a phenomenon that was apparent not, indeed, over the whole world but over a very large part of it (lecture to the Harris Foundation, *CW* XIII, p. 345).

With the impetus of animal spirits, a high rate of interest does not necessarily inhibit investment. Entrepreneurs or speculators can become convinced of the likelihood of high yields; bankers, likewise deluded, will provide the funds. To cut a long story short, when projects are implemented under excessive expectation of yield, returns will eventually fail; interest payments will be increasingly difficult to meet, and debt will mount. While Keynes told the story in terms of capital investment, the same applies to any other activity financed by loans the meeting of which depend on a stream of future earnings (most obviously speculation in and ownership of property). The particular difficulty with higher rates is that they are more difficult to earn than lower rates as well as more punitive when earnings fail. Cheap money conditions are likely to be more prosperous and stable with investment earnings more easily meeting expectations; dear money conditions are likely to alternate between the doldrums and then waves of optimism that come crashing down.

This in a nutshell is what I believe lies at the root of our present predicament. It is the consequence of long-standing theoretical and practical neglect of a seriously elevated long-term rate of interest.

5. The post-war trajectory of the rate of interest

Keynes therefore argued that dear money should be avoided "as we would hell-fire". His practical initiatives were aimed at securing cheap money on a permanent basis. He devised the necessary practical mechanisms in his Treasury role overseeing economic policy in the Second World War (Tily, 2012 for the details). The successful maintenance of a three per cent long term rate of interest for the duration led finally to his prescription for post-war monetary and debt management (at the HMT national debt enquiry). The Attlee Government's monetary policy basically followed this prescription.

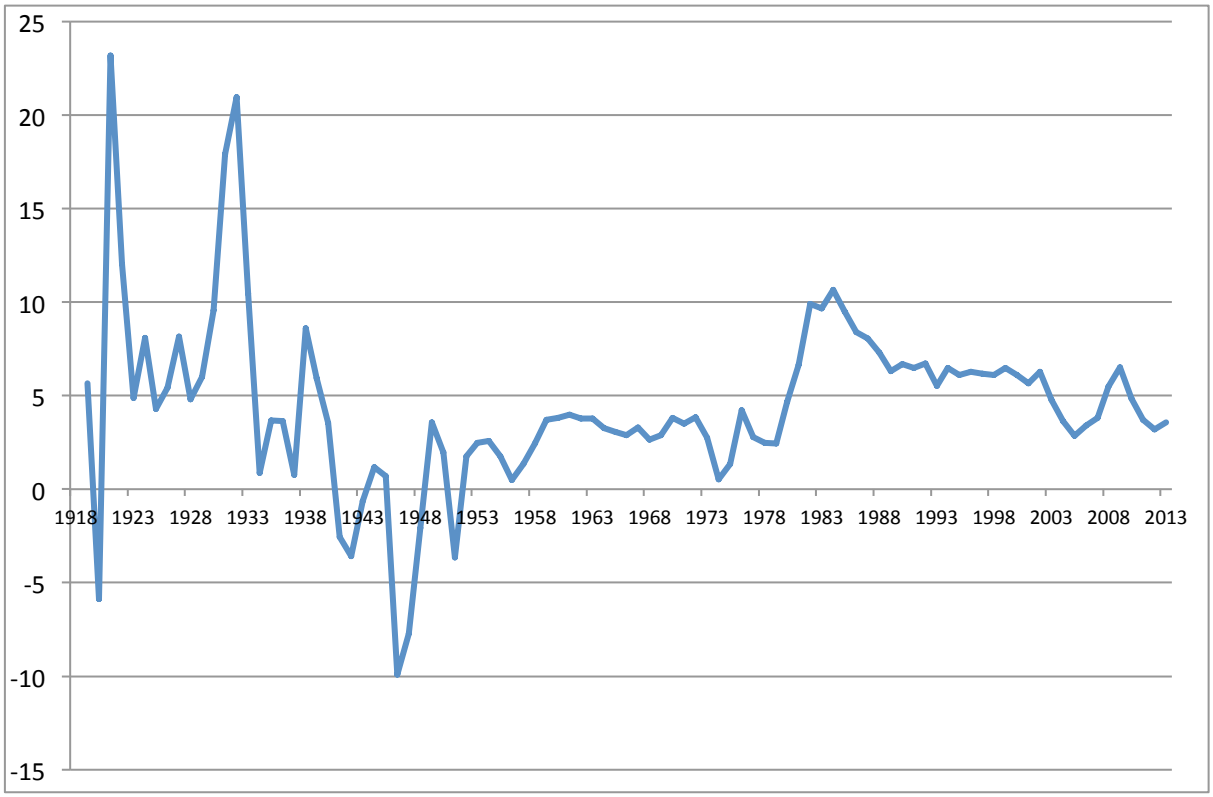
For reasons of brevity, I have left aside the international dimension of his initiatives, even though they were of fundamental importance to attaining cheap money, i.e. permitting nations autonomy over monetary conditions. "In my view the whole management of the domestic economy depends upon being free to have the appropriate rate of interest without reference to the rates prevailing elsewhere in the world. Capital control is a corollary to this" (*CW* XXV, p. 149), as Keynes put it in a 1942 letter.

Imperfect in many ways, the Bretton Woods agreement did permit capital control, and facilitated cheap money throughout the world during the golden age. In another paper, the Bank have recently contrasted the stability of this era with the present arrangement:

Overall, the evidence is that today's system has performed poorly against each of its three objectives, at least compared with the Bretton Woods System, with the key failure being the system's inability to maintain financial stability and minimise the incidence of disruptive sudden changes in global capital flows. (Bush et al, 2012)

The age was decisively ended with financial liberalisation, when long rates surged in a manner that seemingly baffled the authorities. Figure 1 shows my interpretation of rates over the past century, based on BAA corporate bond yields, deflated with the US GDP deflator.

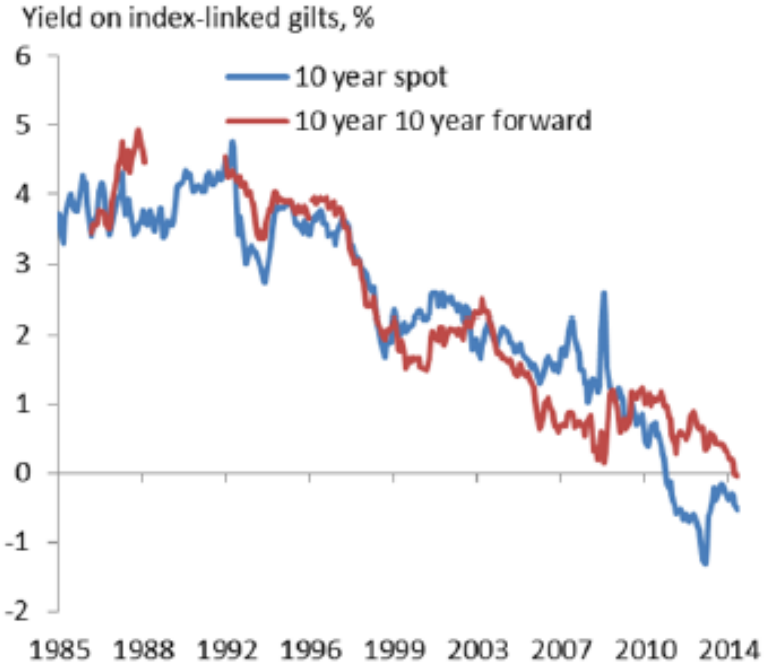
Figure 1: The real long-term rate of interest



These rates are the most important to private activity and hence aggregate economic outcomes; in a liberalised environment, the US rate must set a lower bound for rates in nearly all countries.

The stability of higher rates since liberalisation is in marked contrast to Broadbent's own interpretation of real long-rates as showing a "steep fall" since the mid-1990s (his chart 4), beyond the more volatile behaviour that has been the norm after 2002.

Chart 4 Real interest rates have also declined at longer horizons



Source: Bank of England

The explanation for these apparently contradictory movements follow from the real-world consequences of the most prolonged era of dear money that the world has ever known (given Keynes was right in his assessment of the 1920s, above).

6. Policy into the second debt deflation of the past century

This latest age of dear money has coincided with a period of extreme global economic volatility, against a backdrop of ever-increasing indebtedness. Initially the most important processes were centred on the corporate sector. Excessive expansions of investment and then severe recessions occurred in a number of different countries; most notably, Germany, Japan and the Scandinavian countries collapsed at points from 1990 onwards; the Tiger economies of South East Asia in the late 1990s. The US and UK corporate sectors caved-in in 2000, at the turn of the millennium.

From 2000, policy sought to expand the money supply through both discount rate cuts and even further extended liberalisation, fostering speculative behaviour across the globe (largely at this stage outside the corporate sector) and leading to asset price inflations including in residential and commercial property. The global economy collapsed in 2008 into a 'debt deflation' (of the kind that Irving Fisher identified in the 1930s) after collapsing asset prices exposed a vastly complex and colossal web of indebtedness that was not sustainable. From that point on, the system has been

supported primarily by socialisation of private debts and relentless expansion of central bank balance sheets and ultra-low discount rates. As Broadbent recognises, these could be seen as 'open-market operations *à outrance*'. But having advised such a course in 1930, Keynes would go so much further in both a theoretical and practical sense.

In the theoretical sense, it is wrong to interpret the long-standing reduction in gilt-edged interest rates (Broadbent's Chart 4) as a reduction in natural rates proceeding on a pre-determined course. The fall in rates is caused by this prolonged and ever-intensifying failure of economic activity, and the consequent and coincident retreat from risk, as well as deliberate policy action. Since the South-East Asia crisis of the late 1990s (western) government assets were increasingly attractive for those who recognised the extent of risk that had and was continuing to build up apace. Plainly discount rate cuts and open-market operations also put downwards pressure on interest rates. As crisis has been followed by crisis, rates have been forced lower and lower in desperate attempts to restore normality. But normality has never come; nor is it likely to. To reiterate: all of these developments are fundamentally the consequence of the failure of the dear money regime, not of a natural underlying tendency to cheap money.

In an immediate practical sense, the differences between the rates I report and Broadbent's also indicate the limitations of existing policy. Ultra-low government rates (in Britain) do not mean that money is cheap for all types of borrowing across the global economy. Exceptionally elevated spreads across various instruments are widely understood. Moreover monetary policy doctrine based on inflation targeting has not been dislodged. As a result, any brief expansion of activity is followed quickly by fears of inflation and a clamour for rate rises and withdrawal of other stimulus; in turn this is rapidly followed by fears of slump. There is therefore a permanent threat of dearer money: conditions under which cheap money can never properly prevail. Keynes was clear that Bank rate was redundant as an instrument of policy management in a cheap money regime.

Much more could be said. But the point I really want to get across is that Broadbent draws our attention to a vital and sorely neglected line of thought that was central to Keynes's work.

The current monetary policy arrangement, in spite of exhortations to a future of lower rates, cannot deliver the cheap money that Keynes saw as essential to prosperity. One the one hand, a fuller and more specific commitment to cheap money and actions across the spectrum could be effective given the cooperation of the relevant institutions (Bank, Treasury, Debt Management Office). Moreover the spurious notion of natural rates could be rejected so that they did not stand in the way not only of interest rate policy but also of the kind of expansion in income and expenditure that would permit a fuller recovery including the reduction of debts. But on the other hand, it is unavoidable that the theoretical and practical implications of the *General Theory* go way beyond incremental changes in policy course.

From the point in December 1930 identified by Broadbent, Keynes went on to arrive at a view of the way a monetary economy operated that turned classical theory and policy doctrine on its head. Over the 1930s, domestic and international monetary reform proceeded at a pace and to an extent that is barely acknowledged. With the imposition of cheap money in the UK and across the sterling area (i.e. the Empire), the effective nationalisation of the Federal Reserve System under FDR, the actual nationalisation of the *Banque de France* and the 1936 Tripartite Agreement on exchange cooperation between these great nations, for a significant part of the world money had truly been repositioned as intelligent servant rather than stupid master to society (in the later rhetoric of the Labour Party).

More than any other institution (and in contrast with the shameful response of academic economics), the Bank of England has shown itself willing to contest conventional economic doctrine and wisdom. My appeal is that they look again at Keynes, for there is more to him than they may realise.

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*Cover Image: *Turbo Drop* by Teddy-rised, 2009 – *'The car is held for multiple seconds before it is released, dropping almost to the ground'*

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