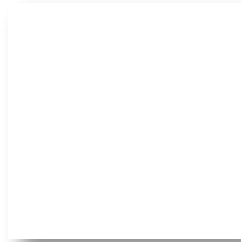
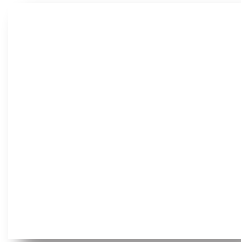


Delivering growth while reducing deficits: lessons from the 1930s

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Detailed and thoughtful comments from Tim Leunig have greatly improved this paper but he bears no responsibility for any errors.

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■ Executive summary

In the Great Depression of the 1930s Britain grew strongly despite significant cuts in the government's deficit, short-term interest rates which were already as low as possible, and the international economy being in disarray. That is exactly what policymakers need to achieve today. This paper sets out what happened in the 1930s and what we can learn from that experience.

Over fiscal years 1932/33 and 1933/34 the structural budget deficit was reduced by a total of nearly 2 per cent of GDP as public expenditure was cut and taxes increased, the public debt to GDP ratio stopped going up while short term interest rates stabilized at about 0.6 per cent. Yet, from 1933 to 1937 there was strong growth such that real GDP increased by nearly 20 per cent over that period.

In the early 1930s, fiscal consolidation without a compensating boost from monetary policy was not conducive to recovery and ran the risk of prolonged stagnation in a difficult world economic environment which had little to encourage business investment and exports. The potential parallels with today are readily apparent.

The key to recovery was the adoption of credible policies to raise the price level and in so doing to reduce real interest rates by raising the expected rate of inflation. This provided monetary stimulus even though, as today, nominal interest rates could not be cut further. Fiscal stimulus was not a factor in the UK recovery until after 1935 when rearmament began.

The 'cheap money' policy put in place in 1932 provided

an important offset to the deflationary impact of fiscal consolidation that had led to the double-dip recession of that year. A major way in which this stimulated the economy was through its favourable impact on housebuilding in an economy without strict planning rules; the private sector built 293000 houses in the year to March 1935.

The key implication for today is that, if a further policy action is needed in 2012 in the face of sluggish growth or even a double-dip recession, there is an alternative to using fiscal policy or continuing with the present policy of quantitative easing. Even though interest rates cannot be further reduced, monetary stimulus can be delivered by modifying the current inflation-targeting framework under which the Monetary Policy Committee operates.

A close approximation to the successful 1930s policy would be to commit to a price-level target which might entail an average rate of inflation of about 4 per cent for three years. Crucially, this would have to be clear and credible so that the inflation was fully anticipated by the public and it would work by reducing the real interest rate.

If the lessons of the 1930s were fully taken on board, a complementary policy would be implemented to liberalize planning rules and encourage private housebuilding.

It must be accepted that, while implementing these reforms envisaged in this paper would stimulate growth, the outcome is most unlikely to be a repeat of the 4 per cent growth rate seen in the 1930s. The output gap is probably smaller now, consumer spending will surely be less buoyant and the Eurozone crisis threatens to undermine business confidence and exports. Although these are important caveats, the fact that we cannot rely on consumers or the international economy for demand growth strengthens the case for a policy response as it makes an early spontaneous recovery less likely.

■ 1. Introduction

The recent crisis in the UK economy has posed severe difficulties for economic policymakers. After a deep recession, growth is still anaemic, yet the government has serious concerns about fiscal sustainability at a time of large deficits and rapidly rising public debt to GDP ratios. With little scope for further reductions in nominal interest rates, it seems difficult to use monetary policy to stimulate growth and to offset fiscal stringency. And while growth has been weak, inflation has been well above the target set for the Bank of England because of the transitory impact of VAT increases, falls in the exchange rate, and energy prices. Fears of a double-dip recession are growing yet inflation hawks still believe that interest rates should soon be increased. Keynesians worry that early deficit reduction threatens to de-rail recovery while at the same time Greece is seen as an awful warning not to delay putting the fiscal house in order.

In 1932, the making of economic policy also seemed very daunting. Britain had been forced out of the gold standard and was facing a possible sovereign debt crisis, the design of monetary policy was highly contentious, memories of German hyperinflation were still fresh, and Keynesian remedies were not acceptable to orthodox opinion. Indeed, after a brief recovery following the devaluation in the autumn of 1931, the economy slipped back into recession in the middle of the following year.

The aspect of the 1930s that is especially relevant for today is that it represents the only experience that the UK has had of attempting fiscal consolidation when nominal interest rates are close to the lower bound and reductions in interest rates

cannot be used to offset the impact of tighter fiscal policy on aggregate demand. Over the fiscal years 1932/33 and 1933/34 the structural budget deficit was reduced by a total of nearly 2 per cent of GDP as public expenditure was cut and taxes increased, the public debt to GDP ratio stopped going up while short term interest rates stabilized at about 0.6 per cent. Yet, from 1933 to 1937 there was strong growth such that real GDP increased by nearly 20 per cent over that period.

An overview of macroeconomic outcomes is reported in Table 1. The picture that we see is of an economy that went through a severe recession such that annual output fell by 5.6 per cent between 1929 and 1931 following which, after a faltering start, real GDP grew at an annual rate of at least 3.1 per cent per year in each of the years between 1933 and 1937. Unemployment was always high and rose steeply in the early 1930s but by 1937 was nearly back to the 1929 level. Prices, as measured by the GDP deflator, fell slowly until 1934 but by 1937 inflation was nearly 4 per cent. Thus, contrary to many people's perception, the initial downturn was of similar magnitude to Britain in 2008-9.¹

This is an episode that has valuable lessons for today as this paper will show. Recovery in the 1930s did not take place under the auspices of inflation targeting. It began while fiscal policy was deflationary but when control of monetary policy moved from the Bank of England to the Treasury. An important impetus to growth at the outset was housebuilding in an economy where highly restrictive planning rules were yet to be imposed. Indeed, the experience of those years raises questions not only as to whether the UK monetary policy framework that has been in place since 1997 is still appropriate in present circumstances, especially if fiscal consolidation is to be sustained, but also as to whether

1 The fall in real GDP from peak to trough based on quarterly data was 7.2 percent (Mitchell et al. 2011). Common beliefs about the 1930s are conditioned by the persistent unemployment in areas of Britain hit by the decline of old industries and the trade wars of the time. These structural problems proved intractable throughout the interwar period but should not be allowed to obscure the fact that this was nothing like the depression that the United States went through or that the economy was growing strongly by 1934. The Jarrow marchers are iconic but their journey in 1936 took them through prosperous southern England.

relaxing planning regulation might now be an important ingredient in returning to growth.

■ 2. Monetary policy at the zero lower bound

Since 1997, in common with other OECD countries, UK monetary policy has been conducted in terms of inflation targeting by an independent central bank. The rationale for this arrangement is to deal with the problem of 'inflationary bias' that potentially arises from the discretionary conduct of macroeconomic policy by ministers when interest rates may be set for short-term political reasons. The framework might be described as one of 'constrained discretion' (Allsopp and Vines, 2000) rather than a rigid rules-based system like the gold standard.

In recent years, the Bank of England's Monetary Policy Committee (MPC) has been mandated to maintain a CPI rate of inflation of 2 per cent per year over time. Until the current crisis, this approach had been consistent with a decent performance in terms of standard macroeconomic policy objectives with low inflation coupled with very modest fluctuations in the level of economic activity; the UK participated in the so-called 'Great Moderation'. There was general political support for the MPC design established by the Labour government although it should be noted that the favourable outcomes appear to have resulted to a large extent from 'good luck' in terms of the shocks to which the economy was exposed rather than 'good policy' (Benati, 2008).

The way in which is inflation targeting by a central bank is implemented is generally through a Taylor Rule. The central bank raises short-term interest rates if inflation is above

target or if GDP is above the economically sustainable level – in the jargon, if the ‘output gap’ is negative. The standard Taylor Rule is that interest rates should rise by 1.5 percentage points if inflation is 1 percentage point above target and by 0.5 percentage points when GDP is 1 per cent above the sustainable level. Conversely, interest rates would be reduced if inflation is below target or if GDP is below the sustainable level.²

There are two circumstances in which inflation targeting using a Taylor Rule runs into difficulties. First, when there is stagflation such that a combination of high inflation together with a low level of output call for both high and low interest rates simultaneously. Then policymakers have to accept either that inflation is above target or output is below potential, or some combination of the two. Second, the interest rate cannot be negative but this might be required by the Taylor Rule. This is known as the ‘zero lower bound’ constraint. This is most likely to matter in times of deflation or severe recession especially if this is associated with a banking crisis and credit crunch (Woodford, 2011a).

The existence of the zero lower bound constraint suggests that in a financial crisis or a severe recession there may be a role for fiscal stimulus to raise demand. In turn, to have the ability to run a substantial fiscal deficit perhaps for several years requires fiscal rules or institutions to ensure that government finances are in robust shape in good times to facilitate fiscal flexibility in bad times (Wyplosz, 2005). No government should run fiscal policy under the mistaken belief that it has abolished boom and bust (Crafts, 2005).

The failure to ensure that public finances were sufficiently strong prior to the financial crisis, combined with the severity of the crisis itself means that the UK is now in a difficult position. Not only is the optimal interest rate below zero but fiscal sustainability over the medium term requires deficit

2 The Taylor Rule can be written as $R_t = \alpha + \beta(\pi - \pi^*) + \gamma(Y - Y^*)$ where π and π^* are the actual inflation rate and the target inflation rate, respectively, and $(Y - Y^*)$ is the difference between real GDP and the sustainable level of real GDP. The standard values for β and γ are 1.5 and 0.5, respectively. The term $\alpha = r^* + \pi^*$ where r^* is the (neutral) real interest rate that is consistent with maintaining aggregate demand at a level consistent with a zero output gap.

reduction, in particular to deal with a sizeable 'structural budget deficit' in the aftermath of the crisis and to head off the possibility that the interest rates at which government can borrow are subject to rapidly increasing risk premia (IFS, 2010). The implication is the need for a lengthy period of fiscal consolidation based on some combination of expenditure cuts and tax increases but this, in the absence of offsetting interest rate reductions, risks pushing the UK back into recession.

While the Bank of England cannot reduce its interest rate below zero, real interest rates can be negative. Ex post, this means that inflation has exceeded the nominal interest rate. Ex ante, an expected negative real interest rate would mean that the anticipated rate of inflation is greater than the nominal interest rate. In principle, the central bank can stimulate the economy by holding its interest rate down while encouraging people to expect inflation. Indeed, this is the classic recipe for escaping the so-called 'liquidity trap', much discussed in the context of Japan's 'lost decade' of the 1990s. Reductions in the real interest rate sustained over a period of time have the potential to act as an expansionary policy so monetary policy is not impotent after all even when interest rates hit the zero lower bound.³

This may be easier said than done, however. There is a problem of 'time inconsistency' in that the private sector may anticipate that the central bank will change its policy as soon as the economy starts to recover. For the real interest rate policy instrument to be effective, it is vital that the central bank is seen as credibly committed to future inflation and the rate of inflation that is needed may well exceed the previous target rate, currently 2 per cent. This might be addressed by an upward revision of the target rate or the adoption of a

3 The central bank can manipulate short term interest rates but long term interest rates matter for investment decisions. Given that long term rates must reflect the expected sequence of short term rates through time which it can control, the central bank can also affect long term rates but generally with less certainty because it may be less successful in influencing expectations and markets have to take a view on how the authorities will respond to inflation in future. It follows that the central bank can influence long term real rates but less easily than short term nominal rates. For a review of these topics which concludes that policy matters for both short- and long-term real interest rates, see Allsopp and Glyn (1999).

price-level target which would require higher inflation to be achieved; either way the issue would be how to make this credible.⁴ One way to do this might be through exchange-rate policy. Svensson (2003) suggested that a 'foolproof' way to escape the liquidity trap is to combine a price-level target path with an initial currency devaluation and a crawling exchange-rate peg which will require a higher price level in equilibrium and can be underpinned by creating domestic currency to purchase foreign exchange.

The implications of this discussion are as follows. First, in present circumstances, inflation is not public enemy number one; an increase in the expected rate of inflation would help avert fears of a double-dip recession. Second, conventional inflation targeting at 2% may not be appropriate in present circumstances. Third, in principle, a credible commitment to a price-level target that could only be met through significant inflation may be preferable to the current MPC rules for the time being. There are obvious difficulties for the government in changing the remit of the MPC, including communicating the new policy to the public and dealing with the political fallout, and price-level targeting has few precedents.⁵ We might expect that such a change will only happen in a serious crisis and with evidence that something similar has worked in the past. It is time to turn to the 1930s.

4 A number of implications of this type of policy change which are favourable to recovery from the 2008/9 crisis are set out by Leunig (2009). As Leunig notes, the aim is to raise expected and actual inflation rather than to try to exploit a Phillips Curve hypothesis that inflation and unemployment are inversely related because people can be deceived by inflation surprises.

5 The example usually cited is the apparently successful experiment in Sweden from 1931 to 1937 (Berg and Jonung, 1999). I shall argue below that de facto, though not de jure, the UK after 1932 is another case in point.

3. A brief overview of UK macroeconomic policy in the 1930s

In the late 1920s, macroeconomic policy in the UK economy was organized along orthodox Victorian lines although with the much greater burden of public debt which was the legacy of World War I. A return to the (fixed exchange rate) gold standard had been achieved in 1925 at the pre-war parity of \$4.86, monetary policy was in the hands of an independent Bank of England with the primary goal of sustaining this parity, and the government budget was expected at least to balance and ideally to run a primary surplus consistent with avoiding unstable debt dynamics and indeed with the aim of slowly reducing the debt to GDP ratio. The world economic crisis which erupted in 1929 and resulted in the Great Depression was a severe shock to this policy framework which was then radically reformed during the 1930s.

3.1. Fiscal policy

Problems in the world economy were transmitted into the UK initially through declines in world trade and thus British exports. The economy entered recession in 1930 and, with unemployment rising rapidly, the budgetary position deteriorated as tax revenues fell while transfer payments rose. The rise in the budget deficit shown in Table 2 in 1930 and 1931 reflects the impact of the recession on public finances not discretionary fiscal stimulus. Fiscal sustainability was jeopardized by falling prices and the threat of risk premia

raising interest rates on government debt.⁶ The situation was made more difficult by the £2 billion 5% War Loan which had to be redeemed between 1929 and 1947 and which the government was hoping to re-finance at a lower interest rate.

Table 2 reports that fiscal tightening reflected in the constant employment budget surplus began in 1929/30 and continued until 1933/34 during which time it had risen by 3.8 per cent of GDP. The flashpoint was the report of the May Committee on public expenditure which was published on July 31, 1931. This forecast a budget deficit of £120 million (3.1% GDP) in 1932/33 and proposed a fiscal adjustment of a similar magnitude, 80 per cent from expenditure cuts, notably on unemployment benefits, and 20% from tax increases. This led to the resignation of the minority Labour government which was succeeded by the coalition National Government. Following their election victory in October 1931, the scene was set for a substantial fiscal consolidation although the May proposals were watered down and the initial adjustment for 1931/2 was £76 million (Middleton, 2010).

Already by 1933/34, the automatic stabilizers having been over-ridden, the budget had returned to surplus. After 1934, as recovery from the recession progressed, fiscal policy was eased and a process of reversing the expenditure cuts and tax increases was implemented. From 1935 to 1938, deficit-financed rearmament expenditure delivered a significant fiscal stimulus equivalent to around 3 per cent of GDP (Thomas, 1983). Only at this point might fiscal policy be described as 'Keynesian' but even then the justification of a military emergency would have been familiar to earlier centuries.

3.2. Exchange rate policy

6 Using the standard formula that for fiscal sustainability $b > d(r - g)$ where b is the primary surplus/GDP, d is the public debt to GDP ratio, r is the interest rate on government debt and g is the growth rate of nominal GDP with the data set from Middleton (2010), on average in the late 1920s, $d = 1.7$, $r = 4.6$ and $g = 2.5$. If inflation is zero then $b = 3.6\%$ but if prices fell at 5 per cent per year, b rose to 12.1%. Conversion of the war debt and gently rising prices in the post gold-standard world changed this so that b fell below 2%. The value of b is quite small in each of these scenarios if d is at the 1913 level of 0.25.

The fixed exchange rate era came to an end on September 18, 1931 when, in the face of massive losses of foreign exchange reserves, the UK was forced off the gold standard. After this, the pound fell sharply against the dollar from its gold-standard parity of \$4.86 reaching a low point of \$3.24 in early December 1931 but recovered to \$3.80 by the end of March 1932. By that point, the Treasury had decided that it wished to lock in a devaluation of about 30 percent and moved to a policy of implementing exchange rate targets defined in terms first of pegging the pound against the dollar at \$3.40 and then, after the American devaluation of March 1933, against the French franc at Ffr. 88 and later at 77 (Howson, 1980). The policy was underpinned through market intervention using the Exchange Equalisation Account set up in the summer of 1932 and by a 'cheap money' policy symbolized by the reduction of bank rate to 2% on June 30, 1932.

The 1930s was an era of competitive devaluations. The extent of the depreciation of the pound is best measured against an average of other currencies, as in Table 3, which shows that a fall of close to 25 per cent was sustained over the period 1932 to 1936. Taking into account relative inflation rates, the real exchange rate was nearly 20 per cent lower than in 1929 so the competitiveness of British exports was increased (Dimsdale, 1981). Other implications of leaving the gold standard were, however, more important. By abandoning the fixed exchange rate, the UK regained control over its monetary policy and could reduce interest rates, eliminated the need for deflation of prices and wages to remain competitive and revive employment, improved the fiscal arithmetic, and created an opportunity to change inflationary expectations.

3.3 Monetary policy

Until the UK left the gold standard, the Bank of England set interest rates with a view to maintaining the \$4.86 parity. In practice, this meant that policy had to ensure that rates were not out of line with foreign, especially American, interest rates. After leaving gold, it took some time for policy to be re-

set. The opportunity to redeem the 5% War Loan was taken in mid-1932 and £1.92 billion was converted to 3.5% War Loan 1952 saving interest payments of £28.8 million annually, a non-trivial amount in the context of the £120 million savings proposed by the May Committee. At the same time, the so-called 'cheap money' policy became reasonably settled and clearly articulated; the Treasury Bill rate fell from 3.77% in the first quarter of 1932 to 0.60% in the third quarter of that year, a level close to which it remained through 1938 (Howson, 1975). Senior Treasury officials wanted the price level to rise and when the cheap money policy was introduced believed that prices would return at least to the 1929 level by 1935.

The cheap money policy was a major change which was central to the recovery of the economy and acted to offset contractionary effects of fiscal consolidation once it was clear and credible. Table 4 reports short and long term nominal interest rates and shows that long-term rates also fell. From mid-1932, there was little scope for further nominal short term interest rate reductions. It can also be seen in Table 4 that ex-post real interest rates fell sharply from 1932 as the price falls of the early 1930s came to an end and then modest price inflation set in. As might be expected, especially early on, policymakers were more successful in reducing short- than long-term real rates but eventually both fell substantially.⁷

7 The estimates of long-term real rates are subject to more uncertainty than the short-term real rates, as Chadha and Dimsdale (1999) make clear. Moreover, it is ex-ante real rates that we would really like to track but there is no reliable way of doing this prior to indexed gilts.

■ 4. The importance of credibility

It is well-known that leaving the gold standard was good for recovery across the world in the 1930s (Bernanke and Carey, 1996); crucially, it offered a route out of deflation. The UK devalued in September 1931 but this was not the signal for rapid economic growth to begin. Instead, as Table 5 reports, in the second and third quarters of 1932 the economy fell into a double-dip recession, with the implication that real GDP a year after devaluation had barely risen, before strong growth became established in mid-1933. It was not until the first quarter of 1934 that real GDP surpassed the previous peak level of 4 years earlier. By contrast, Table 5 shows that the United States did experience a surge in real GDP following its departure from gold in March 1933; a year later real GDP was 13 per cent higher and the economy avoided a second recession in the next 3 years. As is set out below, the contrast between the British and American experiences shows the importance of clarity and credibility in policy formulation.

4.1 'Regime change' in the United States

This was, of course, the era of the New Deal and it would be easy to suppose that the difference lay in Keynesian stimulus in the United States compared with deficit reduction in the UK. However, this would be a mistake. Ever since the work of Brown (1956) it has been known that the New Deal was not a massive fiscal stimulus since it was largely financed by tax increases and the discretionary increase in the federal deficit between 1933 and 1936 was less than 3 per cent of GDP. With interest rates at the lower bound, the multiplier effects of an aggressive Keynesian policy might have been big, as the estimates of Gordon and Krenn (2010) suggest,

but it was not tried.

The most persuasive account of the American turning point in 1933 is to explain it as a 'regime change' linked to the exit from the gold standard (Temin and Wigmore, 1990); they argue that the impact of the new policy stance was reflected in a doubling of share prices between March and July 1933. Recent research has clarified and amplified this proposition in the context of the zero lower bound. Eggertsson (2008) sees devaluation as a necessary but not sufficient condition since the key is not devaluation per se but creating inflationary expectations which reduce real interest rates by credible commitment to raising the price level, which was an often-stated goal of the Roosevelt administration. In his analysis, the role of the New Deal and deficit spending is central but as a credible policy that raised inflationary expectations with the government targeting a return of prices to the 1926 level. The calibrated dynamic stochastic general equilibrium model used by Eggertsson (2008) to quantify his argument predicts that, if the regime change was seen as credible, its impact accounted for around 75 per cent of the rapid rise in real GDP between 1933 and 1937. It is clear from Table 6 that real interest rates fell quite dramatically and very quickly while movements in the exchange rate, which fell to \$5.10 against the pound from \$3.45 and remained in the range \$4.90 to \$5.10 during the next 4 years, and in gold reserves, which almost doubled within a year, were consistent with the 'foolproof way' to escape the liquidity trap.

4.2 Policy vacuum in the UK

There is quite some contrast here with the formation and communication of policy in the UK. It is clear from the archival research reported in Howson (1975) that during the 6 months after leaving gold there was confusion and debate over the policy framework to adopt. The 'cheap money' or 'managed economy' strategy was not settled upon until the second quarter of 1932 and in the meantime the exchange rate was rising in early 1932 when nominal interest rates were higher than in the summer of 1931. A comparison based on Table

4 and Table 6 shows that the declines in real interest rates were slower to materialize after devaluation and were also less pronounced than in the United States. Share prices did not reach the bottom until June 1932 and then doubled over the next three years.

Not surprisingly, Mitchell et al. (2011) suggest that the double-dip in 1932 has to be understood in the light of the authorities' ineffectiveness in changing expectations. Given the absence of monetary policy stimulus and the presence of large falls in world trade, fiscal consolidation pushed the economy back into recession.⁸ Taken together, these contrasting episodes suggest that, while a large fiscal stimulus was not necessary for a strong upturn in the exit from the depression in the 1930s, fiscal consolidation without a compensating boost from monetary policy was not conducive to recovery and ran the risk of prolonged stagnation in a difficult world economic environment which had little to encourage business investment and exports. The potential parallels with today are readily apparent.

4.3 The 'Managed-Economy Strategy'

The Chancellor announced the objective of raising prices at the British Empire Economic Conference at Ottawa in July 1932 and subsequently reiterated it frequently. The fall in the exchange rate from \$3.80 in March 1932 to \$3.28 in December 1932 is consistent with escaping the liquidity trap in the 'Foolproof Way', as is the sustained fall in the value of the pound and the large increase in foreign exchange reserves over the next four years which reflected intervention by the authorities to keep the pound down (Howson, 1980). So market reactions suggest that the cheap money policy quickly became credible.

Based on archival research, economic historians have provided an overview of the strategy for economic recovery after the UK left the gold standard and control over monetary and exchange rate policy passed from the Bank to HM

8 The best available estimates of the short-run fiscal multiplier at this time suggest a value of around 1.5 (Dimsdale and Horsewood, 1995).

Treasury. Partly building on Howson (1975), Booth (1987) argued that from 1932 there was coherence in the Treasury's thinking which deserved the label of a 'managed-economy' approach. The hallmark was a central objective of a steady increase in the price level - which on the assumption that money wages would not react also amounted to reducing real wages and restoring profits – subject to not letting inflation spiral out of control. The rise in the price level would be promoted through cheap money, a weak pound, tariffs, and encouraging firms to exploit their (enhanced) market power but fears of an inflationary surge would be allayed through balancing the budget and intervening if necessary to prevent a currency crisis.

This particular 'managed-economy' strategy is clearly quite similar to a price-level target. It was sustained over several years from the middle of 1932 onwards although prices rose by a bit less than Treasury officials expected and had still not returned to the 1929 level in 1937. As Table 4 reports, it brought about a big reduction in real interest rates compared with the start of the decade. On this measure, monetary stimulus was still being provided after nominal interest rates bottomed out. Obviously, this strategy does not represent an irrevocable commitment but it was a credible policy given that the Treasury and the Chancellor of the Exchequer were in charge.⁹ Cheap money and a rise in the price level were clearly in the Treasury's interests from 1932 as a route to recovery, better fiscal arithmetic, and to provide an alternative to the Pandora's Box of jettisoning balanced-budget orthodoxy and adopting Keynesianism (Howson, 1975).

9 This would not have been the case had the Bank of England run monetary policy. Governor Norman plainly disliked cheap money and regarded it as a temporary expedient (Howson, 1975, p. 95).

■ 5. Economic recovery in the UK in the 1930s

As we saw in Table 1, from 1933 to 1937 the UK grew strongly and real GDP increased by almost 20 per cent. The recovery was based on increases in expenditure which raised aggregate demand in the context of a sizeable output gap in the aftermath of the recession. As Table 1 shows, the unemployment rate in 1932 was around twice the level in the business cycle peak years of 1929 and 1937 while real GDP in 1932 and 1933 was about 10 per cent below the level implied by the trend rate of growth. Hatton and Thomas (2010) estimate that the equilibrium rate of unemployment consistent with stable inflation was about 9.5% in the 1930s. It is reasonable to think there was scope in 1932 for expansionary policy to stimulate the economy.

Table 7 reports on increases in demand in terms of standard macroeconomic categories. Private housebuilding investment has often been seen as a key component of the recovery so it is shown separately. Several points stand out including the resilience of consumer expenditure, the slump in and slow recovery of exports, the flat-lining of government spending in the first half of the 1930s, the bounce back of other investment in 1934, and the surge in private housebuilding between 1932 and 1934 which was largely maintained thereafter.

The background to these trends is as follows. Consumer expenditure was sustained by the growth of real personal disposable income (Broadberry, 1988); in real terms, consumption fell in only one year, 1932, and then only by

0.6 per cent. Underpinned by falls in the price of food and increases in employment, real income grew at over 3 per cent between 1932 and 1935. Exports were hit by a combination of the world economic crisis and protectionism. Government expenditure and public investment were held down in the first half of the 1930s as a result of fiscal consolidation. Business investment responded to lower interest rates (Broadberry, 1986), improved profit expectations reflected in higher share prices and increased sales (Lund and Holden, 1968) while bank lending was largely maintained in a climate of business as usual in the absence of a banking crisis (Billings and Capie, 2011). Housebuilding was the sector most positively affected by the cheap money policy but was well positioned for a number of other reasons including the behaviour of building societies, permissive land-use planning rules, and a shortfall of investment in the 1920s (Broadberry, 1987; Richardson and Aldcroft, 1968).

Fiscal consolidation is normally deflationary and there is no obvious reason to think that this was not the case in the early 1930s UK. The severity of its impact typically depends on the extent to which it is offset by the beneficial effects of currency depreciation on net exports and by interest rate reductions (Guajardo et al., 2011). So was the strong economic recovery which began while fiscal consolidation was still in full swing attributable to policy activism? Two possibilities need to be considered: protectionism and cheap money. The former made a difference in 1932 and the latter was the main policy stimulus to growth between 1933 and 1935.

As part of the so-called 'managed-economy strategy', the UK abandoned free trade and imposed a tariffs on manufactures in 1932 at an average rate of nearly 20 per cent. The share of imports in domestic demand for manufactures fell from around 12.5 per cent to about 9 per cent as a result of the combined effects of the tariff and the devaluation – probably mainly the former (Kitson and Solomou, 1990); this reduced imports by about £100 million and was responsible for much

of the substantial improvement in net exports in 1932/3.¹⁰

The direct effects of cheap money were felt from mid-1932 onwards with reductions in nominal and real interest rates, as reported in Table 4. This has generally been thought to have its most immediate effect through stimulus to private housebuilding investment which increased by £55 million, or about 23 per cent of the increase in GDP, between 1932 and 1934. The number of private unsubsidized houses built rose sharply from the 4th quarter of 1932 and almost doubled from 63,000 in the half year ending September 1932 to 122,000 in the half-year ending March 1934. Broadberry (1987) estimated that about half the additional housing investment was due to lower interest rates. An increasing ratio of rents to construction costs was also favourable but, as Howson (1975) stressed, the leap in housebuilding only occurred once it was believed that construction costs had bottomed out. Here may be the most concrete illustration of the importance of monetary policy in changing inflationary expectations.

While housebuilding clearly was stimulated by the cheap money policy, this stimulus operated in favourable circumstances. Three aspects of the housing market were important in this regard. First, mortgage finance was readily available and advances by building societies rose from £86 million to £128 million between 1931/32 and 1934/35 (Humphries, 1987). Second, between 1921 and 1931 the number of families had increased by 2.05 million but the number of houses by only 1.45 million; this shortfall was made up in the 1930s such that over the interwar period as a whole both houses and families rose by about 3.5 million (Richardson and Aldcroft, 1968). Third, there were virtually no planning restrictions at this time and the period was notable for 'uncontrolled' development notably of suburbs in southern Britain (Royal Commission, 1940).

Fiscal consolidation was accompanied by strong economic growth in 1933 and 1934. This can be put in the context of supportive policy measures initiated in 1932 that offset its

¹⁰ This can be inferred using the method proposed by Foreman-Peck (1981) but correcting an arithmetic error in the original.

deflationary effects. These included policies to raise net exports, in particular, by reducing imports and monetary policy which cut nominal interest rates and reduced real interest rates by also changing the expected rate of inflation. Adverse trends in the world economy meant that recovery was based on domestic demand. Here the main transmission mechanism for monetary policy worked through the stimulus to housebuilding. Growth in real personal incomes encouraged increases in real consumer spending which rose by 8.4 per cent between 1932 and 1935 while bank and building society lending was not undermined by a financial crisis.

In the short term, the policy stance that had evolved by mid-1932 worked reasonably well to promote economic recovery. There are, however, two important caveats on this judgement. First, it did relatively little to help the troubled regions of 'Outer Britain' whose exports were exposed to the decline of old industries such as coal, cotton textiles, and shipbuilding and to the collapse of world trade. Second, it should be remembered, however, that while this was a policy package which encouraged the growth of output it did not result, as has sometimes been claimed, in a regeneration of the economy or an improvement in productivity growth. Indeed, the 'managed economy' of the 1930s is notable for a retreat from competition in product markets that proved very hard to reverse and did substantial damage to long-run productivity performance (Crafts, 2012).¹¹

11

Average manufacturing tariffs were still at the levels of the mid 1930s in the early 1960s.

■ 6. Lessons for today

The experience of the 1930s offers useful lessons for today. This is to be expected since the situation in mid- 1932 had some striking similarities with now; the economy had just been through a recession in which real GDP had fallen by about 7 per cent, growth was fragile, fiscal consolidation was seen as imperative, and interest rates were close to the zero lower bound. There was a threat of a double-dip recession – which actually materialized in the 1930s – and yet the economy was about to enjoy several years of growth at 3+ per cent per year, an outcome which would be very welcome now.

The bad news is that fiscal consolidation is deflationary and in a weak economy can deliver a double-dip recession; given the current weakness of public finances in the UK, the good news is that fiscal stimulus is not necessary to achieve a strong recovery from recession even when interest rates are at the lower bound and so cannot be cut further. The key to promoting economic growth in the early 1930s was to combine fiscal consolidation with other policies that expanded demand, in particular, cheap money.

Cheap money was a policy package that entailed keeping short term interest rates close to zero while raising inflationary expectations through announcing policies intended to raise the price level. This reduced both short and long real interest rates and then pushed the former into negative territory. The policy worked once it was clearly communicated and committed to. This is underlined by the contrast with the United States in 1933 where leaving the gold standard plus the new deal was clearly understood as regime change very

quickly and recovery started much faster.

Is it possible to repeat the experience of the UK after 1932? The answer is maybe partly - but only with some difficulty. It is in any case neither feasible nor desirable to impose tariffs nor is it reasonable to expect consumer expenditure to show the buoyancy of that period today when households are seeking to pay off debt, particularly if commodity prices continue to rise. How fast the economy can grow over the next few years depends on the current output gap which is quite unclear – based on extrapolation of pre-crisis trends it could be 10 per cent or more but looking at business behaviour and survey evidence on capacity utilization it could be as little as 3 per cent.¹²

Given that interest rates are at the lower bound, a modern equivalent to the cheap money policy would be appropriate if growth continues to be weak or the economy enters a double-dip recession. This could not be entered into lightly since it would, at the very least, entail significant modification of the inflation-targeting regime currently delegated to the Monetary Policy Committee but could deliver more stimulus than a return to quantitative easing by the Bank of England. It is quite right that this should be tried first. Nevertheless, at the zero lower bound, economic theory tells us that an option is to reduce real interest rates by a policy that convinces people that inflation will be higher in future. If further measures are required because the impact of quantitative easing with a 2 per cent CPI target is too small, this would be the most effective alternative to the fiscal stimulus called for by the government's Keynesian critics.

Quantitative easing could in principle work either through portfolio rebalancing or through signalling higher future inflation. It appears that so far its main effects have come through the former channel (Joyce et al., 2011). The MPC's commitment to the 2 per cent CPI target makes that unsurprising. Although the UK has had above-target CPI inflation for some time now, the public's medium-term

12 For contrasting views and a review of the evidence, see Office of Budget Responsibility (2011) and Martin (2011).

inflationary expectations have changed very little during the crisis and the Bank has repeatedly emphasized that its central expectation is that inflation will return to the target rate before long as transitory inflationary shocks evaporate. The MPC believes that in the medium term inflation is more likely to undershoot than overshoot the target (Bean, 2011). In sum, this suggests both that there has not been a regime change and that the MPC remains keen to emphasize that.

The 1930s' experience tells us that to be effective a change in monetary policy would have to be clear and credible. If it becomes necessary to go beyond the current version of quantitative easing to a monetary policy that seeks to work by raising inflationary expectations, then it will be important formally to abandon the 2 per cent CPI target and replace it with a new mandate for the Bank of England.

This could take the form either of raising the target rate of inflation rate or of adopting a price-level target which entails a significant average rate of inflation over a period of years. The latter is closer to the 1930s approach and has the advantage that the MPC is tasked with correcting any undershooting of the intended average inflation rate. The modern version of a cheap money policy might be to aim for a 15 per cent increase in the price level over four years. In any event, the key is to persuade the public that there will be inflation, that nominal interest rates will not be raised to counter this and that the target is credible. Quantitative easing in its present guise is not able to do this.¹³

An aspect of the 1930s economy which is remarkable to modern eyes is that in the year to March 1935 the private sector built 293,000 houses. This has not been matched in any year since the Town and Country Planning Act of 1947 despite the rise in population, household numbers and incomes. Whereas, in the modern era, the transmission mechanism for a cut in real interest rates works in the housing sector primarily through its impact on house prices, in a situation where the supply of housing land was elastic it could work,

13 Which is problematic, as is pointed out with regard to the current American situation by Woodford (2011b).

as in the 1930s, through an increase in the number of houses built and in the equilibrium housing stock. This would be much more useful in generating economic growth.

On grounds of economic efficiency, it is clear that a policy of liberalizing planning restrictions is highly desirable in any case and this could be an important complement to a policy to reduce real interest rates. House prices in the average district would be significantly lower and the housing stock higher (Hilber and Vermeulen, 2010; NHPAU, 2007). It is not difficult to construct counterfactuals in which the equilibrium housing stock in England is at least 3 million bigger than at present and a transition from here to there could easily entail building 150,000 additional houses per year for quite some years with a direct impact on employment of around 750,000. The price signals generated by lower real interest rates and a liberalization of planning rules that made hoarding land unprofitable might achieve something like this. As in the 1930s, the key would be credibly to signal that there was no advantage in delaying construction and, as then, there is the opportunity to deal with a situation where housebuilding has failed to keep up with growth in households.

None of this is likely to be palatable to politicians. They started from a different place in the 1930s that made a strategy of this type more feasible. There were no strict planning rules to reform and the forced exit from the gold standard meant that in any case macroeconomic policy had to be redesigned. It is no doubt premature to think in these terms. But, if the UK does fall into a double-dip recession, the ideas set out here make it clear that there is an alternative to doing nothing and also to calls for renewed fiscal stimulus.

■ 7. Conclusions

The 1930s offers important lessons for today's policymakers. At that time, the UK was attempting fiscal consolidation with interest rates at the lower bound but devised a policy package that took the economy out of a double-dip recession and into a strong recovery. The way this was achieved was through monetary rather than fiscal stimulus.

The key to recovery both in the UK and the United States in the 1930s was the adoption of credible policies to raise the price level and in so doing to reduce real interest rates. This provided monetary stimulus even though, as today, nominal interest rates could not be cut further. In the UK, the 'cheap money' policy put in place in 1932 provided an important offset to the deflationary impact of fiscal consolidation that had pushed the economy into a double-dip recession in that year.

If economic recovery falters in 2012, it may be necessary to go beyond further quantitative easing as practised hitherto. It is important to recognize that at that point there would be an alternative to fiscal stimulus which might be preferable given the weak state of public finances. The key requirement would be to reduce real interest rates by raising inflationary expectations.

At that point, inflation targeting as currently practised in the UK would no longer be appropriate. A possible reform would be to adopt a price level target which commits the MPC to increase the price level by a significant amount, say 15 per cent, over four years. In the 1930s, the Treasury succeeded in developing a clear and credible policy to raise prices. It may

be necessary to adopt a similar strategy in the near future.

It would be attractive if this kind of monetary stimulus worked, as in the 1930s, through encouraging housebuilding. This suggests that an important complementary policy reform would be to liberalize the planning restrictions which make it most unlikely that we will ever see the private sector again build 293000 houses in a year as happened in 1934/5.

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Table 1. The UK Economy in the 1930s (1929 = 100)

	Real GDP	GDP Deflator	Unemployment (%)
1929	100.0	100.0	8.0
1930	99.9	99.6	12.3
1931	94.4	97.2	16.4
1932	95.1	93.7	17.0
1933	96.0	92.5	15.4
1934	102.8	91.7	12.9
1935	106.6	92.6	12.0
1936	109.9	93.1	10.2
1937	114.7	96.6	8.5
1938	118.2	99.3	10.1

Note: the measure of unemployment is not the National Insurance concept used at the time (which shows higher numbers) but a constructed series which is intended to be comparable with modern figures.

Sources: Real GDP and GDP deflator: Feinstein (1972); Unemployment: Boyer and Hatton (2002)

Table 2. Fiscal Indicators (% GDP)

	Government Debt	Government Receipts	Government Expenditure	Budget Surplus	Debt Interest	Constant Employment Budget Surplus
1929	158.4	23.8	24.5	-0.7	7.7	0.4
1930	159.2	24.1	25.5	-1.4	7.6	1.1
1931	169.8	25.9	28.2	-2.2	7.7	2.5
1932	173.6	27.4	27.9	-0.5	7.8	3.0
1933	179.2	26.9	26.5	0.4	7.0	4.2
1934	173.1	25.6	25.1	0.5	6.2	3.2
1935	165.0	25.0	25.3	-0.3	6.0	2.0
1936	158.7	25.0	25.7	-0.7	5.7	0.8
1937	147.2	24.5	26.0	-1.5	5.4	-0.1
1938	143.8	24.4	28.1	-3.7	5.2	-1.5

Notes: Government expenditure includes debt interest payments. The constant employment budget surplus is for the fiscal year, i.e., the first entry is 1929/30; a bigger positive indicates that fiscal policy has been tightened.

Source: Database for Middleton (2010) generously made available by the author.

Table 3. Exchange Rates (1929 = 100)

	<i>Pound/Dollar</i>	<i>Pound/French Franc</i>	<i>Average Exchange Rate</i>
1929	100.0	100.0	100.0
1930	100.1	99.9	99.6
1931	93.3	93.2	93.7
1932	72.1	71.9	75.2
1933	86.8	68.2	77.0
1934	103.8	62.0	75.4
1935	100.9	59.9	74.5
1936	102.3	66.9	77.7
1937	101.8	100.5	84.7
1938	100.7	137.6	86.9

Notes: Average exchange rate is weighted by shares of world trade in manufactures.
Source: Dimsdale (1981)

Table 4. Interest Rates (%)

	Bank Rate	Treasury Bill Rate	Yield on Consols	Real Short Rate	Real Long Rate
1929	5.50	5.26	4.60	5.26	5.14
1930	3.42	2.48	4.48	8.63	8.01
1931	3.93	3.59	4.40	9.73	9.20
1932	3.00	1.49	3.75	5.11	7.24
1933	2.00	0.59	3.39	0.66	5.65
1934	2.00	0.73	3.10	0.80	4.26
1935	2.00	0.55	2.89	0.59	3.59
1936	2.00	0.58	2.93	-2.86	1.22
1937	2.00	0.56	3.28	-2.09	0.93
1938	2.00	0.61	3.38	-2.56	0.99

Note: Real rates of interest are calculated on an ex-post basis. Real long rates are based on the yield of consols minus a 3 year backward-looking weighted average of actual inflation rates; for further details, see Chadha and Dimsdale (1999). I am grateful to Jagjit Chadha for providing me with the data.

Sources: Bank Rate, Treasury Bill Rate and Yield on Consols: Dimsdale (1981); Real interest rates: Chadha and Dimsdale (1999).

Table 5. Quarterly Real GDP

	UK (1930 _{Q1} = 100)		USA (1929 _{Q3} = 100)
1929 _{Q1}	97.5	1930 _{Q3}	86.9
1929 _{Q2}	98.9	1930 _{Q4}	82.8
1929 _{Q3}	99.9	1931 _{Q1}	83.0
1929 _{Q4}	99.9	1931 _{Q2}	84.4
1930 _{Q1}	100.0	1931 _{Q3}	81.1
1930 _{Q2}	99.1	1931 _{Q4}	77.0
1930 _{Q3}	97.8	1932 _{Q1}	74.2
1930 _{Q4}	95.9	1932 _{Q2}	70.6
1931 _{Q1}	93.6	1932 _{Q3}	68.1
1931 _{Q2}	93.1	1932 _{Q4}	67.7
1931 _{Q3}	92.8	1933 _{Q1}	63.8
1931 _{Q4}	93.7	1933 _{Q2}	68.4
1932 _{Q1}	94.0	1933 _{Q3}	73.8
1932 _{Q2}	93.4	1933 _{Q4}	68.6
1932 _{Q3}	92.9	1934 _{Q1}	72.4
1932 _{Q4}	94.6	1934 _{Q2}	76.5
1933 _{Q1}	94.4	1934 _{Q3}	73.3
1933 _{Q2}	96.0	1934 _{Q4}	73.3
1933 _{Q3}	97.6	1935 _{Q1}	77.9
1933 _{Q4}	99.1	1935 _{Q2}	78.2
1934 _{Q1}	101.2	1935 _{Q3}	80.4
1934 _{Q2}	102.6	1935 _{Q4}	84.8
1934 _{Q3}	103.5	1936 _{Q1}	85.2

Note: Devaluation was in 1931₃ in the UK and 1933₁ in the USA

Sources: UK: Mitchell et al. (2011); USA: Balke and Gordon (1986).

Table 6. Real Interest Rates in the United States

	<i>Real Short Rate</i>	<i>Real Long Rate</i>
1929	5.78	5.25
1930	6.00	5.87
1931	11.73	9.38
1932	14.24	13.68
1933	7.16	12.17
1934	-3.07	5.97
1935	-1.55	2.26
1936	-0.75	0.97
1937	-2.00	0.70
1938	2.32	2.55

Note: Real interest rates are on an ex-post basis similar to that used in Table 4; for details of methods see Chadha and Dimsdale (1999); I am grateful to Jagjit Chadha for providing me with the data.

Source: Chadha and Dimsdale (1999)

Table 7. Components of Final Expenditure (£ million current)

	C	Private Investment		Public		X - M = NX	GDP
		Houses	Rest	Current	Capital		
1929	3983	97	262	435	123	1096 - 1269 = -173	4727
1930	3932	89	305	443	132	884 - 1100 = -216	4685
1931	3805	88	175	443	142	632 - 926 = -294	4359
1932	3683	90	139	431	119	578 - 764 = -186	4276
1933	3696	125	80	430	94	573 - 739 = -166	4259
1934	3802	145	214	446	97	608 - 799 = -191	4513
1935	3935	136	210	483	115	690 - 848 = -158	4721
1936	4080	134	237	536	140	697 - 919 = -222	4905
1937	4289	122	338	617	174	843 - 1094 = -251	5289
1938	4392	116	361	749	198	757 - 1001 = -244	5572

Notes: C is consumer expenditure; NX is net exports, X is exports and M is imports.

Sources: Feinstein (1972) except: Housing Investment: Feinstein (1965); Public Capital Formation: database for Middleton (2010)

