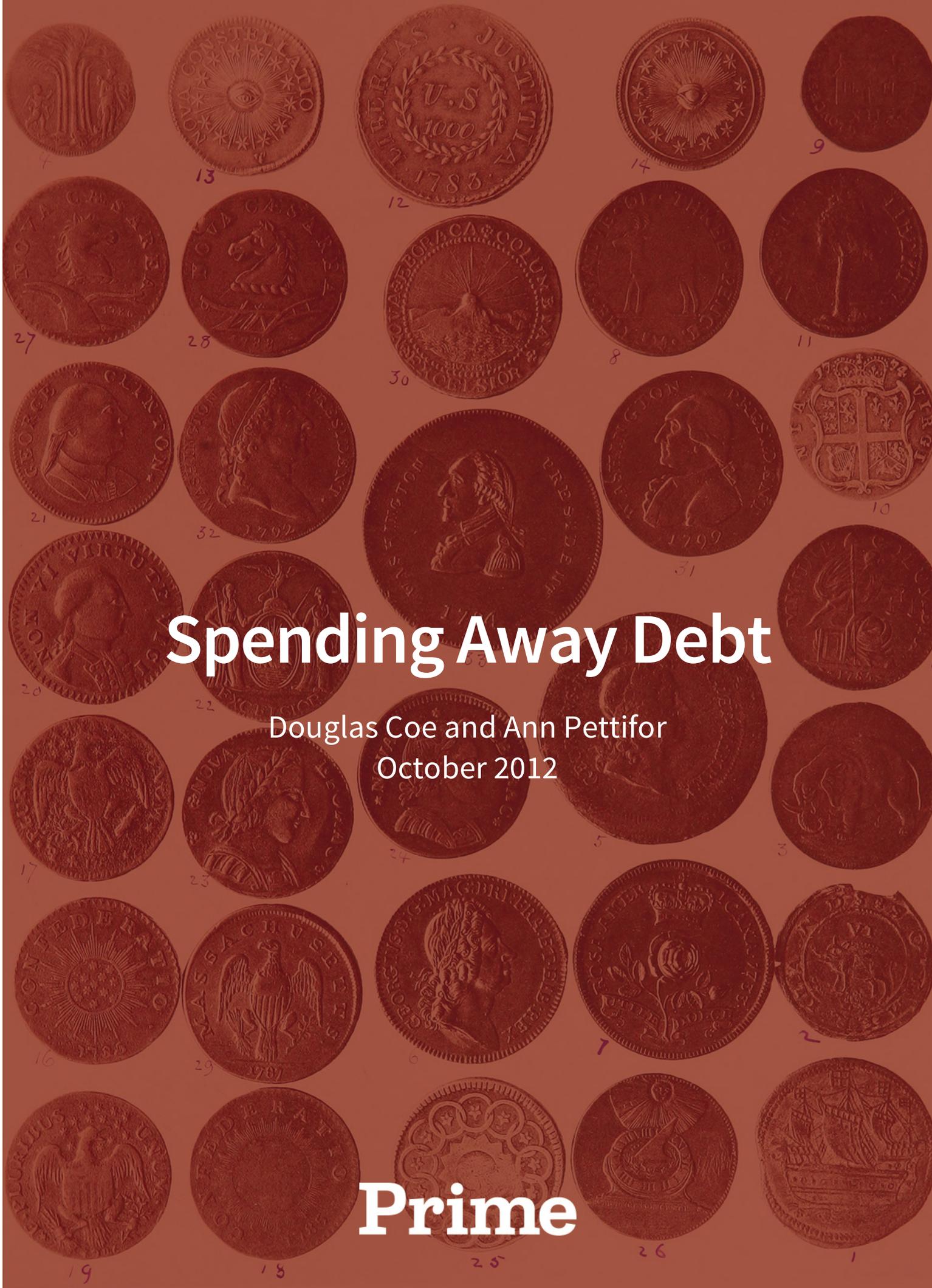


Spending Away Debt

Douglas Coe and Ann Pettifor
October 2012

Prime



Spending Away Debt

By Douglas Coe and Ann Pettifor

This analysis is extracted from the second report of the Green New Deal Group, published on 7 Dec 2009. This extract was co-authored by Douglas Coe and Ann Pettifor. It was published by the New Economics Foundation under the title, “The cuts won’t work: Why spending on a Green New Deal will reduce the public debt, cut carbon emissions, increase energy security and reduce fuel poverty.”

The full report can be read here:

<http://www.neweconomics.org/publications/cuts-wont-work>

The authors thank the Green New Deal group for permission to republish this extract.

Introduction

Look after the unemployment,
and the budget will look after itself.

(John Maynard Keynes, January 1933)

There are several reasons for believing that full employment will be easier to attain in a SSE [steady state economy] than in our failing growth economies... the policy of limiting the matter-energy throughput would raise the price of energy and resources relative to the price of labour. This would lead to the substitution of labor for energy in production processes and consumption patterns, thus reversing the historical trend of replacing labour with machines and inanimate energy, whose relative prices have been declining

(Herman Daly, 1973)

The public has woken up to the terrifying scale of private indebtedness. Encouraged by the commentators in the media, the same fears are now directed at the public debt. These fears are effectively deployed against any initiatives based on public expenditure.

In reality, these fears betray how much they misunderstand our predicament and the limited thinking of those responsible for dealing with it. We will show here that the public deficit is an outcome of policy, not a constraint on policy. At present total public debt is growing fast. As we all now understand, the British economy has been reliant to a foolish extent on the financial sector. Our tax revenues have fallen with the collapse of finance and the growth of unemployment. Our public liabilities have increased because of the bank bail-out, which has caused most of the rise in the government's debt.

In 2008/2009, national debt was 52.4 per cent of GDP. Without the financial sector interventions, it was 42.9 per cent of GDP. The increase in debt from 2006/2007 excluding interventions was about £100 billion, or about £250 billion including the financial interventions. The public debt is growing, but, as we will show, this is no barrier to action. Instead, as we will show, an active programme of productive investment is the only way to reduce the public debt.

As Figures 1 and 2 demonstrate, in the latter part of the nineteenth century both the UK and the USA began with debt on similar downward trajectories. But the financial impact of the First World War differed vastly. The US debt increased

only to 40 per cent and then improved as the economy entered the great expansion that came before the Great Depression. In the UK, debt rose massively. A good part of the rise actually happened after the war had finished, as recession took hold and the government implemented deliberate austerity measures (the so called 'Geddes Axe'). There were only very modest reductions in debt over the late 1920s.

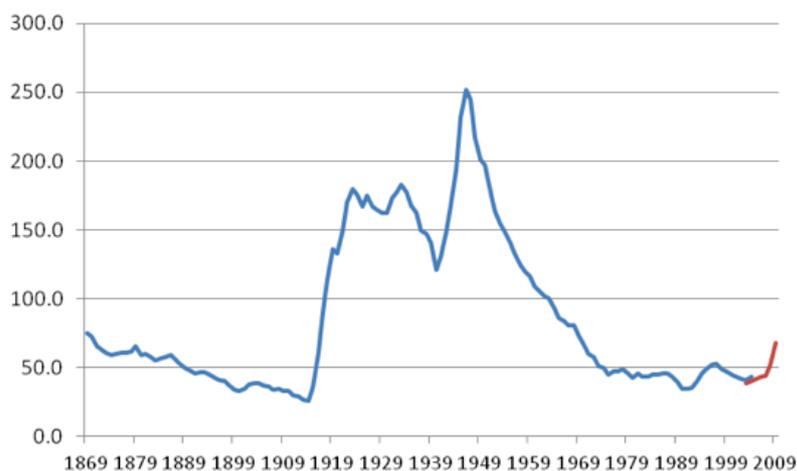


Figure 1. UK public sector debt as a percentage of GDP.

Source: HMT Public Finances Database, table A10; Darker line: UK Maastricht Deficit and Debt Statistical Bulletin and Budget 2009

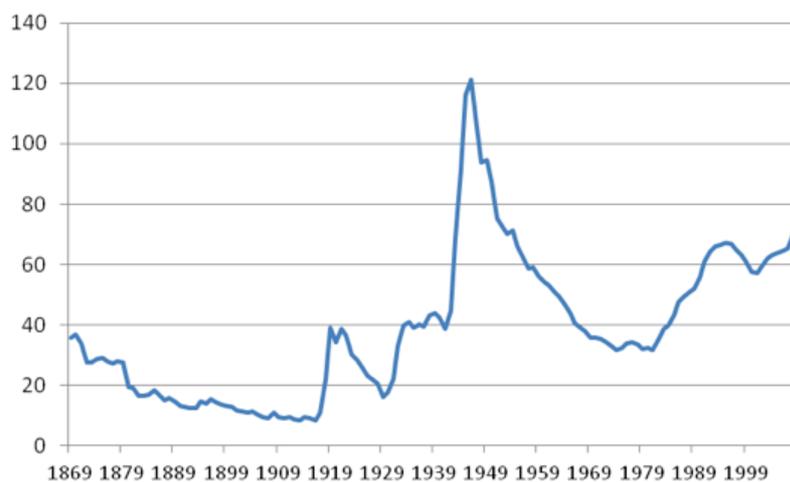


Figure 2. US public sector debt as a percentage of GDP.

Source: US Bureau of the Public Debt and author calculations
<http://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt.htm>

The Geddes Axes

Sir Eric Geddes had been Director-General of Munitions and Railways in World War I, and Minister of Transport (1919–1921). In 1921, David Lloyd George asked him to take the chair of a committee which would suggest reductions in public expenditure. The report of the Geddes Committee, dubbed the 'Geddes Axe', recommended savings of £86 million. The Axe effectively scrapped plans for education reforms, and abandoned proposed compulsory education after the age of 14 in schools. It also ended planned housing reforms.

It abolished a wide range of government posts and some departments, such as transport, plus reductions in salaries for police, teachers, and others. The report provoked an outcry and some recommendations were rejected, so that the eventual reduction in the 1922 budget was £64 million. Education had initially been marked for savings of £18 million – the final figure was around £6 million, but it still suffered, especially through the cutting of continuation schools. In fact, the Axe was aimed mainly at the armed services, which Geddes had successfully portrayed as profligate spenders.

These cuts were on top of the initial cuts in public expenditure that moved the economy from a war to normal footing (current expenditure was cut back from £1.8 billion in 1918 to £0.5 billion in 1920). The Geddes Axe led to government final expenditure (including investment) falling from £648 million in 1921 to £483 million in 1923. GDP collapsed, and in 1924 earlier improvements in unemployment were arrested. The cash level of public debt was virtually unchanged. As a share of GDP it rose from 150 to 180 per cent.

The global deflation of private debt

The world economy is in a debt-deflationary spiral. Over the past twenty years, businesses and households have seen indebtedness steadily rise probably to a more severe extent than in the 1930s, when US economist Irving Fisher coined the phrase.¹

¹ Irving, F (1933) 'The Debt Deflation Theory of Great Depressions, *Econometrica*, 1 (4), October, 337–57.

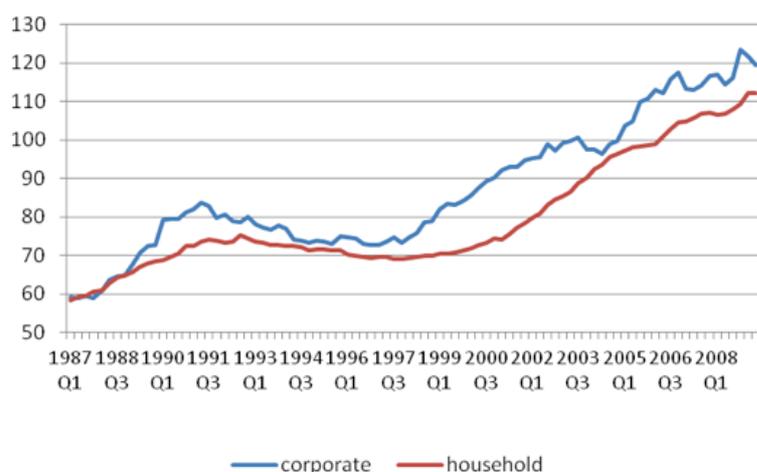


Figure 3: UK Debt as a share of GDP

Source: *UK Economic Accounts* tables A57 and A64; corporate debt is shorthand for non-equity liabilities of private non-financial corporations

After the corporate excesses of the late 1990s, collapse was averted by the deliberate fostering of household and wider speculative excess in commercial and residential property, and by the rapid expansion of complex financial instruments. As Figure X indicates both corporate and household debt doubled as a share of income (GDP) in the twenty-year period from 1998 - 2008. *The Green New Deal: Joined-up policies to solve the triple crunch of the credit crisis, climate change and high oil prices*, explained why this could not have gone on forever.

The ‘credit crunch’ signified the moment this debt creation or debt inflation stopped, when the severity of the situation dawned. Businesses had no choice but to cut intermediate inputs, scrap investment plans, reduce wages, make redundancies and at worse go bankrupt. Households had to confront the reality of their debts, especially as house prices collapsed and jobs were lost. Employment across the world has collapsed. This is the price of debt deflation, as liabilities are met or written off through cutting jobs. In *The debt-deflation theory of great depressions*, Fisher warned of a vicious cycle. As a result of rising unemployment, fears of unemployment and awakening to the reality of debt, household incomes and spending power are drastically reduced, which in turn affects the demand for the goods and services produced by businesses, further adding to the pressure on the corporate sector.

Policymakers have been running to catch up ever since the ‘credit crunch’ hit. Central banks were astonishingly slow to cut discount rates, and resisted more radical measures for too long. With the inevitable failure of discount rate cuts to stem rises in interest rates in the market, the need for quantitative easing was accepted. There was less reticence about the government directing taxpayer support to the financial sector.

Celebrations of 'green shoots' become more muted as each week goes by, but policymakers have nothing else to offer. They are rabbits frozen in the glare of the headlights of the debt deflation that they scarcely recognize. Certainly interest rate cuts are absolutely vital for recovery, but the most basic and simple lesson of the great depression was that cuts in interest were far less effective in a recession that rises in interest rates in a boom. Massive transfers of funds from the taxpayer to the finance sector have supported the financial sector's assets on a temporary basis only. As the additional transfers to Lloyds and RBS have shown, they do nothing to permanently improve affect the underlying strength of the economy. By contrast this is exactly what the Green New Deal programme with its emphasis on productive activity can achieve.

After the Great Depression

The Great Depression set public debt in both the USA and the UK back on an increasing path. But then, rises in debt were halted by expansionary monetary and fiscal policy (government spending and taxation). When public spending rose, especially in the UK, debt began to fall.

Franklin Delano Roosevelt's New Deal began in 1933. There is much discussion about how big this was, but there should be no doubt that it constituted government intervention on an unprecedented scale, and was a political achievement of the highest order. Peter Fearon, a historian of the Great Depression, illustrates some of the expenditures of the Works Progress Administration:²

- 644,000 miles of roads
- 122,760 bridges
- 38,800 schools
- 2,300,000 public toilets
- 8,000 swimming pools

He estimates that \$21.1 billion was spent on public relief and federal works programmes between January 1933 and December 1940. This is equivalent to 3 per cent of total GDP over the same period. In today's prices this would be \$420 billion a year in the USA and £42 billion in the UK.

In the UK, debt peaked in 1933. This improvement coincided with a great relaxation in monetary policy (interest rates and money supply), as the UK had come off the gold standard and tried to carve out some space for independent action from the dictates of international finance, by using capital controls. But, although it did so on a smaller scale than the USA, Britain had also begun to increase public expenditure.

In both countries, policy-makers confronted with the Depression began with austerity measures. As Figure 3 shows, government expenditure was held low or reduced until 1933. Such cuts inhibited recovery and failed to reverse the deterioration in the public finances. Then, from 1933 in the USA and from 1934 in the UK, governments began to spend.

In Britain, these increases grew steadily from year to year. They surged ahead in 1939 as the government realised that war was inevitable. In the USA, expenditure was more erratic, but showed significant increases. In both

² Fearon P (1987), *War, Prosperity and Depression: The U.S. Economy 1917–45* (Lawrence: University of Kansas Press) p. 250.

countries, unemployment began to fall. But then, in 1937, in spite of the success of the New Deal, Roosevelt cut spending.

Roosevelt has received a good deal of criticism for his role in creating the recession that followed, which some call the ‘Roosevelt recession’. Donald Winch outlines eventual spending cuts following pressure from decisions taken by other people.³ In the 1936 election, Roosevelt promised only ‘to balance the budget in the near future’. But once the election was won, Congress voted a bonus to soldiers over Roosevelt’s veto. ‘At much the same time the government was deprived of anticipated receipts from a processing tax which was ruled to be unconstitutional by the Supreme Court,’ writes Winch. These manoeuvres led to pressure on other programmes, and forced cuts in New Deal spending.

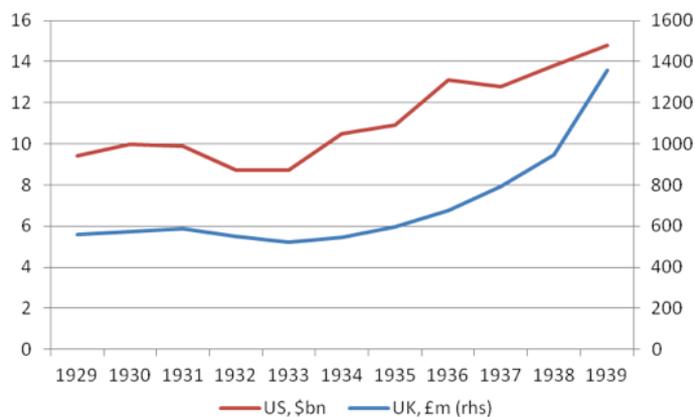


Figure 4. Government expenditure at current prices.

Source: C. H. Feinstein (1972), *National Income, Expenditure and Output of the UK 1855-1965*, Cambridge, CUP, tables 2 and 39; Bureau of Economic Analysis

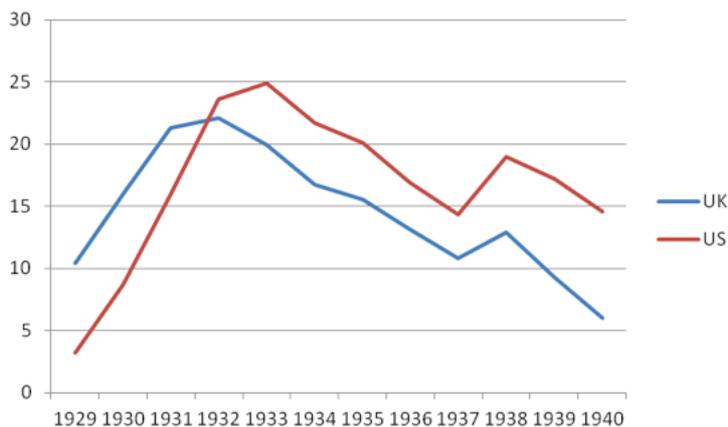


Figure 5. Unemployment rates, %.

Source: C. H. Feinstein (1972), *National Income, Expenditure and Output of the UK 1855-1965*, Cambridge, CUP, US Bureau of the Census (1976) *The Statistical History of the United States from Colonial times to the Present*, New York: Basic Book Inc.

³ Winch D (1969), *Economics and Policy: A Historical Study* (New York: Walker and Company) p. 242.

The Federal Reserve tightened monetary policy at the same time. It was inevitable that the Depression should return.

At the end of 1937, the New York Stock Exchange suffered its worst day since 1929. The Dow Jones dropped 40 per cent between August and October, and industrial activity fell more sharply than at any time in US history. In the last four months of 1937, more than two million people lost their jobs, followed by a further two million in the first three months of 1938. If unemployment had continued to rise at that rate throughout the year, the country could have lost almost two-thirds of the jobs created by the New Deal's work programmes since 1933. But the wider population was left in no doubt of the brutal consequences of cuts in public expenditure. On 14 April 1938, Roosevelt submitted a large spending and lending programme to Congress amounting to US\$3.75 billion, as well as measures to expand credit. The result was that, by the end of the year, employment had risen by two million, factory jobs by 26 per cent and steel production by 127 per cent.⁴

Spending carefully targeted at job creation had turned the US economy around. As Winch observed: 'The expansionist fiscal policy thus inaugurated was continued right up to the beginning of the Second World War.'⁵

In this way, both Britain and the USA approached the war with public expenditure increasing, their economies on the road to recovery, and public debt well under control. But the expenditure increases needed for war were of a scale that debt inevitably increased again. In the USA, the public debt burden rose above 100 per cent of GDP. In the UK, the war began with public debt still at around 120 per cent of GDP and debt rose to 250 per cent of GDP. In each of the great democracies, the whole population was mobilised to fight fascism with a debt burden far greater than it is now. Unemployment fell to nearly zero.

The level of UK national debt peaked at the end of end of the war in 1946. The following year, under a Labour government programme that included the introduction of the welfare state and NHS, national debt began to fall. Over the era commonly associated with pro-public sector and anti-private sector policies, when contemporary belief would lead us to conclude that the public debt must have steadily risen, it actually fell just over 200 percentage points to 50 per cent, roughly 7 percentage points a year.

Since the early 1970s, UK national debt has not improved. It has fluctuated according to the state of the business cycle, at around 50 per cent of GDP. From 1991 to 1996, under a Conservative government, debt rose from 32 to 50

4 Edward Smith, J (2008) FDR , Random House USA; pps 395-398)

5 Winch D (1969) Op.Cit.

per cent of GDP, after the excesses of the Lawson boom turned into a slump. From 2002, the Labour government presided over rises in the public debt, after the collapse of the so-called dot-com or new economy boom at the end of the 1990s.

The truth is that public debt does not behave as conventional wisdom says it does. In general, and with the exception of wartime, our public debt has gone down after periods associated with more interventionist policies. It has also gone up when spending is cut and matters are left to the market. The answer lies in the nature of macroeconomic systems.

Public expenditure in recession

Why does debt behave like this? What Lord Keynes realised in the early 1930s, in the wake of the Great Depression and over a decade of economic failure in the UK, was that the amount of activity, and employment, in an economy depended on what he called 'aggregate demand'. Aggregate demand is made up of household spending, business investment, government spending and exports to meet overseas demand. It is met by domestic production and foreign production (imports). The modern understanding of gross domestic product (GDP) began with this idea.

A recession or depression was characterised by a collapse in aggregate demand. This decline in demand starts a vicious cycle; firms go bankrupt or cut costs and spending. This leads to cuts in employment, which lead to further reductions in demand as the income and spending power of citizens goes down. This leads to reduced revenues and more pressure on firms and the cycle goes round again.

The aim of policy under such conditions must be to restore aggregate demand. The conventional approach is through monetary policy. Central banks cut their discount rate. This feeds through to reductions in interest rates paid throughout the economy, which in turn encourages more borrowing and spending. But in a recession, this is not such a simple task. For one thing, in financial crises, interest rate cuts don't always feed through to lower interest rates for consumers and businesses. Also the level of debt worries both borrowers and lenders. The credit crunch was the result of a widespread realisation that there is too much private debt. Both households and companies realise they have to get their finances in better order. Finally, there tends to be a wider collapse in confidence that makes businesses frightened of any kind of expansion.

For these reasons, cutting interest rates and increasing monetary supply may not be enough to restore demand or to increase employment. This may still be the case even after more extreme action along the same lines, like quantitative

easing or protecting the value of financial assets on the balance sheets of the banks.

Under such circumstances, the only possible way of increasing demand is through government action. Public works spending is the most attractive option because this goes straight to help employment and companies, but also because the projects can add to the well-being of the nation. In the case of green expenditure, spending can be deliberately directed at a reducing carbon emissions and redressing the depletion of natural resources.

In a recession, spending less and saving more is exactly the right thing to do for individual households and firms in financial difficulties, but it will also damage the economy as a whole.

That means a recession is not the time for public retrenchment. The public sector has to take up the slack with public works that are financed by loans. It should only start retrenchment when private demand has been restored. There is no reason why public works programmes should be permanent. And, since the programme of works set out in the Green New Deal are explicitly designed to transform the energy infrastructure of the UK to meet the challenges of climate change and peak oil, they would not need to be. The whole point now is to revive aggregate demand and economic activity while simultaneously preparing for future shocks. As demand is restored, and employment goes up too, the revenue from taxes comes back up and the cost of benefits comes down, and only then can public spending be cut.

Investment in infrastructure projects, such as renewable energy and making buildings energy efficient, fit this bill perfectly. That is why we propose it now. Keynes argued that spending would pay for itself. This argument was asserted even before the 1930s, with the Liberal Party arguing in their manifesto for the 1929 general election: 'We are ready with schemes of work which we can put immediately into operation. These plans will not add one penny to national or local taxation.'

This is one of the fundamental propositions of Keynes's economics, yet the economics profession today remains silent about it, even those who advocate public works. Keynes is not about borrowing in the bad times and repaying in the good; the borrowing in the bad times pays for itself.

The multiplier and saving

To make their case, Keynes and his associates developed the theory of the multiplier.⁶ (See Appendix 1 for a full explanation.) The principle underlying this theory was that any new spending had a series of ‘repercussions’ through the economy. This meant that the aggregate impact would be far larger than the original expenditure.

The direct effects of government spending on a wind farm will first benefit the companies that produce the relevant equipment, their existing employees, and those who benefit from the new jobs created as a result. But the increase of employment doesn’t stop there. There will also be a number of secondary repercussions.

The extra wages and other incomes paid out are spent on extra purchases, which in turn leads to further employment. So the workers on the wind farm stimulate more demand for food, entertainment, clothes and so on. ‘If the resources of the country were already fully employed, these additional purchases would be mainly reflected in higher prices and increased imports,’ wrote Keynes. ‘But in present circumstances this would be true of only a small proportion of the additional consumption, since the greater part of it could be provided without much change of price by home resources which are at present unemployed.’⁷

But the process continues: ‘The newly employed who supply the increased purchases of those employed on the new capital works will, in their turn, spend more, thus adding to the employment of others; and so on.’⁸ These cumulative repercussions are a virtuous reverse of the vicious cycle introduced at the start of this section.

The logical consequence of the repercussions is spending spiralling upwards with no limit. But at each stage of the process there are leakages. Households don’t usually spend all their extra income. Some government spending goes to meet profits and other costs of firms. Some demand is met by overseas producers (imports), and some goes into higher prices rather than higher production. These make sure that the process is contained.

⁶ Keynes set out his case for the public in his 1933 pamphlet *The Means to Prosperity*, from where much of the argument in this section is drawn.

⁷ Keynes JM (1933) *The means to prosperity*. (London: Macmillan).

⁸ *Ibid.*

The public finances

It should be obvious that any new employment will lead to more tax revenue. Equally, those who take up work no longer claim benefits. The scale of these gains to the exchequer depends on aggregate tax rates and how high the benefits are which are paid to the unemployed. Calculations are hypothetical and only intended as indicative. But if government expenditure on implementing public works is £1 billion, the multiplied impact on national income is £1.5 billion, which accrues to households as income.

If the total share of taxation is assumed to be 35 per cent, then £525 million will be paid in taxation. The benefit saving depends on the number of new jobs created. Average earnings in the UK is about £25,000, so we should assume that the full cost of the government creating one job (involving no capital expenditure) is £40,000, to take into account profits and other costs. The total number of jobs created will then be about 35,700 from the initial investment of £1 billion.

The cost of supporting one unemployed person is about £12,000, so the total saving in benefits will be £450 million. Therefore the total saving to the public finances is the increase in taxation of £525 million plus the saving on benefit of £450 million, equal to £975 million, just short of the original outlay in expenditure.

There will be other flows that can't be quantified, not least some corporate taxation. There will also be the wider effects from a general improvement in confidence, which may even outweigh the impact of the initial expenditure. Confidence will lead to increased production and increased employment which will lead to more taxation revenues and benefit savings. The purpose of this example is to show *how* public works spending *can* pay for itself. The uncertainties involved mean that exact calculations are simply not possible.

This logic only works when there are people out of work who would really much rather have a job and who will, as a result, take a job, pay tax and save benefits if they get the chance to do so. This situation only exists in large numbers during a recession so, once the recession is over, public works spending has to be scaled back or withdrawn. If it isn't, then it can become inflationary. Until that point, this is exceptionally unlikely: when there are large numbers of involuntarily unemployed people, the pressure on wages to rise is very low indeed, as we are seeing now. The risk of inflation from this policy is, therefore, effectively non-existent.

That is the theory, but the evidence of historical experience is very compelling. In the 1930s, public works aided recovery from the Great Depression. In the USA, rising public debt was stabilised and in the UK the public debt fell as a share of GDP. Inflation was restrained throughout. We may stand some 80 years from the start of the Great Depression where contemporary challenges necessitate a different package of investments, but the underlying symptoms of the decline are the same. There is no reason why the consequences of spending on public works now should be very different.⁹

⁹ Some argue that the extent to which the UK economy is dependent on imports is a threat to public works expenditures. But the same considerations apply to an expansion driven by the private sector. Moreover, a deliberate expansion of public works could at least ensure that a good deal of the expenditure is directed to domestic businesses. (It should also be noted that, even in the 1930s, there was some reliance on imports; some pretend otherwise.) Nonetheless, the reliance on imports is a vice that demand longer-term action. On this time scale, we favour a move to localisation, where consumption is largely met by domestic production, and restrained according to resource considerations.

Appendix 1

The mathematics of the multiplier process

The theory of the multiplier process can be illustrated by considering an increase in government expenditure of £1billion, with leakages to saving only, and the assumption that households will spend 80 per cent of any increase in income.

The direct effect of the increase in public expenditure is £1billion. The first repercussion of the increase in expenditure is that households spend 80 per cent of the additional income, equivalent to £800 million. The next repercussion is the expenditure of 80 per cent of the additional income of £800 million, and so on. The process is encountered in schools as the mathematics of a geometric progression: $1 + 0.8 + 0.8^2 + 0.8^3 + \dots$ etc. The total of this process can be simply expressed as equal to $1 / (1 - 0.8) = 5$, so that the multiplier is 5, and the aggregate impact of an increase in government expenditure of £1billion is £5billion. Assuming that none of the increase goes to prices or imports, the total change in employment will be five times the direct increase in employment.

The whole of this £5billion accrues to households, with £4billion spent (80 per cent) and £1billion saved, meaning that the amount saved is equal to the original amount of the expenditure. In this way Keynes also demonstrated that the original outlay in government expenditure matched the new saving of households, proving the critics that said government expenditure would divert funds from other productive uses in the private sector wrong. (He might also have added that in a recession almost by definition private companies don't demand funds.)

This example is entirely hypothetical and not realistic. In practice, any employment gain will be a far lower multiple of the original outlay, but the basic equality of the saving and new expenditure is true no matter what share of new income is spent by households.

Today, estimates of the multiplier can be determined from the National Accounts.

The multiplier can be obtained as $1 / (1 - c + m)$ where:

c is the share of an increase in aggregate income that goes to household consumption, or the marginal propensity to consume (mpc) (this approach should crudely account for any leakages to profits and other costs), and

m is the share that goes to imports, or the marginal propensity to import (mpi).

In the UK the mpc is about $2/3$ and the mpi $1/3$, so that the multiplier is 1.5. In the US the tendency is to consume more and import less, so that the multiplier is higher and closer to 2¹⁰ There are concerns about the extent of leakages to price, but at times of high unemployment this is both unlikely and of limited consequence, given that a small rise in prices would also help company revenues.

© Ann Pettifor and Douglas Coe 2012

Provided that you acknowledge the authors, that you fairly represent the views they express and that you credit <http://www.primeeconomics.org>, you may freely quote from this article.

*Cover Image: *Monograph of United States cents and half cents issued between the years 1793 and 1857*, Frossard, Ed. (Edouard), 1837-1899 Loewy, Benno, 1854-1919

10 . This is somewhat higher than the recent estimate from the Council of Economic Advisers, which places the US multiplier at closer to 1.5. Romer and Bernstein, 2009

Prime

*Policy Research in Macroeconomics is a company limited by guarantee
Incorporated in England and Wales
Company no. 07438334*

*Registered office:
30 Percy Street
London
W1T 2DB*

*The PRIME team can be contacted at:
info@primeeconomics.org*

*51 Clarence Gate Gardens
Glentworth St
London NW1 6QS*

*For more information, please visit:
www.primeeconomics.org*