



The
University
Of
Sheffield.

SPERI Paper No. 23

The Failure of Austerity.

Robert Skidelsky

speri.

Sheffield Political Economy
Research Institute.

About the author



Lord Skidelsky is Emeritus Professor of Political Economy at the University of Warwick. His three volume biography of the economist John Maynard Keynes (1983, 1992, 2000) received numerous prizes, including the Lionel Gelber Prize for International Relations and the Council on Foreign Relations Prize for International Relations. He was made a life peer in 1991, and was elected Fellow of the British Academy in 1994.

ISSN 2052-000X

Published in June 2015

Foreword

This Paper is drawn from the Annual SPERI Lecture given by Lord Robert Skidelsky in The Octagon at the University of Sheffield on 19th May 2015. References have been added as appropriate, but the text remains as delivered on the occasion.

The Editors

I. Vice-Chancellor, Professors Payne and Hay, ladies and gentlemen, I am honoured and delighted to have been asked to give this year's annual SPERI lecture. This particular acronym stands for Sheffield Political Economy Research Institute; and I want in this lecture to illustrate some of the power and value of a political economy approach to the most urgent question in contemporary British macro-economic policy: namely, the past and future of George Osborne's austerity programme.

I am currently writing a book to be entitled *Unsettled Questions in Macroeconomic Policy*. The historically-minded among you will know that the inspiration of this title comes from John Stuart Mill's famous essay of 1844 called 'Some Unsettled Issues in Political Economy'. Mill was puzzled to know how Say's Law – crudely the doctrine that 'supply creates its own demand' – could be reconciled with cycles of boom and bust, as well as long periods of depression, during which goods were left unsold as people withdrew from spending. Mill came up with an ingenious answer. Provided, when people started hoarding money, workers were employed producing money, there could never be any lasting unemployment or what he called a 'general glut' of commodities.¹

Mill's essay exhibits two recurring features of economic argument. First, coming at the tail-end of a major agricultural and industrial depression, it fits the pattern of questioning existing economic theory when it cannot answer the question uppermost in people's minds at the time. The same happened in the Great Depression of 1929-32 which gave rise to the Keynesian Revolution; in the stagflationary 1970s which produced monetarism; and the same questioning, this time of efficient market theory, is taking place today in the wake of the Great Recession.

But Mill's essay exhibits another recurring feature of economic theorising: a Lakatosian strategy of protecting the central doctrine by modifying it sufficiently to achieve some consistency with the facts. Perhaps this is what every science does. Thus Mill concludes his essay with a qualified defence of Say's Law, to wit, 'every increase of production, if distributed without miscalculation among all kinds of produce in the proportion which private interest would dictate, creates, or rather constitutes, its own demand'. Notice he has slipped in the requirements of correct calculation and perfect competition. to validate Say's Law. Theoretical consistency is saved at the expense of realism.

II. In my forthcoming book, I treat fiscal theory as one of the most important unsettled questions of today. It goes without saying that it was far from settled by the election result. In fact, one of the terrifying things about the election was the appallingly low level of public debate about economic matters it engendered. There was not a glimpse of economic theory in any discussion, even in the so-called quality press, and facts were simply plucked from the most convenient of shelf of data to hand.

The Conservatives accused the previous Labour government of having 'overspent', as though the existence of a deficit in 2010 was self-evident proof of 'overspending'. Labour, far from defending its record, or justifying the possible value of a deficit in the circumstances, promised only to cut the deficit more fairly than the Conservatives.

Perhaps public debates were always thus. Walter Bagehot wrote about one 19th century politician that ‘the secret of his success was that he always left out the premises on which his arguments depended’. But at the time this was considered sufficiently unusual to be worthy of comment. To realise it was not the general rule we need only turn to the incredibly high intellectual level of the debates between Asquith and Joseph Chamberlain on the issue of free trade versus protection in 1902-3, before vast audiences considerably less well educated than today’s voters are supposed to be. There was nothing remotely like this in the recent election, nor indeed in the build-up to it. None of the leaders were up to it, intellectually or rhetorically. Yet the issues – the future of our union, of the European Union, of our economy – are hardly less momentous.

III. But now down to business. The main unsettled issue in fiscal policy concerns the relationship between the government’s budget and the economy. This is part of a wider debate about the role of the state in economic life. But I leave to one side the wider issue, and concentrate on the economic argument, while recognizing that it leaves a good deal out of account.

On the scientific question, two positions can be identified. The first views state frugality as a necessary condition of the growth of wealth; the second argues that state spending can play a positive role in creating wealth. Which is correct, and under what conditions? Let us consider each in historical context.

By the end of the Napoleonic wars, the settled view among the leading British economists was that a large state budget retarded the growth of wealth. State spending, it was said, was inherently unproductive, and therefore took resources from the productive economy. Taxation to pay for it ought to be kept as low a share of national income as possible. This was the foundation stone of scientific fiscal policy. It is the missing premise of George Osborne’s austerity programme.

The founding father of the doctrine of state frugality was not so much Adam Smith as David Ricardo. The theory of Ricardian equivalence is of particular relevance in the current debate. Borrowing, according to this argument, is simply deferred taxation. Taxation is better than borrowing because it reveals to taxpayers the full extent of their own liabilities. Borrowing, on the other hand, may delude them into thinking they will only have to pay interest on the national debt, and therefore blind them to the need to save enough to pay the full cost of state spending. We shall see, in a moment, how the theory of rational expectations, by removing the element of delusion which Ricardo took for granted, removed the possibility that borrowing could have any beneficial effect.

The doctrine of state frugality underpinned the Victorian fiscal constitution. Its rules were simple. Government was to be kept small in relation to the economy. No investment function for the state was allowed, despite the fact that Adam Smith had given the state the duty of ‘erecting and maintaining certain public works and certain public institutions’ and promoting universal education.² The budget was to be annually balanced. Balancing the budget included a surplus for repaying the National Debt. Maintaining an annual Sinking Fund was considered important for ‘con-

confidence' in the government's creditworthiness. Borrowing was for war only. Free trade policy would diminish the likelihood of wars.

The implicit premise behind all this was that markets were optimally self-adjusting, or, to put it another way, that the market economy always tended to full employment. This idea seemed to be contradicted by the business cycle. But it is important to notice that there was just about enough adventitious correspondence between the theory and the facts in the 50 years leading up to the First World War to obviate a frontal assault on the theory.

Keynes expressed this historical conjuncture, albeit somewhat long-windedly, in a language the Victorian economists would have found somewhat strange:

During the nineteenth century, the growth of population and of invention, the opening up of new lands, the state of confidence and the frequency of war...seem to have been sufficient, taken in conjunction with the propensity to consume, to establish a schedule of the marginal efficiency of capital which allowed a reasonably satisfactory average level of employment to be compatible with a rate of interest high enough to be psychologically acceptable to wealth-owners.³

In short, in that era, the capitalist market system worked more or less as it was expected to, but not for the reasons it was expected to.

IV. The settled theory underlying Victorian fiscal practices was overturned in the twentieth century by the experience of prolonged mass unemployment, which led to the Keynesian Revolution. Keynes and his followers denied that state spending was necessarily at the expense of private spending. Rather, they took private investment to be inherently volatile, and thus saw a permanent investment role for the state to stabilize the macro-economy.

In slump conditions, Keynesians argued that discretionary changes in public spending should be used to offset the fall in private spending. The logic of this argument pointed to the desirability of financing counter-cyclical spending by borrowing rather than by taxation, since its purpose was to ensure that the extra spending had a net impact on total spending. (I am abstracting from the theory of the balance budget multiplier).

It was the Great Depression of 1929-32 which demolished the century-old edifice of Victorian public finance; a key moment in its demolition was the confrontation between Keynes and Sir Richard Hopkins of the Treasury at the Macmillan Committee on Finance and Industry on 6 May 1930. In the run-up to the General Election of 1929, Lloyd George had issued a pledge, endorsed by Keynes, that a Liberal government, the Conservatives then being in power, would borrow £250m for a two-year programme of infrastructure development to get rid of what he called 'abnormal' unemployment. The Treasury had rubbished his proposals by restating the Ricardian doctrine; loan-financed capital spending would leave a 'hole' in private capital.

Ralph Hawtrey, the intellectual architect of the Treasury view, stated one part of

this doctrine with Ricardian clarity in 1909: ‘the Government by the very act of borrowing for [state] expenditure is withdrawing from the investment market saving which would otherwise be applied to the creation of capital’. By 1923, Hawtrey, abandoning the full employment assumption, admitted that increased government spending could increase employment, but only if it was financed by borrowing from the Bank of England, i.e., by expanding the money supply. In *Quantity Theory of Money* terms, he then concluded that it was the monetary expansion, not government spending on public works, which caused the increased employment, and the same result could be achieved without government spending simply by increasing the money supply

In his testimony to the Macmillan Committee on 6 May 1930, Sir Richard Hopkins of the Treasury receded from these heights of Ricardian abstraction to the lower slopes of practical considerations. The Treasury was not opposed to government spending as such, Hopkins said, but to the particular plan put forward by Lloyd George. This plan, far from setting up a ‘cycle of prosperity’ as Keynes had hoped, would much more probably produce a great cry against waste, so the loans would have to be ‘put out at a very high price’. This new version of the Treasury doctrine, later labeled psychological crowding-out, took Keynes by surprise. He tried to pin Hopkins down to his own original understanding of the Treasury view. Was it the Treasury position that ‘schemes of capital development are of no use for reducing unemployment?’ he asked. That was going ‘much too far’, Hopkins replied. Did the Treasury not believe that ‘that any capital that could be found for their schemes would be diverted from other uses?’ That, said Hopkins, ‘was a much too rigid expression of any views which may have come from us’. It was the ‘atmosphere in which schemes may be undertaken’ which condition their effects.

‘You mean’ said Keynes ‘that if the schemes are very unpopular they may have reactions of an adverse kind?’

‘Yes’.

‘But that would not affect the amount of employment the scheme would create?’

‘Not the amount the particular scheme would create...but it immediately alters its dynamic effect’.

‘So the issue’, Keynes went on, ‘between those who are in favour of these schemes and those who are against them, is not whether they cure unemployment?’

‘Do you wish me to agree?’

‘What is the point where we differ?’

‘If...a scheme of this type is undertaken under different conditions [from those you assume] it is not in itself a dynamic force towards a great renewal of activity and prosperity... It does [then] make a hole in the capital which is available for the purposes of the community... It might lead people to believe that this country was a much worse place in which to do business.’

Keynes tried again:

‘Is it your view that all the capital which is available is used?’

‘No. I should say very likely that it may not be now’.

‘Nearly all of what you have been saying today comes to this, that it is difficult to find good schemes’.

‘Yes’.

‘And that bad schemes are open to indirect objections. That is quite different from

what I previously thought to be the Treasury view. It was not that kind of view, but the theoretical view, that the objection to these schemes was that they caused diversion. That was a misunderstanding on my part.⁹

‘Yes. The Treasury view is not a rigid dogma. It is the result of the view that we take as to the practical reaction to the scheme.’

‘It bends so much that I find difficulty in getting hold of it.’

‘Yes, I do not think these views are capable of being put in the rigid form of a theoretical doctrine.’

Let’s stand back for a moment. What Hopkins had done was to invoke what Paul Krugman in 2011 called ‘the confidence fairy’: the view that the effects of a budget deficit on the economy depend on the expectations of the business community, right or wrong, about its effects; formally, that it depends on the model of the economy in the minds of the business community. If they believed that a government loan-financed programme of capital investment would make things worse, that belief would cancel any possible beneficial effect of the programme, by causing a spike in interest rates: as Hopkins put it, ‘if you had to get [the loan] taken up at a very high rate [of interest] and accompanied by an adverse public sentiment you would very quickly lose what you gained ... from the number of people who would think it better to invest the next lot of money that they had to invest in America’. It was loss of confidence in government finance which would create the ‘hole’ in private capital.

It would have been fascinating had Keynes continued the cross-examination by asking Hopkins whether it was the Treasury’s view that a programme of reducing the deficit would improve confidence sufficiently to bring about an economic recovery. Because this obverse of the Lloyd George plan was exactly what the government was driven to in the financial crisis of 1931.

The Labour government elected in 1929 had implemented a small part of the Lloyd George programme – far too small to make much impact on the rising numbers of unemployment, but enough to alarm the City. The deepening depression – unemployment rose from 10.4% in 1929 to almost 20% in 1931 – left Philip Snowden, Chancellor of the Exchequer, with a projected deficit of 5% of GDP in 1931-2.

The political debate now took on an uncannily familiar form. The Conservative opposition blamed the deficit on the extravagance of the Labour government and demanded cuts in ‘wasteful’ public spending, especially on unemployment benefits; Labour said the hole in the budget was due to the slump. The minority Labour government refused to implement the full scale of the spending cuts demanded by the bond markets (in this case J.P. Morgan, the government’s American broker). As a consequence, the prime minister, Ramsay MacDonald, and his Chancellor joined the Conservatives and Liberals in a National Government in August 1931, while Labour went into opposition.

Faced with a prospective deficit of £170m, the National Government proposed to balance the budget by a £82m hike in taxes, and economies of £70m. With its allocation of £20m for debt repayment, this was really the last hurrah of the Victorian balanced budget rule. Recovery, brought about by devaluation, cheap money and protection, enabled the budget, minus sinking fund, to be balanced from 1933-7,

but there was another collapse in 1937-8. A huge loan-financed rearmament programme finally lifted Britain out of semi-slump ten years after the start of the Great Depression. A new note had been struck by John Maynard Keynes. ‘Look after unemployment’, he said, ‘and the budget will look after itself’.

There is no doubt that Keynes was shaken by Hopkins’ confidence fairy. Experience of slump was not itself sufficient to loosen the hold of the old theory. That could only be done by a counter-theory. Keynes’s *General Theory* of 1936 may be seen as his attempt to create a different set of expectations concerning the effects of budgetary policy on the economy. As he wrote in this book, ‘economic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average businessman’.⁴ Today, I think, he might have written ‘the average bondholder’, for with the financialisation of the economy, it is the bondholder, not the businessman, whose expectations delineate the scope of government policy.

V. The Keynesian fiscal constitution of the 1950s and 1960s comprised two elements alien to the Victorian fiscal outlook: a budget balanced at a much higher level of taxes and spending than the Victorians would have accepted; and a budget deliberately unbalanced – with a corollary of temporary rise in the National Debt – to fight a slump. The object of this constitution was to create a settled expectation in the minds of the business community that, by its spending, whether on investment or consumption, the state would not allow slump conditions to develop. This was expected to create the confidence needed for long-term investment.

The Keynesian fiscal constitution was undermined by the stagflation of the 1970s: Keynesian tools seemed powerless to prevent the simultaneous appearance of unemployment and inflation, which in the opinion of those hostile to the Keynesian dispensation could be attributed to Keynesian fiscal policy. With its well-known propensity to mistake a correlation for a cause, the economics profession started to argue that the conquest of inflation was the necessary, and possibly sufficient, condition for the restoration of full employment. This took it back into Ricardian territory. The new classical economics reinstated Ricardian equivalence; in the UK, Nigel Lawson, as Mrs Thatcher’s Chancellor of the Exchequer, reestablished the Victorian fiscal constitution in the 1980s; and, with variations, the new wisdom took hold globally. Inflation was to be fought by monetary policy. Governments would not use the budget to balance the economy at full employment but instead would seek to balance the budget ‘over the cycle’, a modification which allowed for the influence of the so-called automatic stabilizers. Governments renounced responsibility for maintaining a stable level of investment. Deliberate deficit financing to meet a crisis was abjured, because, if prices were kept stable, the economy was presumed to be naturally cyclically stable at its natural rate of unemployment.

Three issues arise: to what extent does the success of a policy depend on the expectations which it generates? What causes expectations to be what they are? And what light do the data on the effects of different kinds of policies shed on the first of these questions?

In 2011, the Nobel laureate economist Paul Krugman characterized conservative discourse on budget deficits in terms of ‘bond vigilantes’ and the ‘confidence fairy’.

Unless governments cut their deficits, the bond vigilantes will scupper by forcing up interest rates. But, if they do cut, the confidence fairy will reward them by stimulating private spending more than the cuts depress it.

Krugman thought the ‘bond vigilante’ claim might be valid for a few countries, such as Greece, but argued that the ‘confidence fairy’ was no less imaginary than the one that collects children’s teeth. Cutting a deficit in a slump could never cause a recovery. Political rhetoric can stop a good policy from being adopted, but it cannot stop it from succeeding. This was exactly Keynes’s position at the Macmillan Committee. Conversely, it cannot make a bad policy work whatever expectations may be created by its adoption. In short, Keynesians like myself predicted that Osborne’s Ricardian austerity policy would fail to revive the British economy, even though it was thought to be right by business and financial leaders.

But, like Keynes, I was shaken by the confidence argument, and put this point to Krugman at a *New York Review of Books* event. Was it not possible that adverse expectations could affect a policy’s results, not just the chance that it will be adopted? For example, if people thought that government borrowing was simply deferred taxation, might they not save more out of their incomes to meet their expected future tax bill? Conversely, would not a credible deficit reduction policy lead them to expect lower taxes which would be good for confidence?

Krugman did not buy this: a market was a market. If governments spent enough to cause the market to grow, businessmen would invest more to provide more goods: expectations followed, they did not lead results.

I don’t think we reached perfect agreement on this, but the debate did raise the question of where expectations come from. The rational expectations theory holds that they are model-determined. Individuals can perceive, through a learning process, the correct model of the economy. Rational expectations are then said to be informed predictions of future events and as such are the same as the predictions of the relevant economic theory. The relevant economic theory for new classical economics, is not the Keynesian theory, but the new classical theory which has its roots in Ricardo and his successors. The essential assumption underlying new classical macroeconomics is that markets continuously clear. This requires the assumption of almost unlimited price and wage flexibility as implied in a Walrasian setting blessed by the presence of a benevolent auctioneer. By contrast, the incorrect Keynesian models rely on wage and price rigidities not fully accounted for by its underlying theory. In absence of such theory departures by individuals from market clearing behaviour is tantamount to their adoption of non-utility maximising behaviour. We have a theory to explain why markets should clear, but not one to explain why they fail to clear.

This, as I see it, was the intellectual foundation on which current fiscal policy is built. You might argue that such a chain of reasoning never occurs to your average businessman, and I would agree. But I remind you of Keynes’s remark about ‘practical men, who believe themselves to be quite exempt from intellectual influences, are usually the slaves of some defunct economist’.⁵ And the actual rhetoric of Cameron’s first government, government, pinpointing the similarity of the household and the government budget, money, the overspending and extravagance of the

previous Labour government, the danger of a bond-market strike (‘going the way of Greece’), and the burden of the national debt is simply the banal echo of a barely understood but hugely resonant view of the relationship between the state budget and the economy which survived the Keynesian revolution and has come back to haunt us with its demise.

But ultimately we have to ask: does new classical macroeconomics provide the correct model of the economy; in particular, does it correctly specify the relationship between the budget and the economy? Here the data can help us though they do not conclusively settle the question. The austerity policy relies on what is thought to be a reliable prediction, encapsulated in the phrase ‘expansionary fiscal contraction’: the idea that the less the government spends, the faster the economy will grow. A massive research effort went into proving this led by economists of the so-called Bocconi School.

In the 1980s and 1990s, a number of influential papers were published, which claimed to have established a positive correlation between increases in government spending and a slowdown in the growth rate. The reason was straight from Ricardo: government spending was less productive than private sector spending. The converse of this was that a reduction in the size of the budget would increase the growth rate. Both were long-run arguments.

This second argument was now applied to short-run fiscal policy for depression. A decrease in public spending would speed up recovery. Hence the centrality of the deficit in discussions of appropriate fiscal policy. This short-run argument for deficit cutting had nothing to do with efficiency – a long-run argument – but with confidence. Against the Keynesian proposition that expanding the deficit in a slump would increase aggregate demand, the fiscal contractionists argued that it would damage confidence. Their argument was that a ‘credible programme of deficit reduction’ would generate the confidence to more than offset the direct effects of fiscal contraction.

They arrived at some striking correlations. For example, ‘an increase in government size by ten percentage points is associated with a 0.5-1 per cent lower annual growth rate. In April 2010, Harvard University’s Alberto Alesina, a graduate of Milan’s Bocconi University, assured European finance ministers that ‘even sharp reductions of budget deficits have been accompanied and immediately followed by sustained growth rather than recessions even in the very short-run’. Alesina’s work influenced Jean-Claude Trichet, president of the European Central Bank, and President Obama’s Council of Economic Advisors. Crucially, it fed into the UK Treasury’s emergency budget of June 2010.

However, other studies lead to conclusions more conformable with common sense, viz. that an economic expansion can occur *despite* a fiscal contraction if currency depreciation has enlarged export demand more than fiscal consolidation has reduced domestic demand. We are reminded again that a correlation is not a cause. Added to this, the proponents of ‘expansionary fiscal policy’ twisted their logic to fit the facts. Since the cuts had to be ‘credible’, i.e. large and decisive, they could blame any failure of their predictions to materialise on the insufficiency of the credibility.

Thus, on this view, the failure of Europe to recover ‘immediately’ has been due to a lack of confidence in governments’ ability to deliver the promised cuts.

An International Monetary Fund paper of 2012 brought Alesina’s hour of glory to an end. Going through the same data as Alesina had, the IMF authors pointed out that, ‘while it is plausible to conjecture that confidence effects have been at play in our sample of consolidations, during downturns they do not seem to have ever been strong enough to make the consolidation expansionary’. Fiscal contraction is contractionary, full stop.

Evidence that this is so has been accumulating. There is now much agreement about the damage caused by austerity. The Office of Budget Responsibility, the independent agency set up by Osborne to assess the government’s macroeconomic performance, has just concluded that austerity reduced GDP growth by 2% from 2010 to 2012,⁶ bringing the cumulative cost of austerity since 2010 to 5% of GDP. Simon Wren-Lewis of Oxford University estimates that the damage might be as high as 15% of GDP.⁷ In a recent poll of British economists by the Centre for Macroeconomics, two-thirds agreed that austerity had harmed the UK economy.

Moreover, Britain is not alone in having suffered from austerity. In its October 2012 World Economic Outlook, the IMF admitted that ‘fiscal multipliers were underestimated across the world’. In plain English: the forecasters underestimated the extent of spare capacity and hence the scope for fiscal expansion to raise output.

Was it an honest mistake? Or was it because the forecasters were in thrall to economic models that implied that economies were at full employment, in which case the only result of fiscal expansion would be inflation?

What the Conservatives did succeed in doing, and doing brilliantly, was to persuade English voters that they were only ‘cleaning up Labour’s mess’, and that, but for austerity, Britain would have ‘gone the way of Greece’. Unfortunately no other party, with the exception of the Scottish Nationalists, was able to develop an effective counter-narrative, so the debate between austerity and expansion was never engaged.

However, late is high time that it was. George Osborne is back as Chancellor, promising even tougher cuts in the next five years. And fiscal austerity is still the reigning doctrine in the eurozone, thanks to Germany. So the damage is set to continue. In the absence of a compelling counter-narrative, we may be fated to find out just how much pain the victims can withstand before the promised recovery obliterates the memory of it.

VI. What I have been discussing is a particular aspect of a debate about the role of the state in the economy. This has gone on since at least the 18th century, and has been ‘settled’ in different ways in different countries at different times. It is a debate which has always been compounded of at least two elements: a discussion about the effect of state activities on efficiency of the economy, and a debate about the effect of state activities on the liberty of the subject. In both aspects it remains

one of the great unsettled issues of economic policy today.

Notes

1. Mill was treating money as a commodity, not unreasonable when legal tender was gold. He pointed out that Say's Law depended on 'a supposition of a state of barter'. In barter, buying and selling are 'simultaneously confounded'. But money offers the possibility of postponing purchases. Such postponement (equivalent to an increased demand for money) may arise from a 'general anxiety', leading to a fall in prices. So a general glut of unsold goods may appear from time to time. However, if money is a commodity like gold, this state is bound to be temporary, because an increased demand for money, will lead to an increased production of gold, causing prices to recover.
2. Smith's list of state duties are now called public goods, but he did not properly explain what it was about public goods which made it impossible for the market to produce them.
3. John Maynard Keynes (1936), *The General Theory of Employment Interest and Money*. Kessinger Publishing, Whitefish, USA, p307.
4. *Ibid.*, p162
5. *Ibid.*, p383
6. Simon Wren Lewis (2015) 'The Macroeconomic Record of the Coalition Government', *Journal of the National Institute of Economic and Social Research*, available at <http://ner.sagepub.com/content/231/1/R5.abstract>.
7. Simon Wren Lewis (2015) 'The size of the recent macro policy failure', *Mainly Macro*, available at <http://mainlymacro.blogspot.co.uk/2015/02/the-size-of-recent-macro-policy-failure.html>.



The
University
Of
Sheffield.

Sheffield Political Economy Research Institute
Interdisciplinary Centre of the Social Sciences
219 Portobello
Sheffield S1 4DP

T: +44 (0)114 222 8346
E: speri@sheffield.ac.uk