Understanding the Crisis: Clarity on Measurement, Clarity on Policy

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Prime



Understanding the Crisis: Clarity on Measurement, Clarity on Policy

By John Weeks

In collaboration with PRIME, Professor John Weeks has written a critique of the coalition government's "deficit disorder" approach to economic recovery. This paper argues that the government's prioritising of debt and deficit reduction remain unfounded. Rather, as evidence suggests, financial markets have no reason to be alarmed about the state of UK public finances. This paper advocates a practical, non-ideological policy reversal based on fiscal stimulus, financed through public borrowing and personal income tax increases.



What is the Problem?

In a newsletter in 2010 Victoria Chick and Ann Pettifor set out an analytical and empirical argument to demonstrate that the economic policy of the Coalition government was inappropriate in that it would undermine the growth of the UK economy, and be unsuccessful in its major objective, reducing the public sector deficit. To emphasise their view that the policy was fundamentally misguided, they suggested that the government had a "deficit fetish" (I prefer "deficit disorder").

Subsequently two interventions appeared in support of government policy, by Booth and Shackleton who "welcome the fact that the Government acted decisively", and Harrison who speculated that J. M. Keynes might have been pulling our legs by allegedly advocating "that we should borrow our way out of recession" and "spend our way of debt". While interesting, the former intervention manifests a primarily political argument, with the authors at the end explicitly stating their political (ideological?) preference for considerably less public regulation of business and a substantially smaller role for the public sector both qualitatively and quantitatively. The Harrison intervention focuses upon a very long run view of the UK public debt organized around interesting but subjective assessments of changing historical circumstances.

As economists we all should agree that issues of economic policy should be approached with clarity and precision of concepts and measurement. Our teaching is dedicated to those principles. Imagine, for example, that in late 2009 a lecturer in economics at a UK university sets his introductory students the essay topic, "In light of the current severe contraction of the economy, discuss the appropriate government policies for economic recovery (feel free to use algebra and diagrams in your answer)". Further imagine that one (or several) of the students begins her/his essay with the following introduction:

The most pressing problem of the UK economy is the public sector debt and the associated fiscal deficit. Therefore, the first priority of economic policy must be to reduce that deficit by an appropriate mix of expenditure cuts and tax increases. If this is not done, the continuation of the deficit and the large debt burden will undermine business confidence and unsettle financial markets, driving up public sector borrowing rates, thus rendering fiscal policy unsustainable. In this context Keynesian recovery policies are not feasible.

We would expect a conscientious instructor, whatever her/his political views, to provide comments of the following type:



This interesting essay would be strengthened if the author were to clarify the concepts essential to the argument: are all debt and deficit measures equally appropriate to business confidence and financial market stability? What caused the deficit and is this related to the method to reduce it? Is confidence the same for all sectors of and size of business, and what is the empirical evidence for the interaction of fiscal policy and financial market stability in the United Kingdom? Finally, what is meant by "Keynesian policies".

These queries would be appropriate to impress upon the student that economics is a discipline whose empirical inferences are theoretically based. A first step by the student towards answering these queries would be to demonstrate the seriousness of the current economic situation, such as shown in Figure 1. Quarterly growth rates are measured as deviations from the sixteen year average, 1992-2007. Since the end of 2007, in only one quarter was the growth rate above that average (2010.2). In the subsequent six quarters as well as below the average, the growth rate was negative in two and zero in one. The conclusion that we observe little sign of recovery should be non-controversial.

Figure 1: UK GDP growth, deviations from average, 1992-2011

Source: Office of National Statistics website.

Definitions and Measurement

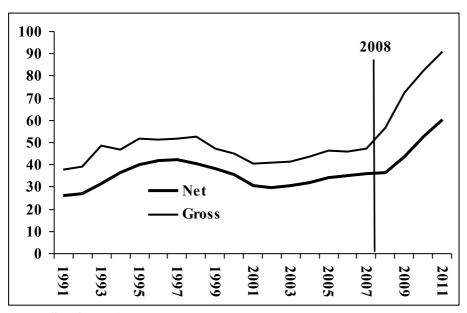
Moving to definition, the relevant measure of public indebtedness is not the infamous trillion pounds in the headlines in January of this year. That much-trumpeted number refers to the *gross* public debt. By that measure Norway would be close to the almost infamous Maastricht criterion of 60 percent of GDP, when the country's treasury has



net assets of 150 percent of GDP. The net measure is the one used by Harrison in his comment and by the Treasury. At the end of 2011, the UK net debt stood at 62 percent of GDP, which was below the same statistic for the United States (73 percent), and not far from the German ratio (56%). It is worth noting that the debt to GDP ratio is not in itself a good indicator of fiscal health, verified by Spain, that has a ratio below that of Germany.

Inspection of Figure 2 makes it obvious that the increase in the UK debt-GDP ratio was a phenomenon of the global financial crisis. Even into the crisis at the end of 2008 the net debt ratio was lower than it had been in the second half of the 1990s (41% for 1995-99, compared to 37). Basic macroeconomics predicts this outcome, that recession generates fiscal deficits, and the borrowing to cover those deficits manifests itself in increased public debt.

Figure 2: UK Gross and Net public debt, percent of GDP, 1991-2011 (end year value)



Source: Office of National Statistics January 2012.

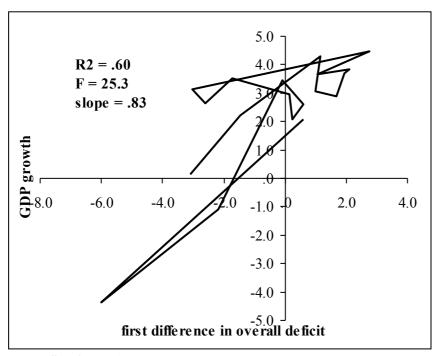
It would be reasonable to expect an undergraduate to do the algebra to demonstrate the deficit-GDP relationship deficit. It produces the simple identity that the change in the fiscal balance equals the change in tax revenues plus the change in expenditures. The former declines when national income falls because of the income elasticity of revenues (close to unity). The latter increases with rising recession-associated transfer payments (most notably unemployment payments).

The public deficit is determined by the level of national income, and the GDP growth rate causes changes in the deficit. The interaction between growth and the first difference in the fiscal balance is shown in Figure 3 for 1992-2011. This approximation



ignores changes in tax rates and expenditure programmes, but is statistically significant and corresponds to what theory predicts, with a slope quite close to unity.

Figure 3: UK GDP growth rate and 1st difference of the public sector Borrowing requirement (percent of GDP)



Source: Office of National Statistics January 2012.

Applying macroeconomics to available statistics we reach the conclusion that the UK public sector deficit and the increasing debt to which it adds resulted from the severe recession that struck the global economy in 2008. With causality identified, we can move to the policy issue, is the deficit so large that it requires immediate expenditure and tax measures? A student with some knowledge of public finance would know that there are different categories of deficits. The measure in Figure 3 is the overall deficit, total public revenue minus total outlays (expenditures plus lending, the "public sector borrowing requirement"). This is not the deficit relevant to managing fiscal balances, because it includes payments on the public debt which cannot be reduced without default or negotiation with creditors.

Subtracting interest payments gives the *primary* deficit. This measure is generally accepted, notably by the International Monetary Fund, as the one relevant for fiscal management. In principle if not in practice, all the items in the non-interest budget are policy variables. The non-interest budget is divided between current and capital components, the latter referring to investment. While not universally accepted, it is a common rule in public finance that public revenue should cover current expenditure and capital expenditure can be financed by bond sales. The justification for this rule for public finances is the same as for the private sector. If an investment is positive, and it should not be made if it is not, it will generate a revenue stream to service the



debt it creates. Under circumstances when policy makers fear excessive inflationary pressures, the rule should not be applied. If it is not applied this is for reasons of macroeconomic management, not because of the financing decision on specific public investments.

Figure 4 shows the three deficits over the twenty-one years 1991-2011, overall, current and current primary (to reduce clutter I omitted the "overall" primary). As the previous scatter chart suggested, the deficits show a clear cyclical pattern. A few obvious inferences can be drawn. First, the current wave of deep deficits is not substantially different from the experience of the mid-1990s by any of the three measures. For 1993-1994 the overall deficit averaged 7.5 percent of GDP, compared to 8.3 for 2010-2011. Because recessionary conditions were more severe during the latter years, it is surprising that the deficit was not larger. The annual overall deficit for 2009-2011 was almost exactly the same as for 1993-1995 (7.2 and 7.1). Second, five years of growth at an average of 3.5 percent during 1994-1998 brought the overall deficit into surplus, not expenditure reduction or tax increases.

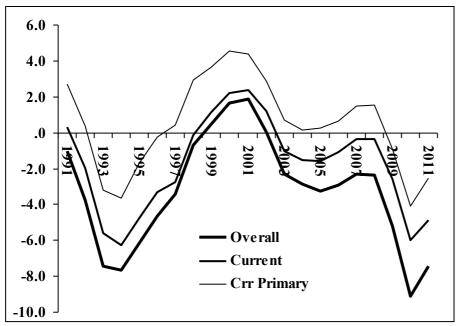
Third, the primary deficit during 2009-2011 was 5.1 percent of GDP and the current primary deficit was 2.5 percent. A deficit on current expenditures is never sound fiscal policy, but not necessarily cause for alarm. During 1993-1995 the same measure was substantially higher, 4.7, and it did not prompt the Conservative government to undertake the type of substantial fiscal adjustment that the Coalition has. Finally, during 1993-1995 the public sector paid an average of six percent to borrow, while during 2009-2011 bond yields were below one percent.

In summary, theory and evidence indicate that the current debt and deficit statistics are recession generated, and would be reduced through growth. The deficit levels are similar to those in the mid-1990s and more easily financed because of the much lower national and international bond rates. The hypothesis that deficit and debt reduction should be the first fiscal priority remains unconfirmed.



Figure 4: UK public sector fiscal balances, overall, current and current primary (less interest payments), 1991-2011, percent of GDP

Note: The overall deficit is total public sector borrowing.

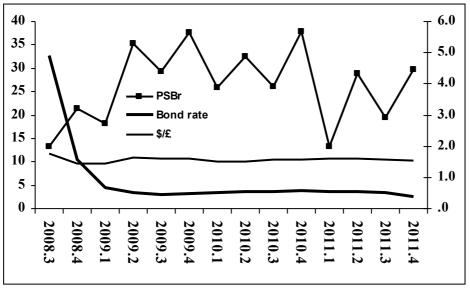


Source: Office of National Statistics January 2012.

Could the hypothesis be sustained by reference to the probable reaction of "financial markets" to the continuation of debt and deficits at the current levels? The answer is "no". In light of the statistics presented above, it is reasonable to infer that "financial markets", however defined, should not be alarmed by the state of UK public finances. This is what the evidence suggests. Figure 5 shows public sector borrowing by quarter for 2008-2011 (measured in billions on left hand axis), and the treasury bond rate and dollar-sterling exchange rate (right hand axis, percentage and ratio \$/£). After the first quarter of 2009 both the yield on public bonds and the dollar exchange rate have been almost constant (coefficients of variation of .11 and .03, respectively), while public sector borrowing showed major fluctuations and debt grew by over £300 billion. If some believe that UK public finances require immediate expenditure and tax adjustment, so-called financial markets do not appear agree with them.



Figure 5: Quarterly public sector borrowing (left axis, billions) and the treasury bond rate and f exchange rate (right axis, % and ratio), 2008-2011



Sources: Office of National Statistics January 2012, and Bank of England website.

What could be done?

Every great thinker suffers from misrepresentation and vulgarization of her or his views. Keynes is a case in point. Therefore, our eponymous student would profit from dropping the modifier "Keynesian" and discussing the substance of policy. All economists agree that the level of output is at any moment determined by the level of demand. The fundamental difference is between those whose theory leads them to conclude that the level of demand (and simultaneously the level of output) in the short run adjusts to changes in relative prices, and those who conclude that the level of output and the level of prices adjust to aggregate demand. In his outstanding book, *Keynesian Economics and the Economics of Keynes*, Leijonhufvud names these two approaches "price constrained" and "quantity constrained" systems (see Weeks, 2012, Chapter 11). I suspect that few if any macro courses have the book on the reading list.

Harrison and Booth and Shackleton would seem to derive their conclusions from price constrained analysis. I interpret them as maintaining that rejuvenation of the UK economy will result from the recovery of depressed entrepreneurial expectations, which are low due to a combination of fears of public sector default and direct reduction ("crowding out") of private investment by public borrowing. These depressed expectations are aggravated by low household ("consumer") demand due to "Ricardian equivalence" effects (anticipating taxation to service the public debt).

As these authors would no doubt agree, it is not sufficient to assert the possibility of these price constrained processes. As an empirical discipline, economics requires



clear specification of the conditions under which a theoretical process occurs, then some empirical evidence to assess its importance. For example, if the conditions for "crowding out" are present, is the impact closer to zero or to 100 percent? If the former, the argument may be theoretically correct but of little practical consequence. If the latter, it must be central to the analysis. The same applies to Ricardian equivalence. It is the task of those who propose these processes to demonstrate that others should take them seriously in formulating policy.

A more fundamental issue lurks in the background: the importance of entrepreneurial expectations and Ricardian equivalence require that the economy be price constrained. As every economist of every theoretical persuasion knows, an economy is price constrained if and only if there are no idle resources. If there are idle resources, more can be produced at prevailing factor and product prices; i.e., the economy is demand constrained.

Unless there is some very esoteric process at work that is hidden from view, the evidence for demand constrained UK and European economies is overwhelming. If crowding out of private investment were a practical problem, it is difficult to explain why the Treasury could borrow in excess of £300 billion over three years and have no impact on bond yields.

Because the economy is quantity constrained, recovery requires a demand stimulus. This will not come from domestic business because of the lack of demand itself. It will not come from consumption because the larger part of consumption is a function of the income generated in the private sector which is demand constrained. With the continental European countries in the throes of their own recession, the stimulus is unlikely to come from exports. I lack the space to discuss monetary policy other than to suggest that it has not been notably effective despite substantial "quantitative easing".

It follows as practical matter that the choices are continued stagnation and decline, aggravated by the Coalition government's reductions in public sector demand, or a policy reversal that favours a fiscal stimulus. This conclusion is not "Keynesian" nor is it ideological. It is the analytical and practical implication of recognizing 1) that the UK economy is demand constrained, 2) the present levels of the public deficit measures are neither unusual nor a source of alarm, and 3) "financial markets" have demonstrated no concern with the state of public finances.

The fiscal stimulus would be financed by a combination of personal income tax increases and public borrowing. The tax increases would be expansionary through the well-known "balanced budget multiplier" process (part of the taxed income would have been saved). With present bond yields, the borrowing would be at negative real interest rates. Once the recovery begins, both the deficit and the debt-GDP ratio



would fall. As economists we once understood and practiced this policy process, guided by a wealth of empirical evidence. Nobel Laureate Paul Krugman has put the issue well:

...[W]hat we've witnessed pretty much throughout the western world is a kind of inverse miracle of intellectual failure. Given a crisis that should have been relatively easy to solve — and, more than that, a crisis that anyone who knew macroeconomics 101 should have been well-prepared to deal with — what we actually got was an obsession with problems we didn't have. We've obsessed over the deficit in the face of near-record low interest rates, obsessed over inflation in the face of stagnant wages, and counted on the confidence fairy to make job-destroying policies somehow job-creating.

- [http://krugman.blogs.nytimes.com/2011/08/02/macroeconomic-folly/]

Our eponymous student and the Chancellor might benefit from reading a bit of Krugman, or perhaps Lord Skidelsky's biography of Keynes.



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