

A TECHNICAL ANALYSIS OF BRITISH MACROECONOMIC CIRCUMSTANCES

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Summary

This essay gives an account of British macroeconomic circumstances in the summer of 2012, using an analytical framework of established descriptive conventions and conventional illustrative diagrams. It emphasises the crucial importance of the exchange rate for determination of government economic policy because of the political priority given to sustaining sterling as a sovereign currency.

It affords a perspective on economic performance and government policy which ought to be preferred to that provided by the Office for Budget Responsibility whose view is used to provide contrast.

Introduction

I'd like to use a short sequence of illustrative diagrams to describe what I think has been happening to the British economy. Beginning with a picture of the situation before the Great Financial Crisis, then contrasting it with the post-crisis situation, before considering the prospects for present recovery and future abundance.

Diagrammatic Description

The diagrams are specified in terms of a distinction marked by the axes, drawn to separate the outputs of UK economic activity into a category of those that are tradable or into the alternative category of those which are non-tradable. When considering the distinction between 'tradable' and 'non-tradable' sectors of the economy many people glaze over, and I admit that there are aspects of the terminology that are confusing; but because this technical language is already out there, being used (e.g. "Real exchange rates and the relative prices of non-traded and traded goods: an empirical analysis" by Jan J J Groen and Clare Lombardelli, Bank of England Working Paper no. 223, 2004; "External rebalancing is not just an exporters' story: real exchange rates, the non-tradable sector and the euro" by Eric Ruscher and Guntram B. Wolff, European Commission Directorate-General for Economic and Financial Affairs, Economic Papers 375, March 2009), I must proceed hoping that you'll not be too fazed by the distinction being made.

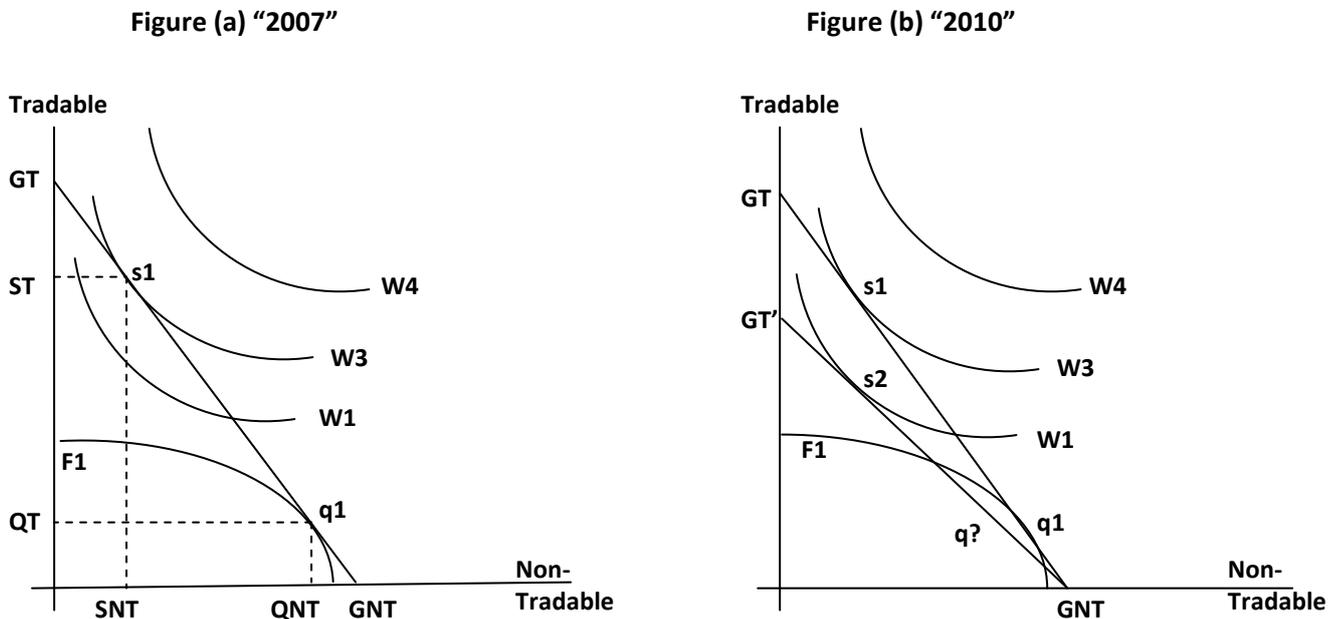
Tradable outputs are essentially portable internationally (i.e. between countries and currency-zones): they can be bought from and brought from overseas; they can be sold and sent or delivered abroad.

Non-tradables cannot be treated like this, they are not internationally portable, their consumption is site-specific to the country of origin; residential property would be a good example, domestic care services likewise. So too the country's infrastructure: irrevocably site-specific in consumption (you have to be in it to benefit from it; it is non-internationally-tradable) and maintained by tolls and taxes levied in sterling. It is worth noting that the government is responsible for a significant proportion of the non-tradables

sector of the UK economy either as direct provider or as commissioner on behalf of the public (for example: health services and hospitals; schools and colleges; traffic systems and policing).

Before the Great Financial Crisis

So, my account begins with a picture of the UK economy before the Great Financial Crisis, shown in Figure (a) entitled "2007".



A conventional map of social welfare functions (W_n), specified in terms of tradables and non-tradables, is married with the country's production possibility frontier (F_1 , also specified in terms of tradables and non-tradables) by the national income and expenditure function; this is shown as $GT-GNT$, reflecting the relative prices of tradables and non-tradables by its slope.

National production is shown optimised at q_1 , with national resources fully committed to outputs QT and QNT . National consumption is shown optimised on W_3 at s_1 , requiring supplies of tradables and non-tradables to be ST and SNT respectively.

The country's Balance of Payments reflects the situation that the deficit represented by net payments to overseas suppliers of tradables (imports required to supplement domestic production QT to achieve the preferred pattern of consumption ST) is compensated by the surplus of payments associated with net overseas purchases of UK non-tradables (the difference between QNT and ST).

I think this is a fair diagrammatic representation of the UK economic situation before the crisis.

After the Crisis

The situation in the aftermath of the crisis is pictured in Figure (b) entitled "2010". The illustration concentrates attention on one key aspect of the UK's changed economic circumstances: the sterling exchange rate. In 2007, one pound sterling (£1) was worth two US dollars (\$2). Three years later (2010), £1 was worth \$1.54. In 2007, in euro terms £1 was worth €1.46; in 2010, €1.17. Overall, sterling has experienced a 20% devaluation. The consequences of this devaluation are marked by the changed position of the national income and expenditure function, becoming $GT'-GNT$. This indicates the crucial impact of devaluation: the increases in price of all UK tradables sector outputs, whether in net-exporting

or net-importing parts of the sector. This comes about because the prices of things that are internationally tradable are set in world markets beyond the control of UK economic actors and in currency other than sterling. Because I know that, even considered in aggregate (according to the paper on “UK export performance by industry” by Buisán *et al* in the Bank of England Quarterly Bulletin Q3 2006), the operators in the UK’s best-performing export sectors don’t get 20% of their respective world markets, so I think it’s a fair bet that individually these operators are international price-takers; and so are the operators in every other British tradable-generating sector. This is as likely to be true for net-importing as for net-exporting parts of the tradables sector; so when there’s a devaluation of sterling the prices of tradables rise ‘across the board’. Meanwhile, prices in the non-tradables sector, locally set in sterling, remain the same (which is why the national income and expenditure function stays put at **GNT** on the non-tradable axis whilst pivoting to **GT’** on the tradables axis). The change in relative prices of tradables and non-tradables is marked by the altered slope of the national income and expenditure function. These changed relativities indicate incentives for a national rebalancing of output between tradables and non-tradables i.e. from non-tradables to tradables.

This presentation emphasises the deflationary aspect of devaluation, with the lowered level of social welfare being achieved at **s2** on **W1**, as national real income is reduced by the large tradables price increases.

A Difficult Situation

At this time, national output is difficult to specify: indicated by **q?**, a region of indeterminacy inside the perimeter of the production possibility frontier. It is to be expected that this diagram represents a time of mixed signals before economic recovery can become established. The mixture will include:

- (i) some continuation of expanding output achieved in those parts of the tradables sector exercising UK comparative advantage by eating into other countries’ shares of domestic and overseas markets, though this may be limited by the post-crisis condition of global aggregate demand;
- (ii) other trend elements, which may be positive or negative for demand, such as those associated with an ageing population;
- (iii) increased prices caused by devaluation will mean enhanced profitability in those parts of the tradables sector where domestic demand is inelastic, but without volume output growth;
- (iv) elsewhere, reductions in scale of operation may result from depressed domestic demand;
- (v) pressure for cost-reduction in the non-tradables sector, responding to the lower relative but higher real prices caused by devaluation, will exhibit itself as redundancies or reductions in hours, wages and salaries (e.g. in local authority services);
- (vi) within-sector mixed signals – for example, based on the competitive advantage of London, the UK financial sector accounts for a significant fraction of the global trade in currencies and financial instruments (37% according to the Bank for International Settlements), and according to the BIS this activity had returned to 2007 levels by 2010 (hence explaining the return of bankers’ bonus payments), but whilst the financial sector is a significant fraction of the UK economy as a whole, a major proportion of financial sector activity may be linked to domestic residential property markets (i.e. non-tradables) that have contracted; and
- (vii) the impact of higher real international market prices for food and energy, that may be justifiable at the global level on precautionary grounds, with impact over and above the impact of devaluation on sterling prices.

Recovery

It is from this period of mixed signals that recovery will emerge as depicted in Figure (c).

Figure (c) "Recovery"

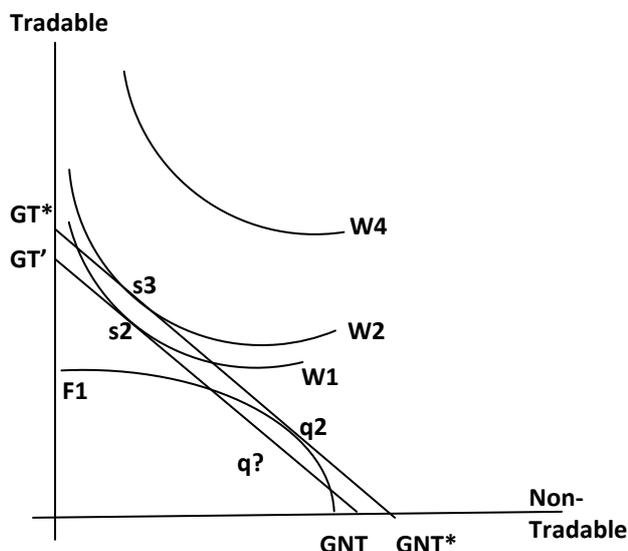
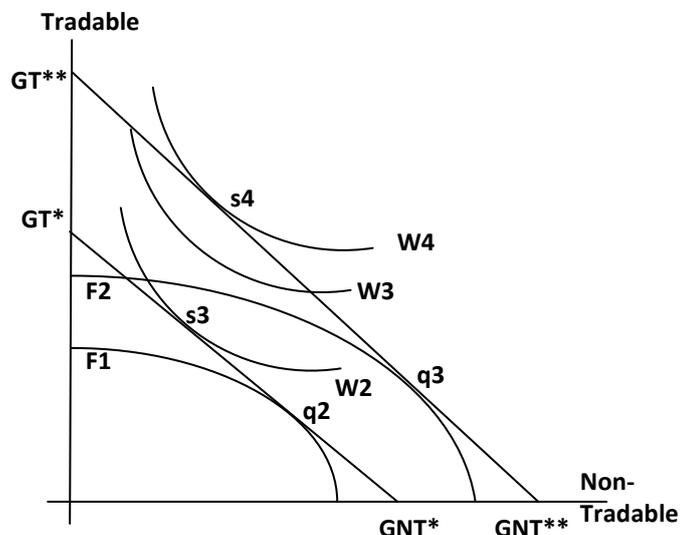


Figure (d) "Abundance"



As international aggregate demand expands, so the UK's national income and expenditure function shifts from $GT'-GNT$ to GT^*-GNT^* and a new optimum point $q2$ on the production possibility frontier, associated with some improvement in social welfare at $s3$ on $W2$.

It is probably fair to expect the contribution to recovery to be made by global aggregate demand will be observed earliest in the non-tradables sector and that this will be as a result of sterling's devaluation. This is because (sterling) prices of UK non-tradables will have fallen for overseas purchasers in terms of their own currencies (whilst prices for tradables for overseas purchasers in terms of their own currencies are unaffected by sterling's devaluation). In fact, anecdotal evidence suggests that this development is occurring: foreign buyers are blamed for inflating prices for niche residential property, especially in London; visa restrictions are reported to be limiting overseas student numbers for schools, colleges and universities (i.e. institutional inflexibility or regulatory rigidities seem to be hampering necessary economic adjustments).

And, meanwhile, non-tradables in overseas countries will have been made more expensive for UK residents in sterling terms. This leads to consideration of the British economic situation in terms of the Balance of Payments.

The Balance of Payments

When I was an economics student in the nineteen-seventies, it made sense to consider the impact of the exchange rate in terms of current account exports and imports of goods and services (i.e. tradables). A comparison of data from the mid-seventies with equivalent figures from the run-up to the Great Financial Crisis illustrates the change that has taken place in composition of the UK Balance of Payments.

Table 1: Changing Composition of the UK Balance of Payments (data are £million)

	1975			2004		
	£ Inflow	£ Outflow	Balance	£ Inflow	£ Outflow	Balance
Goods	19451	22696	-3245	190859	249473	-58614
Services	7406	5959	1447	99100	78911	20189
Employment	88	190	-102	1171	1100	71
Investment Income	6439	5921	518	138485	112393	26092
Financial Account	3089	1520	1569	525711	513733	12038

Then, the big aggregates were the value of exports and imports of goods. On the cash inflows side of the Balance of Payments, exports of goods brought in more than the other sources put together. On the cash outflows side, goods imports likewise accounted for more than all the other elements combined. Investment income flows and trade in services, both inward and outward, were of roughly equal magnitudes. Flows within the financial account were not large by comparison.

Now, the big aggregates are the flows within the financial account. On the cash inflows side of the Balance of Payments, financial account inflows brought in more than the other sources put together. On the cash outflows side, financial account outflows accounted for more than all the other elements combined. Whilst trade in goods is still important, it is responsible for only one fifth of the UK's Balance of Payments revenues. Investment income flows, both inward and outward, are now markedly greater than current account receipts from and payments for services.

The point is: **then** tradables dominated the Balance of Payments; **now** it's nontradables that count for more.

A Different Analysis

I do not think that the understanding which I have sought to portray, in the diagrammatic sequence offered here, is part of conventional wisdom or established official thinking. As expressly stated to me by Robert Chote:

"The depreciation of sterling which began in 2007 has led to a change in the relative prices of domestic and foreign goods which will have had two effects:

- (i) it will provide a boost to export growth as the relative price of exports of UK goods and services in foreign markets has fallen; and
- (ii) it will reduce import growth as the relative price of imports to the UK from foreign markets has increased (often termed import-substitution)"

(email from Robert Chote, Chairman of the Office for Budget Responsibility, received April 4th 2012)

So the effects of devaluation traditionally expected, signals of which are now misguidedly being sought by those with an OBR mindset, require production increases involving the tradables sector, with some expansion of exports and some import substitution. However these sorts of economic developments are not a necessary consequence of devaluation, as I hope I have clearly demonstrated. They may occur in the longer run as part of a desirable transition to an era of plenty such as that illustrated in Figure (d) entitled "Abundance", where the national income and expenditure function expands from **GT*-GNT*** to **GT**-GNT**** powered by productivity improvements shifting the production possibility frontier from **F1** to **F2** and by increasing overseas aggregate demand. In this sunlit upland, national output of both tradables and non-tradables has increased (at **q3**) and social welfare has reached previously unattained levels (at **s4** on **W4**). But that is for the future; for the present the UK seems still to remain in the period of mixed signals to be expected prior to recovery, as illustrated in the diagrams presented here.

Government Economic Policy

Other than encouragement by exhortation, present government economic policy seems to restrict itself to waiting for aggregate demand to recover overseas, particularly in those areas where British suppliers are equipped to benefit: both traditional ones, in North America and Continental Europe; and the new territories of the BRIC and EME countries. Maybe this is admirable self-restraint. Alternatively perhaps a failure to exercise the government's economic muscle.

Final Observations

To end with, I cannot help observing that there is seemingly unquestioning political unity behind the fundamental commitment to maintain sterling as an independent sovereign currency:

“We have our own very strong view in this country that we should keep our own currency”
(Prime Minister David Cameron, House of Commons, 31st January 2012)

“Many people are breathing a sigh of relief that we are not in the Euro. Me included”
(David Miliband, Speaker's Lecture, Palace of Westminster, 19th June 2012)

And I don't see why this should necessarily be thought a bad decision.

After all, across the world there are bound to be accumulations of wealth at least some part of which will need to be kept in the form of cash; and prudence requires that this be cash of more than one currency. And sterling can have fair claim to be a very suitable sovereign currency: the UK produces a range of tradable products and services as well as providing many non-tradables purchasable only in sterling.

And I suppose that's the most essential economic attribute of a non-tradable: that it must be paid for in local currency; these things are called non-tradables because you have to be here to get the benefit (e.g. a flat in London) – it's not that you can't trade the thing between people but that you can't move it between countries which justifies the tag. What is traditionally recognised as 'tourism' is the quintessential non-tradable; and the same recognition should be extended to overseas purchases of any sort of service that it is necessary to travel to the UK to experience (e.g. education or hospital treatment). Arguments for enhanced airport access to London and speedy travel beyond must surely depend essentially on facilitating this.

Another part (actually quite a large part) of the international demand for sterling is the result of overseas demand for non-tradables such as UK-based-asset-ownership or loans-repayable-in-sterling (presumably including UK government debt). And of course it is the symmetrical demand amongst UK residents for similar overseas assets that has led to the position that sterling increasingly represents a portfolio whose underpinning security is not limited to these shores – even though its effective use is - and there are serial articles by Bank of England staff, and others, attesting to this.

All of which means that, for as long as there is fundamental commitment to sustain sterling as an independent sovereign currency, understanding the implications for government policy of changing international and domestic economic circumstances requires an appropriate appreciation of the role played by the exchange rate; and because the OBR does not provide this, the process by which government fiscal policy is determined is flawed and consideration of alternative possibilities is undermined.