



The Balance of Payments

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Introduction

The disappointing performance of the UK economy over the last three years has been widely discussed. In 2010 I would have said that the UK economy was in a better position than our competitors because the sharp fall of the exchange rate in 2007 and 2008 had left us in a competitive international position. As Chart



1 shows, the sterling effective rate fell by over 25 per cent between early 2007 and late in 2008. It recovered somewhat in the last quarter of 2012 but was still 20 per cent below its value of six years ago and it has slipped again this year.

In the face of such a change I might have expected that United Kingdom exporters would reduce their foreign currency prices currency and be able to sell more abroad. Or they would leave foreign currency prices unchanged- the rational thing to do if they were small suppliers in global markets- and raise prices in pounds, so that exporting, if not more fun, would become at least more profitable. Higher margins on

exports and a bigger return on capital in export production would, over time, draw more resources into exporting. At the same time the prices of imports would be expected to rise in sterling terms; demand for and supply of domestic alternatives would be expected to rise. So upward pressure on export volumes and downward pressure on import volumes should be expected to lead to a rebalancing of the economy.

Growth of exports and a shrinkage of imports would together be a helpful source of demand for UK output. The multiplier effect of this on national income would be offset, to some extent, by the fact that in sterling terms import prices would probably rise more than sterling export prices. But, overall, the volume effects should more than offset the price effects so the current account of the balance of payments would be expected to improve and real income would be expected to rise. It was recognised that this process might take some time to work. After all the phenomenon known as the J-curve, that the trade balance can worsen in the immediate aftermath of a depreciation, because import prices rise ahead of any increase in exports and reduction in imports, was discussed after the 1967 devaluation. But by now, more than four years after the depreciation has been completed, I would have expected the long-term consequences to be clear to everyone.

Today I would like to review two issues. First of all, what has happened to exports and imports in the aftermath of the 2007/08 depreciation? And secondly, what has happened to other components of the balance



of payments, and in particular investment income? I would then like to reach some conclusions on how far the current account of the balance of payments is, in its present condition, sustainable.

Export and Import Flows

Chart 2 shows the volume indices of exports and imports relative to the first quarter of 2008 which marks the start of the global recession. Although both exports and imports fell during the global recession, export volumes, unlike import volumes are higher than at the start of the recession. But at the same time, the impact on export volumes has been disappointing. The gain compared with 2008Q1 is small. This pattern is similar to the growth of the GDP of our major trading partners. But the depreciation should have been expected to lead to an increase in market share, allowing our exports to rise appreciably faster than their GDP.

In fact exports of goods have performed better than exports of services. The volume of the former rose by 6.3 per cent between 2008Q1 and 2012Q3, a performance which was worse than that of the United States and Germany but better than that of the other G-7 countries. Nevertheless, measured as a share of goods exports, the UK has done no more than hold its own, after several years in which its share was declining. The volume of services exported has fallen by 4 per cent in the same period and only Japan among the G7 economies has performed worse in terms of service exports. Measurement of service volumes is, however, imprecise and an alternative indication of the underperformance can be gained by looking at the movement in the values of different types of service exports. Chart 3 shows the growth in the value of exports of each type of service and compares it with growth in the value of goods exports since 2008Q1. While business services have performed well, a striking aspect of the chart is the weakness in financial services¹- a term which in the trade statistics includes banking and fund management but excludes insurance. Exports of these have declined in money terms since 2008Q1. I address subsequently the possibility that they may be

¹ In 2008Q1 financial and business services each accounted for about a quarter of UK exports of services. Growth in the exports of the two added together has been broadly in line with the exports of the service sector as a whole.

mismeasured and examine whether in fact this sector may have performed better than Chart 3 suggests. Further discussion of recent export performance is provided on pages 24-25 of the February *Inflation Report*. The import side also matters. Import volumes remain below those of 2008Q1; so too does our GDP. Indeed both were in 2012Q3 just over 3 per cent below their values of 2008Q1. It does not seem that import penetration has declined.

Unit Values and Relative Costs

Traditionally a fall in the exchange rate was assumed to make exports cheaper in foreign markets and imports more expensive in domestic markets. As a consequence the depreciation led to a worsening of the terms of trade which needed to be offset by an increase in the volume of exports and a fall in the volume of imports. Chart 4 shows that, since 2007Q1, there has been some cheapening of UK exports relative to the export prices of our international competitors. However the gain is by now only under 6 per cent and the movement in goods export volumes is probably commensurate with this, on the assumption that export sales are influenced by relative prices and other demand factors.

But if there has been a favourable movement in costs relative to export prices, then supply-side effects should also be present. Such a shift may occur if export prices are set with reference to foreign prices while costs are determined domestically. Chart 5 shows unit labour costs in manufacturing measured in euros for the United Kingdom, France and Germany. Costs are measured relative to 2007Q1 so the chart shows changes in unit costs relative to that date; it does not indicate competitiveness in absolute terms. The chart also shows, once more, movements in the sterling effective exchange rate and the exchange rate against the euro. It is clear from the chart that there was a substantial gain in competitiveness resulting from the fall of the exchange rate. But between 2011Q4 and 2012Q3 a considerable amount of this gain was eroded away. In part this was because the exchange rate rose, a rise which has been reduced in the last few weeks.



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Competitiveness was also lost because of the United Kingdom's particularly poor productivity performance. Data on unit costs are available up to 2012Q3 but the fall in sterling since then, shown in Chart 1, has restored some of the gain in competitiveness relative to our neighbours.

Had United Kingdom industry maintained its international competitiveness at the position of two years ago, it is perfectly possible that further impacts on exports and imports would have flowed from the depreciation. But seen in the round, a reasonable conclusion is that the growth in net exports following from the depreciation has been weaker than I would have expected. It would, however, be wrong to put too much blame for this on the fact that our export prices in sterling have risen and in foreign currency have not fallen very much in the aftermath of the depreciation.

The conventional analysis of the effects of a depreciation has its roots in the theory of imperfectly competitive firms, developed by Chamberlin (1933). Each firm is assumed to produce a product which is differentiated, to some extent, from those produced by its competitors. This means that a modest increase in price leads to some, but not a complete loss of sales. Firms choose prices to maximise their profits and simple assumptions lead to the conclusions that profit-maximising prices will be set as a mark-up on costs. To the extent that domestic wage and other costs are fixed in pounds, a depreciation leads to a fall in costs measured in foreign currency. As a consequence export prices are reduced and export sales increase. The magnitude of the reduction depends on the extent to which export volumes are price sensitive and also on the extent to which production costs depend on the amount produced. If exports sales are very sensitive to foreign currency prices so that exporters essentially price to market, then there will be little change in foreign currency prices. But, unless costs rise steeply in terms of the amount produced, export volumes will nevertheless be increased sharply. From this perspective then, a modest movement in export prices would be expected to lead to little change in volumes only if producing extra goods for export led to sharp increases in costs of production, perhaps because of capacity constraints.

In practice it seems rather unlikely that increasing export volumes will be associated with sharply rising costs. Compared with the pattern of domestic expenditure, export sales are disproportionately manufactures. Exports make up 36 per cent of manufacturing sales to final demand, but only 16 per cent of the output of the rest of the economy is exported. Even though capacity may be much-reduced after the crisis, the CBI survey shows more manufacturing firms reporting below-capacity than above-capacity working. As Chart 6 shows, the weakness in manufacturing output and therefore probably spare capacity is fairly evenly spread across manufacturing. The only component which has performed well is transport equipment; this is in large part because exports have done well. What might be limiting exports from the other manufacturing sectors? One explanation is that exporters who want to increase their sales have to break into new markets (and that international branding means this is much less of an issue for the motor vehicle industry). Rodriguez-Lopez (2011) sets out a structure in which firms which wish to increase their exports face entry costs and, in his framework, an increase in exports following a depreciation comes not so much because existing exports increase their sales (the intensive margin) as because new exporters enter the market (the extensive margin). He shows that this can happen with measured export prices not changing by very much. But his analysis also suggests that the effect of the depreciation on export volumes should be observed fairly quickly. So what might hold it up?



One possibility is that the costs which need to be incurred in entering new markets are a deterrent, not because businesses expect new sales not to be worthwhile but because they see the whole exercise as risky. In normal market conditions that might not matter- businesses would be prepared to take risks. But, at a time of heightened uncertainty, the risks involved may be putting them off. This is, of course, the same explanation as that often given for low domestic investment. In technical terms, if the IS curve, which shows the relationship between the rate of interest and investment has steepened, as Bean (2012) has argued,

then perhaps we should not be too surprised if export performance disappoints. One obvious source of uncertainty is whether the competitive exchange rate will persist; episodes like the weak euro in the summer of last year reinforce that concern even if they prove to be temporary. Similar arguments probably apply to imports. Indeed several of the businesses I have visited have told me that they are reluctant to devote substantial resources to competing against imports because they are concerned that the competitive advantage gained by the United Kingdom after 2008 might not last.

The Current Account of the Balance of Payments

Anyway, to note that there has been a modest improvement in net trade volumes, as Chart implied, is only a part of the story. Imports have to be paid for at their current prices and not on the sort of volume basis shown

in Chart ; similarly export earnings are measured with references to the prices people actually pay for them, and not those implied by volume measures. And import prices have risen more than export prices, at least in part because of increases in prices of agricultural and industrial raw materials. Chart 7 shows the balance of trade both in volume terms and in current prices. This indicates that, while there was an improvement in the months after the start of the recession, the balance of trade measured in current prices is now not much better than it was in 2008.

But trade flows are not the whole of the story. Current account payments take place for two other main reasons. First of all, the United Kingdom invests heavily abroad while foreigners invest heavily in the United Kingdom. Payments of property income take place in both directions and the balance of these is an element of the current account of the balance of payments.



Secondly, both individuals and governments pay transfers to other countries or to their residents. Any shortfall on these has to be financed internationally, just as any shortfall of exports relative to imports has to be financed by borrowing from abroad or by selling off part of the national capital. Chart 8 shows these components along with the balance of goods and services and the overall balance going back to 2007Q1. The main points to be learned from this are as follows. First of all, while the trade balance has improved since the period before the crisis, even if not very much, the same cannot be said of the overall current balance. In the last two quarters it has in fact, as a percentage of GDP, been larger than at any time since late 2006. The deficit on transfer payments has increased steadily, from 0.7 per cent to 1.5 per cent of GDP, while the investment income balance, although erratic, has recently been worse than for most of the period after the crisis. The labour income balance is very small and I do not discuss it further.

All of these figures must regarded as imprecise and they are in any case subject to revision. They are the differences between large and inaccurately measured inflows and large and inaccurately measured outflows. So the general impression that they give is more important than any particular number. But the general impression is that, despite the depreciation, our balance of payments deficit is no smaller than it was before the depreciation; at least seen from this perspective the United Kingdom seems to have made no progress with rebalancing.

Investment Income

The flows of investment income require a detailed discussion. The United Kingdom, like the United States, is a net external debtor; our net external liabilities have varied between 5 and 30 per cent of GDP over the period since 1997. But despite being a net debtor, the United Kingdom, again like the United States, earns more investment income than it pays out (see Chart). In that sense, our external debts appear to pay for themselves.

Chart 9 shows the net asset position of the United Kingdom together with investment income while Chart 10 shows the gross position². It can be seen that, while in 2000 assets and liabilities were around three times GDP, this ratio rose to almost six in 2007. Valuation changes drove it up to well over seven in 2008. As Chart 9, shows these changes led to a marked reduction in the United Kingdom's net external liabilities. Gourinchas, Rey and Truebler (2012) attribute 60 per cent of the net improvement to the exchange rate depreciation, with the United Kingdom's assets being disproportionately denominated in foreign currency and its liabilities disproportionately denominated in sterling. However the net position worsened again in 2009 despite the fact that there was no real recovery in the exchange rate. By the end of 2011 gross assets and liabilities were once again over seven times GDP.



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The situation represented in Chart 10 makes it possible for the United Kingdom to earn positive investment income even though liabilities exceed assets, provided, of course, the rate of return on assets exceeds that on liabilities by sufficient margin. The United Kingdom is not the only country which pulls off this trick. Gourinchas, Rey and Govillot (2010) point out that the United States is in a similar position. They suggest that there are two possible sources of the excess return on assets. The first is that, for each type of investment the investing country earns more than it pays out on the same investment. The second is that it chooses a mix of assets which is biased towards higher-yielding investments as compared with the liabilities it has to foreigners. Gourinchas *et al.*(2010) describe the first source of excess return effect might arise because of what a French minister of finance once described as exorbitant privilege- the idea that the country which manages the reserve currency of the international financial system can borrow more cheaply than anyone else. The composition effect, on the other hand, might well arise because the portfolio of the country's assets was more risky than were its liabilities.

At this point it should be noted that the analysis is conducted in terms of the categories used in balance of payments statistics, foreign direct investment, equity, debt and "other", with "other" representing for the most part the external assets and liabilities of banks. This classification means that the distinction between return effects and composition effects is less informative than one might like. The return on holdings of debt by UK investors overseas may be higher than that earned by foreign investors in the United Kingdom because UK investors run greater risks rather than because UK investors are more skilled at identifying market anomalies. In other words composition effects may be present even within the asset categories.

But, making the distinction suggested by Gourinchas *et al.* (2010), Habib (2010) suggests that none of the other advanced economies, including the United Kingdom, enjoy the return effect and that only the United States can enjoy exorbitant privilege. However, United Kingdom data have been substantially revised since Habib (2010) completed his study. Tables 1 and 2 show the returns on the different types of asset, both for the period from 1997-2007 and for 2008-2011. The returns are calculated both from reported income alone and after taking account of capital gains. The latter are calculated from the residuals needed to reconcile the published figures for transactions in assets with the balance sheet data provided by ONS. Thus they include measurement errors and discrepancies. These may be particularly marked for "other" assets.

	UK Assets		UK Liabilities		Share of	Share of
	Ex gains	Inc gains	Ex gains	Inc gains	Total Assets	Total Liabilities
FDI	10.0	8.0	7.5	4.1	16.1	9.2
Equity	2.6	8.0	2.9	9.9	12.4	15.5
Debt	4.8	6.0	5.0	6.0	16.2	13.6
All long-term					44.7	38.3
investment	5.9	7.1	4.7	6.4		
Other	3.0	7.3	3.4	7.2	55.4	61.7
All	4.2	7.1	3.9	6.7	100	100
Excess Return on Assets		0.4				

Table 1: Rates of Return on the United Kingdom's External Assets and Liabilities (mean per cent per annum) 1997-2007

Source: UK Balance of Payments, ONS and Bank calculations

Rounding means that sums and differences of aggregates may differ from those computed using these figures.

Table 2: Rates of Return on the United Kingdom's External Assets and Liabilities (mean per cent per annum) 2008Q1-2012Q3

	UK Assets		UK Liabilities		Share of	Share of
	Ex gains	Inc gains	Ex gains	Inc gains	Total Assets	Total Liabilities
FDI	7.8	7.4	4.2	4.0	10.5	7.0
Equity	2.7	4.6	3.2	-1.6	6.9	8.1
Debt	3.1	7.5	2.8	7.1	12.5	14.8
All long-term					29.9	30.0
investment	4.6	6.2	3.2	3.6		
Other	0.9	9.7	1.1	9.5	70.1	70.0
All	2.0	8.1	1.7	7.2	100	100
Excess Returns on Assets		0.9				

Source: UK Balance of Payments, ONS and Bank calculations

Rounding means that sums and differences of aggregates may differ from those computed using these figures.

These data suggest that, asset by asset, returns including gains seem to be mostly higher on United Kingdom assets than on United Kingdom liabilities, although this was not true of equity in the period 1997-2007 and the returns on debt were equal on assets and liabilities then. Total returns, including those earned from the composition effect on United Kingdom assets exceeded those on liabilities by 0.4 per cent per annum in the period from 1997-2007 and by 0.9 per cent from 2008 onwards. The very high capital gains associated with other assets and liabilities between 2008 and 2011 are, as noted above, derived by comparing reported assets transactions with reported balances and there is more than a small risk that they may be artefacts resulting from mis-recording.

Looked at overall, the information available on the United Kingdom's external assets and liabilities suggests, in contrast to the findings of Habib (2010), that the excess return comes from a return effect rather than a composition effect. For the period up to 2007 the return effect amounts to 0.3 percentage points while the composition effect is 0.1 percentage points. From 2008 to 2011 the return effect, after rounding, is put at 1.0 percentage points while the composition effect is -0.2 percentage points. This suggests that the

United Kingdom, like the United States, enjoys favourable returns on its investments rather than biasing its investments towards the broad categories which offer the highest measured returns. Capital gains on top of flows of investment income, have offered a second means by which the United Kingdom's external position has financed itself. But, as I noted earlier, it is not possible to say whether this is the consequence of the skill of the United Kingdom's investing community or whether it is simply because they run greater risks with the United Kingdom's overseas investments than do the foreigners who invest in the United Kingdom. It is, however, certainly the case that relatively small movements in returns on the United Kingdom's external



assets and liabilities would turn the surplus on our investment income account into a deficit and the sequence of capital gains we have enjoyed into capital losses.

It is a slight, but worthwhile digression to explore the question of whether the financial sector makes a positive or negative contribution to the United Kingdom's external account. This can be done by adding together³ net exports of financial services to the net property income earned by monetary financial institutions in the UK. The coverage of the income data and the export data are not exactly the same. The balance of investment income was very high during the crisis because of the large losses made by foreign banks in London. But Chart 11 suggests that it would be wrong to conclude the United Kingdom has suffered from fall-off in demand for

financial services. The contribution made by the sector is lower than it was before 2008, but that does not mean that the United Kingdom has lost income from this source, compared to the pre-crisis period.

Is the Current Position Sustainable?

In an economy in which money GDP is growing at a rate *g*, then, if the external deficit measured as a proportion of GDP is given by *d*, the ratio of net external debt to GDP will settle at *d/g*. But the experience of the last few years has reminded us that, whatever this arithmetic might say, high ratios of external debt to GDP tend to be unstable. Our current deficit is about 3 ½% of GDP and, even if the rate of money GDP growth were to return to 5% per annum this would mean, in the absence of continuing capital gains, that our net external debt would rise to 70 per cent of GDP, a level which has proved uncomfortable at least for countries in the euro area. Reinhart, Rogoff and Sastavano (2003) suggest that restructuring becomes likely once the ratio exceeds 60 per cent, although inevitably most of the examples they consider are provided by

³ Adding up in this way nets out the inevitably arbitrary effects of treatment of a component of income flows as a purchase of intermediation services (see Begg, Bournay, Weale and Wright, 1997 and Haldane, 2010).

developing countries, so it is not clear how far this might indicate what the United Kingdom could support. Certainly Lanau and Wieladek (2012) suggest that countries with liquid financial markets can sustain deficits for longer than those without such markets and it is therefore possible that they may be able to sustain larger debt stocks.

What changes might reduce the deficit? Obviously one possibility is that the income account recovers; a second is that sustained capital gains on our overseas assets outrun those on our overseas liabilities so that our current account deficit once again pays for itself. No one could rule out these possibilities, but equally we should not fall into the trap of thinking that the period before 2007 was in any sense normal. Many people and businesses generated positive income flows or net capital gains through gearing and countries are simply the aggregate of households and businesses. So, just as it may no longer be possible for people to pay for their retirement by means of capital gains on housing, it may no longer be practical for the United Kingdom to finance an excess of imports over exports by means of a positive income flow and capital gains made possible through gearing.

Should this prove to be the case, the third outcome is that the current account deficit has to narrow. That could be achieved without any movement of the real exchange rate if a substantial part of the impact of the depreciation of 2008 on our exports and imports has yet to come. I have suggested a reason why that might be the case; in the general atmosphere of uncertainty, businesses are reluctant to meet the costs involved in entering new markets, whether export markets or domestically, in competing against imports. If, however, much the major impact of the depreciation has now been felt, the deficit could be reduced by a sharp exogenous revival in export demand, coming, perhaps from rapid economic growth in our major trading partners, or by semi-permanent economic weakness at home depressing imports. The only other solution is for a further decline in United Kingdom labour costs relative to those of our major competitors.

Even then there are a number of ways in which such an adjustment could take place. One is by means of an improvement in productivity. If productivity levels in the United Kingdom were to move back towards the path which would have been anticipated ahead of the crisis, then there would be a sharp fall in unit labour costs. The United Kingdom has more of a productivity shortfall than is typical for advanced economies, and so a general recovery towards trend would result in the United Kingdom gaining competitiveness. But with no clear explanation of why there is a productivity shortfall, there is no reason to anticipate this.

Secondly, hourly wage costs in the United Kingdom could rise less than in our major trading partners. In an atmosphere of generally low inflation, this competitive deflation would be a very slow process, at least in the absence of a general fall in wage rates. But a fall in wage rates is not a solution that I would welcome. Falling wage rates would probably be associated with stagnant or falling prices at home. As a result real interest rates would be increased, even if the Monetary Policy Committee maintains current policies. And the outcome of this could well be a further squeeze on domestic expenditure.

The final, and perhaps most natural, means of resolving the problem is for the nominal exchange rate to fall. Clearly, the first consequence of such a fall in the exchange rate would be a further rise in inflation. Indeed work with colleagues at the Bank has suggested that the fall of the exchange rate that has already happened since the start of 2013 may, if it is sustained, add something like 1 per cent to the price level over the next three years.

King (2009) referred to the paradox of policy as, "almost any policy measure that is desirable now appears diametrically opposite to the direction in which we need to go in the long term". Of course I am talking about possible market movements and not the effects of a policy measure. But King's point also applies to the depreciation of this year. The change pushes inflation further from its target but at the same time it probably goes some way to reducing our external imbalance.

The MPC remains oriented towards meeting our objective using domestic instruments, and does not target the exchange rate. It explained, in its statement of 6th February, that, "as long as domestic cost and price pressures remained consistent with the inflation target in the medium term, it was appropriate to look through the temporary, albeit protracted, period of above-target inflation". I certainly see that there would be a strong case for treating the effects of any further depreciation similar to that experienced in the last few weeks in the same way. To do any different would be to veer towards deflation as a means of restoring external equilibrium. But I should stress that this point is quite different from saying that I would be unconcerned about the effects of a sharp depreciation on prospects for inflation.

Conclusions

To sum up, it is possible that the full benefits of the 2007/8 depreciation are yet to be realised; it may be that high levels of uncertainty, and a reluctance to take on new risks, have stood in the way of exporters seeking new markets and domestic producers doing what is needed to displace imports. If this is the case then, provided the calmer atmosphere we have seen since the summer is sustained, we may see further benefits of the depreciation. But at the same time an important aspect of the United Kingdom's external account has historically been a net surplus of investment income. As this has eroded, the overall deficit has increased to around 3½ per cent of GDP, a level higher than before the depreciation. Unless we continue to enjoy capital gains, this points to a marked increase in United Kingdom net external debt at the current exchange rate. The likely outcome of this would be a lower real exchange rate which, while unwelcome in terms of its effect on inflation, would go some way to redress what is probably, at present, a substantial external imbalance.

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