28.10.2015

MPC MEMBERS

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ISSUES IN ONS TRADE DATA FOLLOWING BLUE BOOK 2015

Issue

- After raising concerns with the ONS about the latest import price deflators the ONS has confirmed that there are issues in the trade data. This note outlines the issue and what we plan to report in the November Inflation Report.

Key points

- Following the 2015 Blue Book, ONS trade deflators derived from the real and nominal data suggested import and export prices in 2014/15 had been much stronger than previously thought.
- The revisions to the deflators do not match the revisions to the published goods trade price indices that are used to deflate the goods data.
- We have worked closely with colleagues at ONS to understand the data and some progress has been made. This investigation has uncovered that there is an issue with the goods import and export data from 2014 onwards.
- We have been advised by the ONS to use the trade price indices, which are unaffected by this issue, to assess movements in import prices.
- ONS are still working to understand what the impact is likely to be on the real and nominal data. Their sense is that the nominal data will be affected by less than the real figures, and that any real impact is unlikely to have a sizable impact on GDP, in part because the output data are more important for determining GDP at this stage of the data cycle so revisions to net trade would likely be offset in other expenditure components.
- The Inflation Report will report the ONS's preferred series for import prices and the latest vintage of import and export values and volumes, emphasising the greater than usual degree of uncertainty around those estimates.
- We have asked the ONS to issue a notice ahead of the publication of the November Inflation Report.

Puzzle in the trade data

Following the publication of the Quarterly National Accounts consistent with the 2015 Blue Book Bank staff queried the upward revisions to the trade deflators calculated from the nominal and real values. The revised deflators implied annual import price inflation was revised up by several percentage points in the year to 2015Q1 in between the July and October vintages of the data (Chart 1). The implied deflator for import prices excluding fuel suggested import prices were rising on a year ago, despite sterling's appreciation (Chart 2).

At the same time the real monthly goods data out to August, showed some erratic movements in imports and exports that contributed to the strong contribution to net trade in Q2 that appears to have unwound into Q3 (Charts 3 and 4).

Chart 1: Revisions to goods & services import price deflator

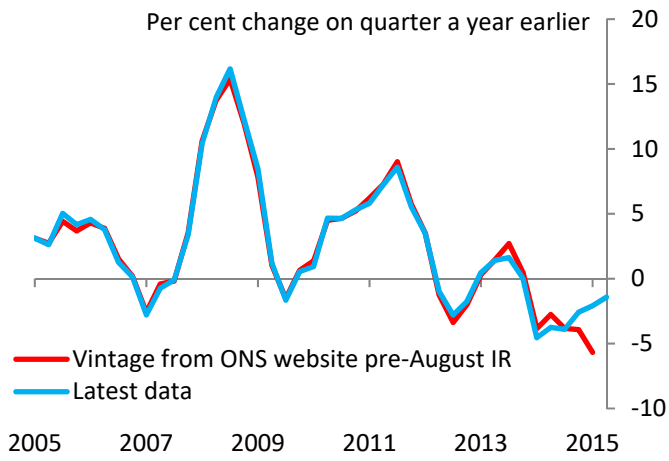


Chart 2: Revisions to goods & services import price deflator excluding MTIC and fuel

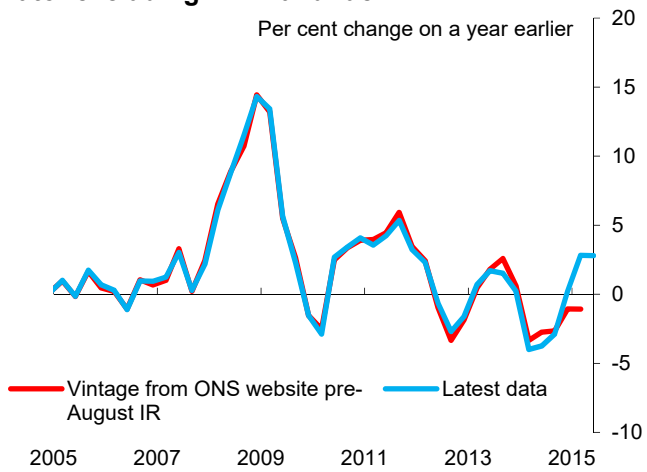


Chart 3: Monthly goods imports trade data[(a)]

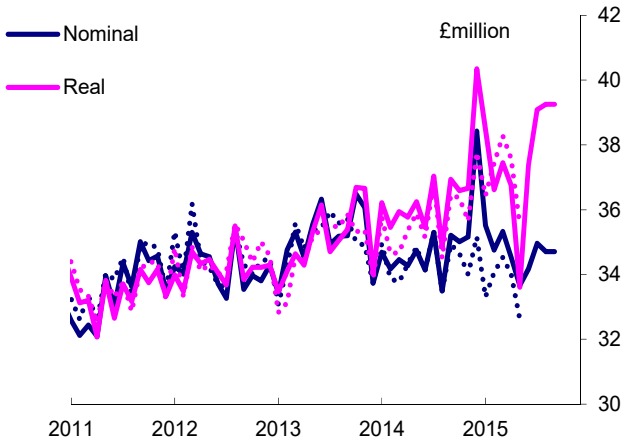
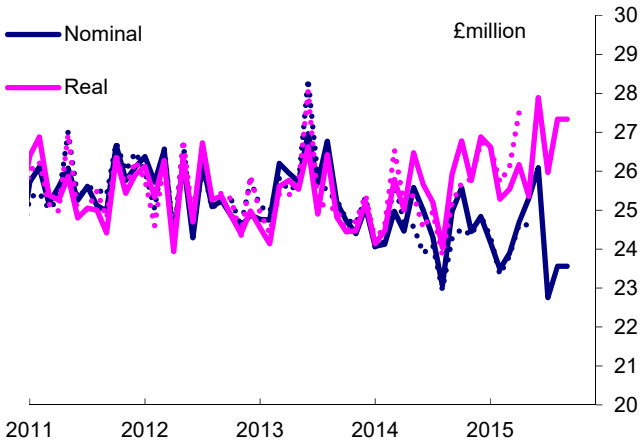


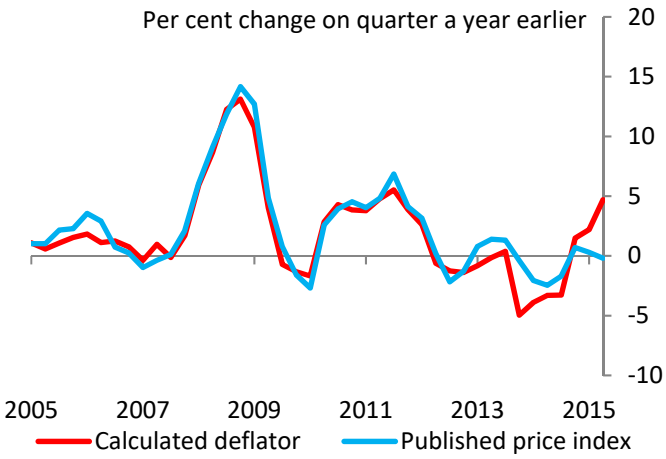
Chart 4: Monthly goods exports trade data[(a)]



(a) Dotted lines are data as published in July 2015 ahead of August Inflation Report.

The inflation rates from the deflators calculated using the ratio of nominal and real data do not match the inflation rates from published price indices. For example, the inflation rates for imported goods excluding oil and erratics (based on the ratio of nominal to reals) are not as close to the published deflator during the past couple of years, however (Chart 6).[1] Such a large difference was not a feature of the vintages of data available at the time of the August IR.

Chart 6: Inflation rate for goods imports excluding oil and erratics in latest data



[1] Stripping out erratics removes the effects of non-monetary gold on the trade data (erratics also include ships, aircraft, precious stones and silve). Changes to the way non-monetary gold is incorporated into the trade data (in compliance with Eurostat regulations) have contributed to the increased volatility of the trade data.

Calculation of goods import prices

The information collected by the ONS from the Monthly Inquiry for Index of Import Prices (IPI) is used to compile the Import Price Indices. The survey covers approximately 1500 importers (including domestic manufacturers who also imports) who provides approximately 2500 price quotes in the UK. The sample is drawn from the population comprising all UK manufacturing businesses that record import activity with HM Revenue & Customs and the selection criteria is UK trading businesses registered for VAT and/or PAYE.

IPI survey data is the primary source for the compilation of import price indices for deflating nominal trade data. However, for certain items within manufactured goods imports directly collected import prices are not available. In such cases, either PPI (at the same product levels for food, fuel and basic materials, which are within SITC 0-4) or adjusted PPIs (adjustment factor being derived from the relationship between IPI's and PPI's where both exist - i.e. for semi-manufactured goods, which are within SITC 5-8) are used as import price deflators.

In addition, where products are traded on a world market basis (i.e. raw agricultural goods, metals, etc.), prices from the world market prices are used. For instance, prices for imported metals are obtained from the London Metal Exchange and meat prices are provided by the Meat and Livestock Commission.

For more details of the measurement,

We've not looked at the export price data in as much detail so far, but there appear to be similar issues with the scale of revisions to the implied deflator and the divergence between the price indices and deflators (see Chart 7 and Chart 8).

Chart 7: Revisions to goods export prices excluding fuel and erratics

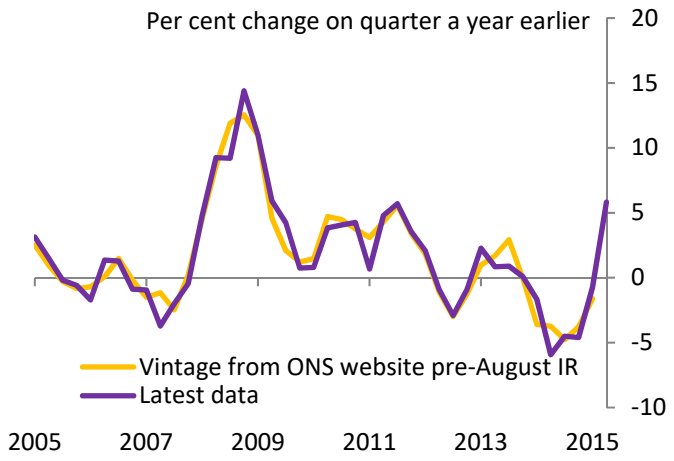
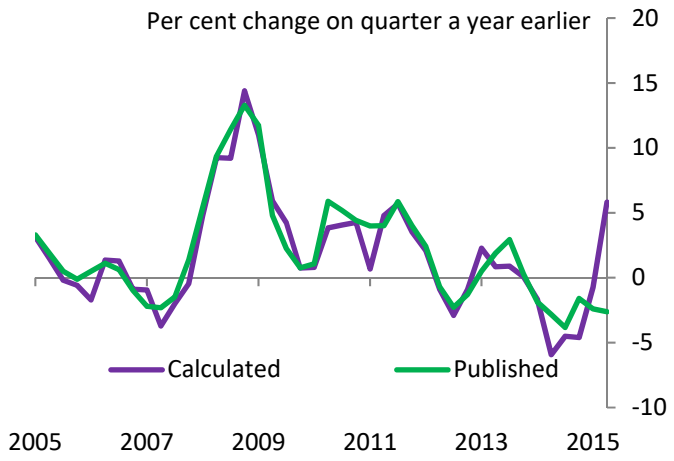


Chart 8: Exported goods prices excluding fuel and erratics: price index vs deflator



ONS response

Following detailed examination of the trade data, the ONS have discovered that the goods trade data from 2014 onwards were not properly updated as part of the 2015 Blue Book.

The ONS have advised us to use their published goods price indices to track movements in trade prices. They have provided us with a weighted import price index using the services deflator and the price index for goods excluding oil and erratics which is closest to the economic concept we would want to use for our assessment of import price pressure relevant for inflation.

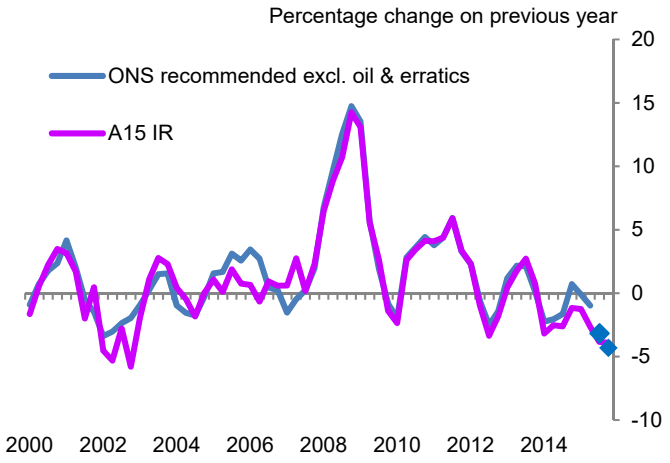
The ONS is still working to understand what the impact is likely to be on the real and nominal data. ONS staff's sense is that the nominal data will be affected by less than the real figures. As there are probably issues with the export data too (though the ONS haven't looked at those data in as much detail), the effects on net trade are unclear at this point. Notwithstanding any effect on net trade, the effects on GDP were likely to be very limited as they would probably be mopped up in balancing adjustments elsewhere in the expenditure components at this stage of the data cycle.

The next opportunity to revise the data back to 2014 would be the QNA in December (the ONS are very unlikely to reopen the data in the November UK Trade release, which is published on 6th November), although they may decide to wait until June 2016's Blue Book.

Treatment of latest trade data in the November Forecast

Given the steer from the ONS to use its price indices as the best measure for import prices, the revisions to import deflators have not been reflected in the Draft inflation forecast. News in import prices has been assessed against the ONS recommended series. The quarterly forecast for import prices in Q3 in the Draft forecast are based on the goods excluding fuel import price index series published by the ONS for July and August. The constraint for Q4 is determined by estimating the suite equation. The profile for import prices using the ONS recommended series point to a four-quarter change in import prices of 3.2% in Q3 and 4.3% in Q4 – broadly in line with the August Inflation Report (Chart 9).[2]

Chart 9: November Inflation Report import price forecast



The profile for nominal net trade and the current account is even more uncertain than usual given the uncertainty about the data. The forecasts for Q3 and Q4 assume the fall in the trade deficit in Q2 is erratic

[2] The deflator in the forecast database has not been revised to match the ONS preferred price index because it is not currently clear how revisions to the deflator will feed through to the nominal and real values. Users are advised not to use the series PMDEF or PMDEFXF for assessing import price data this forecast round.

(consistent with the current vintage of data for July and August) and that the trade deficit and current account return to around 2% and 5% respectively in the second half of 2015.

Treatment of latest trade data in the November *Report*

The latest vintage of trade data have not been allowed to affect the narrative in the November *Report*, consistent with the treatment in the November Benchmark forecast. In the discussion of net trade in Section 2 of the IR, we report the latest published trade data. But the unusually large scale of the revisions has been noted, and the higher than usual degree of uncertainty around the latest estimates emphasised. We have stated that the revisions have not had an effect on the projections for imports and exports growth. The proposed paragraph is:

> Having made a negative contribution to GDP growth in 2014, net trade was strong in Q2 according to the latest estimates, reflecting a sharp fall in import volumes and a rise in exports. Early estimates of trade data are uncertain and subject to revision, however, and large downward revisions to both import and export volumes growth since mid-2014 in the Blue Book 2015 [may be related to the issues highlighted in the notice released by the ONS on [xx] October 2015]. There is therefore a greater than usual degree of uncertainty around the current vintage of trade data. On the current estimates, monthly data on trade in goods for July and August, together with Bank staff estimates, suggest that net trade turned negative again in Q3. Beyond this, revisions to the trade data have had little impact on the outlook for net trade, which will depend, in part, on movements in the sterling exchange rate.] Although sterling has depreciated by around [3]% since the August Report, it remains [17]% above its trough in 2013 (Section 1). That appreciation of sterling, together with weak world GDP growth, is expected to drag on UK exports and boost imports such that net trade continues to drag on GDP growth (Section 5).

The discussion of import prices makes use of the series provided by the ONS for total import prices excluding fuel and erratics, instead of the implied deflator for imports excluding fuel used in previous *Reports*. We have included a paragraph on import price data in Section 4, and changed the measure of import prices used in the chart in the import price pass through box (Chart A).

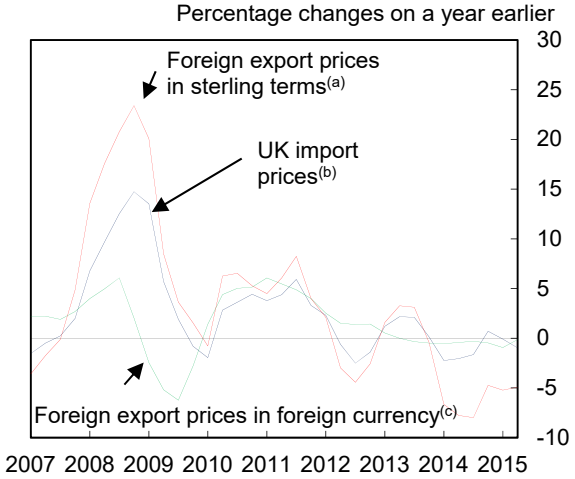
According to ONS estimates, import prices for goods and services excluding fuel and erratic factors[1] have fallen by around 3% over the past two years, a somewhat smaller fall than implied by the data available at the time of the August Report. As discussed in the ONS notice released on [xx] October, the ONS has advised to use the goods import price index weighted together with the service imports deflator to assess changes in UK import prices. Those revisions to the implied deflator have not, therefore, been allowed to affect the MPC's projections (Section 5).

If you have any comments on the proposed text for the Inflation Report, please send them to the Inflation Report Authors by close Friday 30th October.

SEAD and IRAID
Monetary Analysis (HO-2 BD)
28 October 2015

Chart A Import price inflation has been robust compared with sterling world export prices

UK import prices and foreign export prices excluding fuel



Sources: Bank of England, CEIC, Eurostat, ONS, Thompson Reuters DataStream and Bank calculations.
(a) Domestic currency non-oil export prices of goods and services of 51 countries weighted according to their shares in UK imports, divided by the sterling effective exchange rate. The sample does not include any major oil exporters.
(b) As advised by the ONS in the notice released on [xx] October 2015, this line shows the price index for goods excluding oil and erratics, as defined in footnote [x] on page [x], weighted together with the services import price deflator.
(c) Domestic currency non-oil export prices as defined in footnote (a).

[1] The ONS define erratic facots as ships, aircraft, precious stones, silver and non-monetary gold.