Department for Business Innovation & Skills

CONSULTATIVE COMMITTEE ON

CONSTRUCTION INDUSTRY STATISTICS

Minutes of the meeting of 25th June 2014

Present

Frances Pottier	BIS (Chair)
Liam Cavin	BIS (Minutes)
James Liley	BIS
Anna Fialko	BIS
Keith Folwell	BIS
Jacqui Jones	ONS
Kate Davies	ONS
Michael Dall	Barbour ABI
Karen Hazelden	CITB
Peter Rumble	BCIS
Ian Pegg	BCIS
Robert Davis	Glenigan
Alan Wilén	Glenigan
David Holmes	Aecom
Alberto De Biasio	Aecom
Jim Meikle	Aecom
Stefani Kostagianni	Aecom
Stephen Gruneberg	University of Westminster
Sonya Patel	Experian
Noble Francis	CPA
Helen Sleight	DCLG
Neil Higgins	DCLG
Marco Yu	University College London
Alex Murray	University College London
Les Ruddock	University of Salford
John Appleton	IUK (HMT)

Apologies

Adam Valentine	Barbour ABI
Steve Shelley	Barbour ABI
Lee Bryer	CITB
Pete Lee	ONS
Anna Davies	ONS
James Hastings	Experian
Alan Couzens	HMT
Ian Murdoch	NSCC
Bob Packham	BPA Consult
David Crossthwaite	Aecom

1. Preliminaries

1.1 Members introduced themselves to the group and minutes from previous meeting were agreed.

Action 1: BIS to publish minutes of last meeting on the BIS website

2. Update from Aecom on the revisions to the PCI methodology.

2.1 Alberto de Biasio outlined the proposed changed to the construction price and cost indices.

Aecom have developed and tested a new set of input cost indices, and are developing a new approach to the output cost indices. This is being done with the target of producing the new PCI series by the end of November 2014. The methodologies for both input and output cost indices are being updated. The focus is on types of work rather than projects, thus avoiding sample size problems.

Aecom have adopted a basket of goods approach to input cost estimation, using methods which align with CPI and RPI. Typical materials/products, types of labour and items of construction equipment hire are used as selected inputs, and a master list of construction inputs has been validated. It is proposed that prices for items on the list will be reviewed each quarter, and updated where appropriate.

In order to construct the input cost indices, an un-weighted price relative approach was adopted. Price differences between periods are calculate for items as percentage change, and then combined into the un-weighted arithmetic mean for sub-groups. Different resource mixes are used for different work types, and the aggregate price change for all construction calculated using appropriate expenditure weights.

The results of this approach have been tested and compared to the indices currently published by BIS. The Aecom RCI & 'All Construction' cost index better track expected price drops/stagnation following the 2008 recession.

In order to derive output prices from the input costs, Aecom proposed using a market indicator:

$$Market\ indicator = \frac{New\ Work\ Orders\ at\ Current\ Prices\ (by\ sector)}{Employment\ Index\ (base\ 2010 = 100)}$$

where:

$$Employment\ Index = \frac{\text{number of construction employees}}{\text{number of people employed in the whole economy}}$$

This portion of the proposed methodology by Aecom generated much discussion.

2.2 Noble Francis was concerned about the use of a proxy for industry capacity – as the index measures employment share rather than capacity.

2.3 Alan Wilén suggested that changes in employment could represent changes in capacity. Changes in employment due to changes by HMRC would erroneously affect this measure of industry capacity. Discussion also focused on whether using a measure of employees only (which does not include self-employed, who are a large part of the labour force in the sector) would bias the results.

2.4 Alberto de Biasio responded by describing the methodology in detail, and advised that the proposed index had a good fit with industry capacity.

2.5 Stephen Gruneberg suggested that employment flows could perhaps be estimated using changes in productivity and output.

2.6 Alberto de Biasio advised that employment was used as it smooths the volatility of new work data.

2.7 Noble Francis agreed that new orders data are volatile and suggested smoothing using a 12 month moving average as a potential solution. Measuring capacity utilisation may be better.

2.8 Ian Pegg argued that there was a key difference between new orders in the short and longer term. In the short term orders on the books relate to the perception of a pipeline. But in the longer term he did not agree that this measure would reflect the reality of industry capacity.

2.9 Marco Yu queried how the material prices were collected.

2.10 David Holmes responded by explaining that Aecom have a long term and consistent approach to the collection of cost data. They contact suppliers directly and ask what they charge, and believe that the information in accurate. Essentially, this is a field in which Aecom have considerable experience.

2.11 Noble Francis asked how future changes in the indices would impact upon the sample necessary, and whether this would be a problem.

2.12 David Holmes advised that Aecom currently take a wide sample, and have expertise in picking the right 'bag' of supplies and products.

2.13 Marco Yu and David Holmes agreed that the 2008 recession gave a useful turning point in the data series. David pointed out that the index picks up the second dip in 2012.

Action 2. Aecom to continue the development of the new methodology, and, in conjunction with BIS, conduct a consultation on the proposed improvements.

3. Update from BIS on the seasonal adjustment of building materials and components.

3.1 James Liley introduced the seasonal adjustment (SA) of building materials and components time series. The aim is to remove the effect of periodic variations and outliers from selected data series, thus allowing end users to compare across periods of time within the data series. For example, without SA, fluctuations inconcrete block deliveries between winter and summer make it difficult to make meaningful comparisons. The implementation of SA was recommended by the Methodology Advisory Service of the ONS, for the following total deliveries data series: bricks (monthly), concrete blocks (monthly), ready-mix concrete (quarterly), sand & gravel (quarterly).

James advised that BIS propose to use the X13ARIMA-SEATS methodology, and demonstrated that there was little difference between constrained and non-constrained annual totals, using concrete blocks data. Thus, he argued that a non-constrained methodology be used, but invited committee members to advise if they had a preference.

Another key issue is that the addition of each new data point results in revisions to the whole of the seasonally adjusted data series, although the size of the revisions may often be very small. James invited the committee to advise their thoughts regarding the scope of any revisions, i.e. what period of data (current year, whole series?) should be revised upon the addition of a new data point. Furthermore, what would be an appropriate review period for the seasonal adjustment methodology?

Lastly, James announced that a user consultation on the proposed changes would be conducted in the next few months.

3.2 Noble Francis questioned whether SA would apply to deliveries or production data. James Liley advised deliveries only.

3.3 Alberto de Biasio questioned how the data would be collected. James Liley advised that the ONS conduct surveys on behalf of BIS.

3.4 Stephen Gruneberg asked whether annual data series would be dropped. James Liley advised no.

3.5 Marco Yu stressed the importance of non-seasonally adjusted data for the academic sector.

3.6 Noble Francis argued that, in relation to non-constrained data, many users would think there was something odd about data that did not sum to the annual figures. James Liley agreed that notes in the commentary would be required to make this clear to users.

3.7 Noble Francis argued that users don’t like revisions, and agreed that he felt an annual scope would be appropriate. James Liley advised that the historical data would be unlikely to change much, and encouraged users to participate in the forthcoming consultation on the new methodology.

Action 3. BIS to conduct user consultation on the seasonal adjustment of building materials & components data.

4. Update from ONS on the UK Statistics Authority review of the construction output and new orders publication.

4.1 Kate Davies introduced the topic, changes to the construction output and new orders publication, in response to the UK Statistics Authority review. She outlined that the major target for her session was to canvas the opinions of the committee on the following: the introduction of seasonal adjustment, revisions, chained volume measures, and changes to the commentary.

4.2 Monthly Seasonal Adjustment

Kate Davies advised that the ONS recognise that there can be problems with a 'young' seasonally adjusted series (i.e. less than 5 years), and that their series is 3 years. They are implementing a revisions policy to minimise the number of revisions, however this can result in larger changes to the data once a revision does take place.

John Appleton advised that IUK focus more on quarterly and annual data due to the long term nature of projects. He was not too concerned about potential large revisions, and are confident that any revisions are accurate. He accepted that one-off events would take a while to settle down.

Noble Francis agreed that he tends not to focus on the monthly data, as it is volatile. The media and market analysts are more likely to focus on the monthly data, which can lead to misunderstanding.

Neil Higgins said that he would be interested to see how the seasonally adjusted data affects his work, due to the time required for the series to settle down. He felt that the monthly data was useful, but needed to be taken in context.

4.3 Revisions

Noble Francis cautioned that it was often difficult to explain to his members why revisions were made, especially after a long time (e.g. ~18 months after). Often companies have little statistical expertise.

Kate Davies explained that a number of factors can make revisions necessary, such as: late receipt of data, response rates, revisions to the deflator for a chained volume series, reclassification of businesses from SIC code. Often there can be differences in the characteristics of companies that respond to surveys early when compared to those that respond later. She accepted that reason for revision should be explained in more detail in the commentary.

Marco Yu queried why revisions tended to be upwards, and whether this was due to differences between early and late respondents. Kate Davies advised that the ONS are looking into this as it is important, particularly for the first estimate of GDP. However, Jacqui Jones countered by stating that it is not true that revisions tend to be upwards.

Sonya Patel asked whether there were any plans to publish data from before 1997. Kate Davies advised that this was being considered. Noble Francis and Marco Yu said that this would be helpful to them, and others.

4.4 Chained Volume Measures

Noble Francis advised that his members don't like changing levels, and queried what would happen with New Orders. Kate Davies advised that new price statistics would allow an update of the base year and ensure consistency. An update to constant prices for New Housing Repair & Maintenance would be enabled by an update of the base year, which the ONS will investigate.

4.5 Commentary

Noble Francis commented on the recent combination of Output and New Orders. He felt it had been badly misrepresented by the media, and wondered whether they shouldn't be combined. He suggested that new orders could be provided in excel format only, which the media ignore. Kate Davies advised that this issue existed before the combined commentary.

Steven Gruneberg advised that many of his post-graduate students found accessing the data and commentary difficult. Noble Francis and Alex Murray defended the ONS with regards to data accessibility: the website has long been an issue for the ONS but is much better now. Students need to work harder.

John Appleton enquired whether there are any plans to add to the commentary. Kate Davies responded that there are tight turnaround times, and that they plan to continue to focus on the most important issues in the commentary. They had looked at tying the output commentary to, for example, brick figures, but couldn't find anything of substance to add.

Alex Murray wondered if lagged responses might be an issue. For example, a large proportion of small firms report when income is received, whereas large firms report when an invoice is raised. There can often be a large gap between work being done and when it is paid for, thus output figures may have considerable lag. He estimates that around 25-30% of respondents report inaccurately. Jacqui Jones advised that the ONS is well aware of this, and monitor it. They are currently working with respondents to make sure that output is reported correctly. Noble Francis and Alex Murray agreed that this was a difficult problem to address, especially for small firms. Alan Wilén added that large firms contribute to the difficulty by delaying payment to small firms.

John Appleton noted that the bulletin focuses on construction work by construction firms, and queried whether more attention should be paid to work carried out by non-construction firms, e.g. rail firms and supermarkets. Noble Francis added that in engineering construction, work done is not always defined as construction if it is not done by contractors.

Action 4: ONS to publish information on users' experiences of the changes made to the Output & New Orders publication.

5. AOB

5.1 Stephen Gruneberg advised that he has been approached by Wiley Blackwell regarding their website www.statisticsviews.com. They are interested in running a feature on construction statistics. If any members of the committee are interested in getting involved, they should contact Stephen, and he will connect them.

6. Date of next meeting

6.1 The group agreed that the next meeting should take place around November 2014. BIS will be in touch with members nearer the time to agree an appropriate date.