

Northern Ireland Quarterly Construction Bulletin

Revision Notice – Effects of Methodological Change

19 October 2017

Users were advised in the ‘Planned Future Changes’ section of the Quarter 1 2017 NI Construction Bulletin that a series of improvements to the sampling methodology would be introduced in the Quarterly Construction Enquiry. A methodological notice was published on 25th September 2017 indicating that there would be a break in the construction output volume series from Quarter 1 2016 onwards arising from the change in sampling methodology. The same methodological notice also provided users with an indication of the extent to which the change in sampling methodology would impact upon construction output statistics. The methodological notice published can be found here:

https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/BreakInSeries2017q2_0.pdf

However, following further internal consultation within NISRA, a decision has been made to use smoothing techniques to manage the transition from the old sampling methodology to the new sampling methodology. This will preserve the NI construction output volume series rather than introduce any discontinuities, thereby allowing users to continue to compare trends in construction output over time. This consultation, and the further work required to enable this development, caused a two week delay in the publication of the Q2 2017 NI Construction Bulletin.

Background

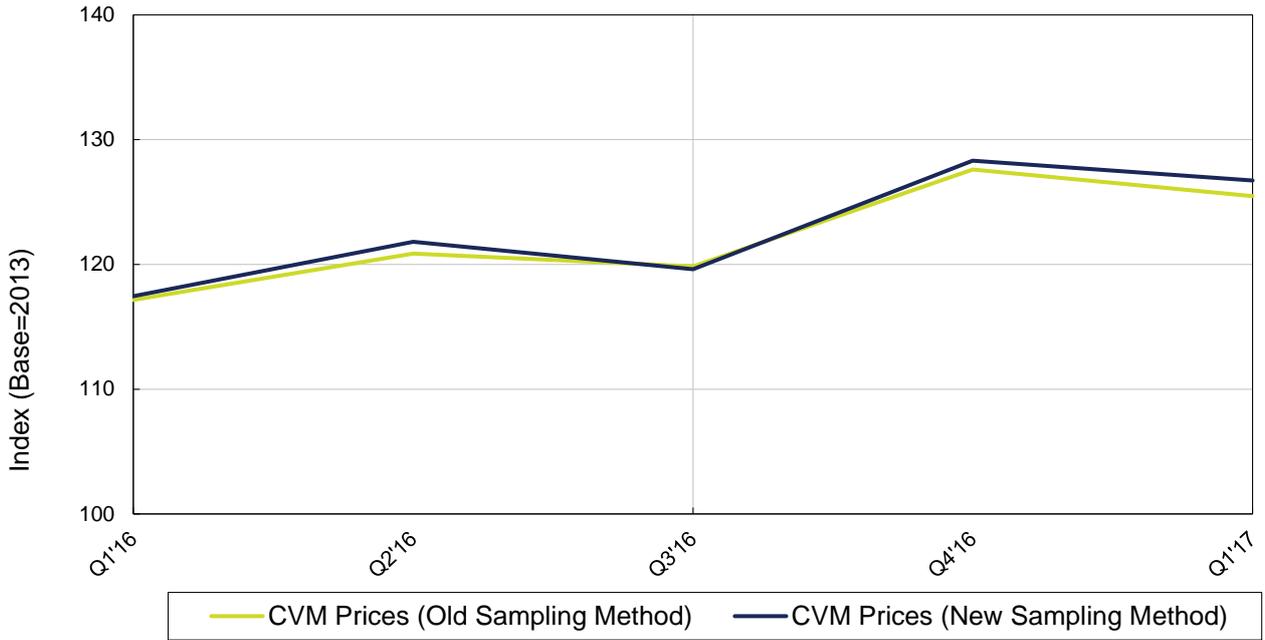
In each quarter of 2016 and Q1 2017, questionnaires were issued to businesses using both the new and old sample methodologies as a means of assessing the impact of the change. With advice from the Office for National Statistics methodologists, a methodology has been developed in order to integrate the new sample with the old, without making significant changes to the back series data, thus giving a meaningful index over time. The integration of data collected from each sample, in essence, strips out the old sample data over time whilst adding new sample data in.

Impact of Change in Methodology on Construction Output Volume Series

Overall Output

The main difference in the revised series is the general upward revision of total output levels under the new sampling methodology, however the quarter on quarter growth rates remain highly consistent with previously published output levels (Figure 1).

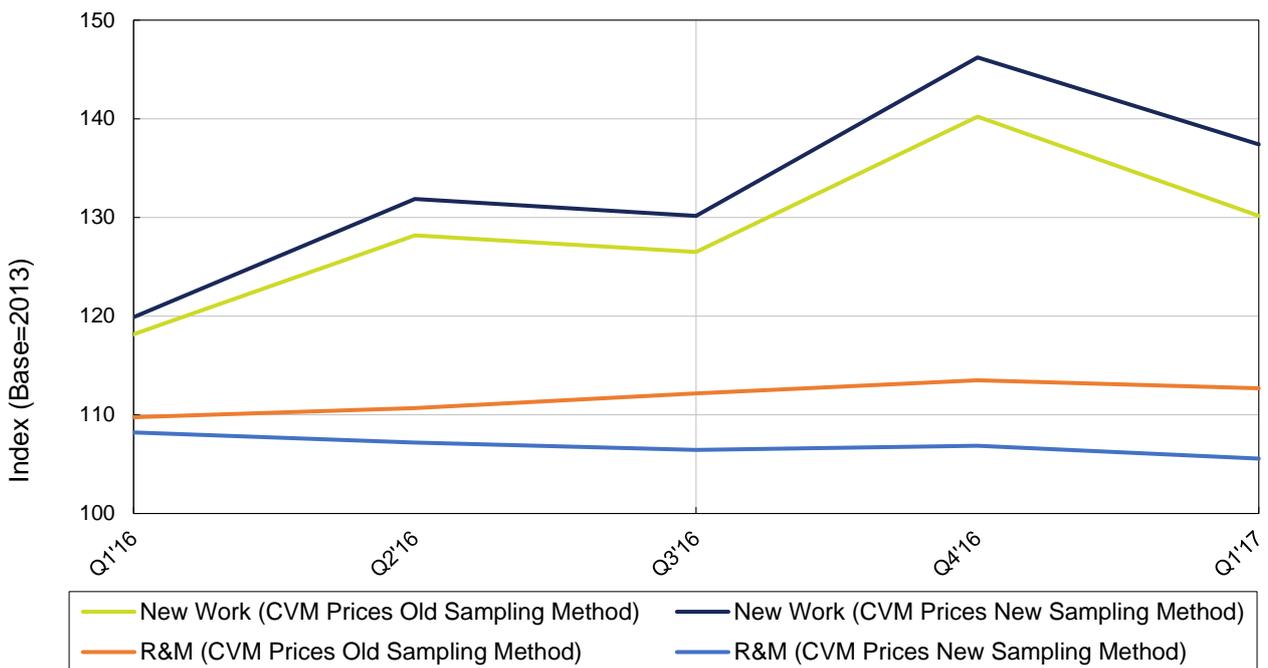
Figure 1: Total Volume of Construction Output in NI



New Work and Repair & Maintenance

Within the sub-components of construction output, New Work tends to revise upwards whereas Repair and Maintenance Work tends to revise downwards under the new sampling methodology (Figure 2). This is caused by a combination of firm selection and re-stratification of firms within the sample. However, the quarter on quarter variations in growth within the sub-components of construction under the new methodology are consistent with those previously published.

Figure 2: Construction Output - New Work and Repair & Maintenance



Housing, Infrastructure and Other Work

Within the sub-levels of construction output, Housing tends to revise upwards whereas Infrastructure and Other Work tend to revise downwards under the new sampling methodology (Figures 3-5). However, the quarter on quarter growth rates within the sub-components of construction under the new methodology are highly consistent with those previously published except for Housing work in Q4 2016 (Figure 3). This is caused by a combination of firm selection and re-stratification of firms within the sample.

Figure 3: Construction Output – Housing

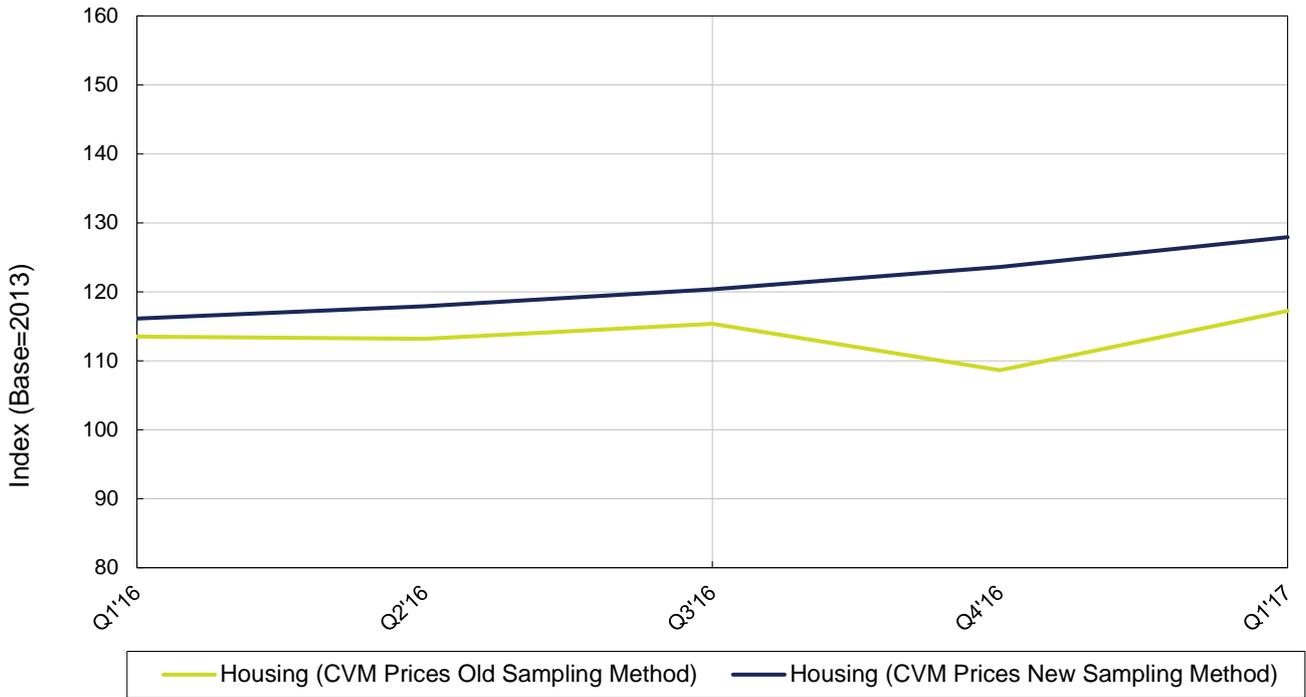


Figure 4: Construction Output – Infrastructure

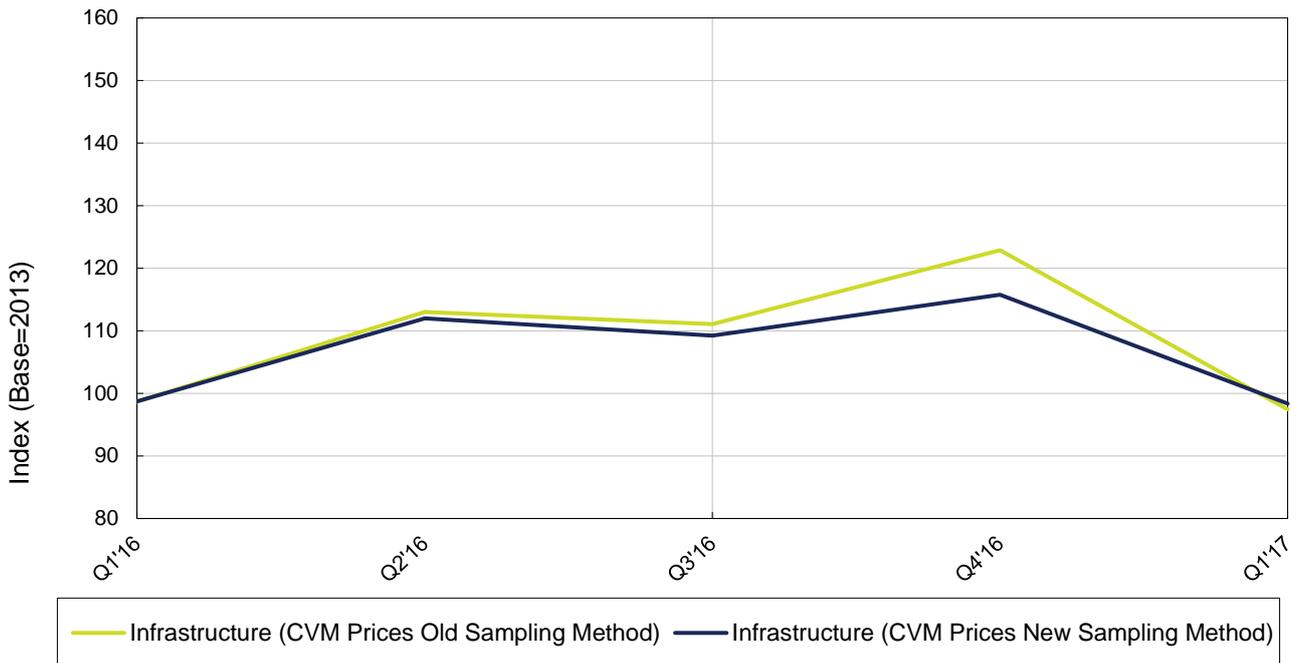
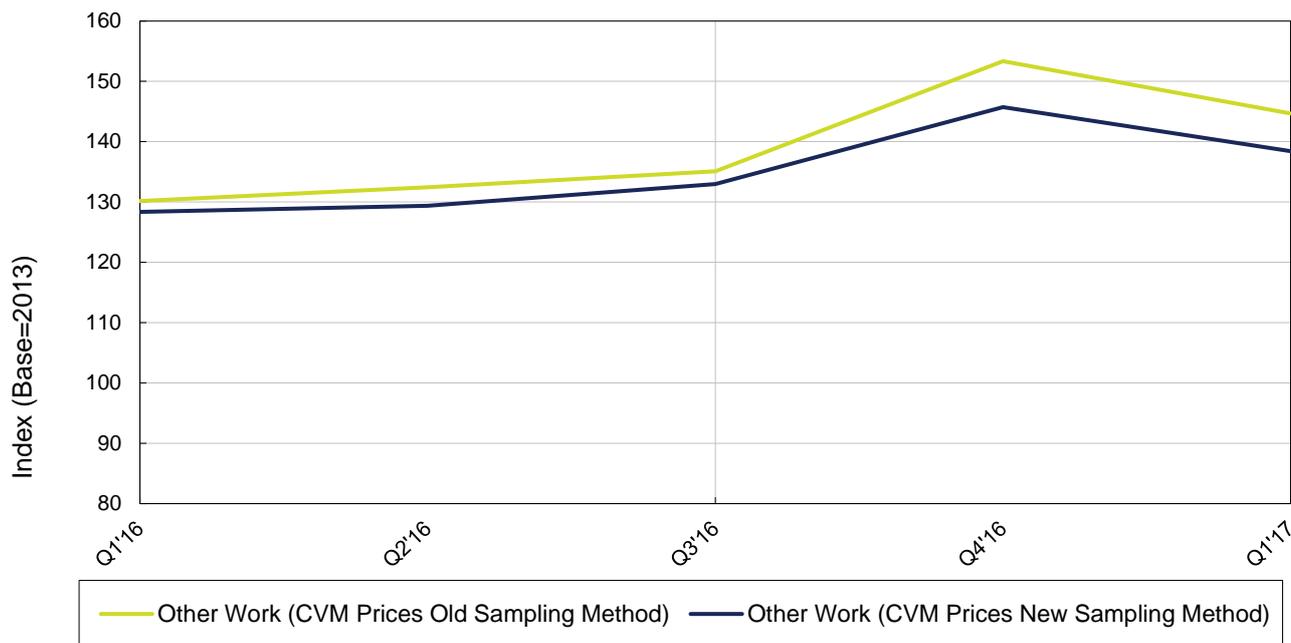


Figure 5: Construction Output – Other Work



Publication of future estimates of construction output

The Q2 2017 NI Construction Bulletin will contain estimates for construction output based exclusively on the new sampling methodology. Figures from Q1 2016 to Q1 2017 will be revised based on the smoothing techniques applied. It is not possible to smooth the figures prior to Q1 2016 and therefore the historical series will be based on the old sampling methodology.

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