Business Cycle Indicator – An Update

By Graeme Walsh¹

The Central Bank’s Business Cycle Indicator (BCI) is a statistical measure of economic activity used to help provide a timely assessment of the current state of the economy. The indicator uses a large panel of relevant economic data from a variety of monthly data releases. For example, the dataset includes retail sales, Exchequer tax returns, and survey measures of both consumer and firm sentiment.² The combination of high-frequency data and a mix of hard and soft data allows the indicator to identify potential turning points in the economy. This Box presents the latest update of the BCI for the period up to August 2019.

Figure 1: Business Cycle Indicator (2004M01-2019M08)

Note: mean = 0, S.D. = 1

Source: Author’s Calculations

¹ Irish Economic Analysis Division
² For a full description of the BCI and the underlying dataset, see: Conefrey, Thomas and Graeme Walsh (2018), “A monthly indicator of economic activity for Ireland,” Economic Letters 14/EL/18, Central Bank of Ireland.
Latest Estimates

The latest estimate of the BCI is shown in Figure 1. The indicator shows that following the sharp downturn in 2008-2009, the economy eventually rebounded in 2013 and, for the past 5 years, has continued to grow at a steady, above average, pace. The most recent estimates show that the indicator has fallen for the past five consecutive months, signalling a marked slowdown in economic activity. In August 2019, the indicator fell to its lowest level in 6 years, comparable to its level in June 2013.

Historical Decomposition

Figure 2 presents a historical decomposition of the indicator. This illustrates which variables in the dataset have caused the indicator to move up and down over time. For example, in the late 1990s, the main factors supporting economic activity were consumer spending and improvements to the labour market. Then, during the mid-2000s, the expansion in housing market activity and consumer spending explained most of the variation in the indicator. Throughout the 2008-2013 period, there was a broad-based contraction with the rapid rise in unemployment and reduction in economic output resulting in lower spending by both consumers and firms. Since 2014, there have been significant improvements to the labour market. Output and consumer spending have also been important factors behind the recent above average levels of economic activity. The slowdown in the indicator in 2019 is explored more closely in the next section.

Figure 2: Historical Decomposition (2000M01-2019M07)

Source: Author’s Calculations

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3 Values of the indicator above zero signal that economic activity is expanding at a rate above its long-run historic average; values below zero indicate slower than average growth.
Slowdown in 2019

By decomposing the indicator and examining the underlying data, it is possible to identify the main drivers behind the sharp slowdown since early 2019. To see this more clearly, Figure 3 shows a decomposition of the indicator for the current year into the contributions from hard and soft data.4

Figure 3: Hard and Soft Data Contributions (2019M01-2019M08)

There are two features worth highlighting. First, throughout 2019, the soft data have acted as a drag on the BCI and its effects have become even more pronounced since July. The soft data includes survey estimates of both consumer and firm sentiment, such as the KBC Consumer Sentiment Index and the IHS Markit Purchasing Managers Index for Ireland. The manufacturing PMI stood at 53.9 in March 2019 and has since fallen below 50 to 48.6 signalling a contraction in August 2019.5 Meanwhile, the services PMI continues to indicate an expansion with a value of 54.6 in August 2019; however, this is down compared to the average value of 58 in 2018. In terms of consumer sentiment, the survey-based measures fell to their lowest levels in six years in August 2019.6

Second, although the hard data have continued to signal an expansion in economic activity, its positive contribution to the BCI has weakened significantly since the second quarter. The unemployment rate

4 “Hard data” here refers to measured economic activity such as retail sales, production volumes, tax receipts, etc., while “soft data” refers to survey-based estimates of sentiment, uncertainty, and expectations.
5 In August 2019, the associated sub-indices for output and new orders stood at 47.0 and 47.8, respectively.
currently stands at 5.2 per cent, and as the labour market has tightened, its positive contribution to the indicator has decreased.\(^7\) Other hard data, such as consumer spending, tax receipts, and traditional sector activity, have shown robust growth in 2019. For example, core retail sales grew by 4.4 per cent in August while traditional sector output grew by 7.9 per cent in July 2019. The strength of these and other hard data have ensured that the overall BCI remains in positive territory despite the weakness in the soft data.\(^8\)

Historically, weak consumer confidence and firm sentiment have acted as a leading indicator of a slowdown in economic activity. While this relationship does not always hold, it will be important to closely monitor incoming data over the coming months for any signs that the recent weakness in the Bank’s BCI is being reflected in slower economic activity and employment.

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\(^7\) The monthly unemployment rate increased to 5.3 per cent in September 2019.