Box 1: 'Now-casting' the growth of Modified Domestic Demand for the first quarter

An unavoidable trade-off between timeliness and quality of data lies at the heart of conjunctural economic analysis. Understanding the economy in real-time is constrained by the fact the compilation of high quality macroeconomic data takes time and, accordingly, is only available with a lag.

In Ireland, for instance, official quarterly estimates for modified domestic demand (MDD) are generally published sixty days after the quarter has ended ('T+60'). For many other countries, the gap is even longer – 'T+90' being the norm. On the other hand, some countries produce earlier estimates ('T+45' or even 'T+30') but there are often subject to large revisions (hence the trade-off between timeliness and quality).

In an effort to overcome this problem, and to try to gain a better insight into the performance of the economy in real-time, economists have increasingly expanded their analytical toolkit by constructing 'bridge models'. These (mathematical) models essentially utilise available higher frequency data (monthly data, soft data, etc.) in order to 'bridge' the quarterly data gap.

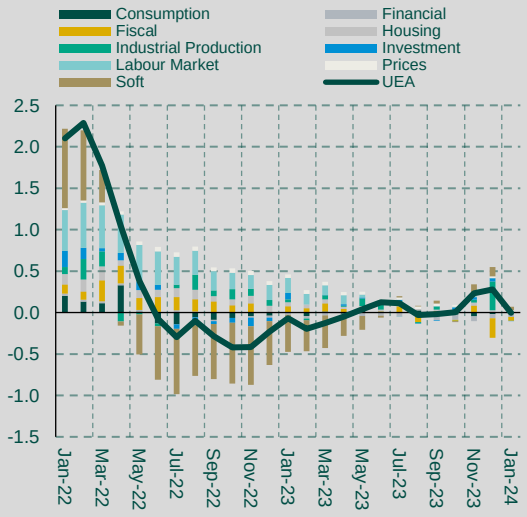
In this spirit, the Department makes use of a methodology known as '*nowcasting*', the objective of which is to combine multiple data available at higher frequencies (retail sales, industrial production, consumer sentiment, etc.) into a single metric that summarises the performance of the economy in real-time.^ This tool provides an early indicator of changes in activity and is one of the key variables used by the Department to monitor economic developments; many of these variables can be viewed in the Department's newly launched dashboard.^^

To produce the 'nowcast', a measure called the Underlying Economic Indicator (UEA) is first constructed. This is a single variable that incorporates and summarises data from a wide variety of sources, providing an estimate of how economic activity for each month compares with its long-run trend (**figure 1A**).

The UEA is then linked to the historical outturn for MDD to provide an estimate for economic growth for the current quarter in real-time (**figure 1B**).

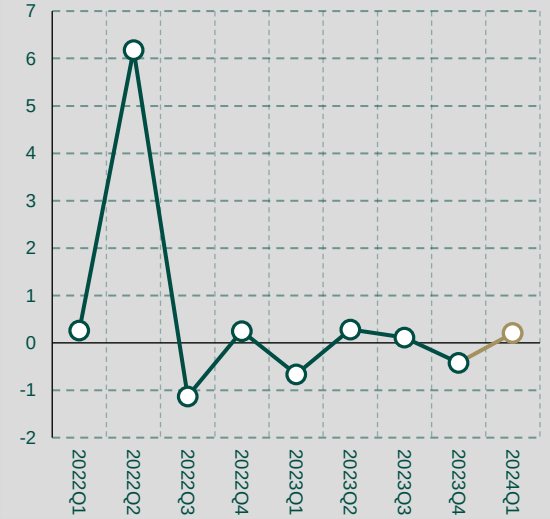
Figure 1: Underlying economic activity and Modified domestic demand now-cast

A: Underlying economic activity by indicator category



Source: CSO, Department of Finance.

B: Nowcast of MDD, q/q per cent change



Source: CSO, Department of Finance.

The decomposition of the UEA shows that industrial production was a key driver of economic activity in both January and December, while soft indicators (consumer sentiment, PMIs, etc.) also contribute positively. However, economic activity has been dragged downwards by other indicators. For instance, financial indicators have remained negative since mid-2022, while the contribution from labour market variables has eased significantly since their high point in the first quarter of 2023, though its overall effect remains positive.

The most recent nowcast suggests that MDD growth rates are likely to remain relatively weak in the first quarter of 2024, continuing the pattern of relatively low growth that has characterised the economy since the monetary policy tightening cycle began in mid-2022.

^ For more detail on the methodology used, see L. Daly and L. Rehill (2020), *Where are we now? Examining Irish Economic Developments in Real Time*, available at:
https://www.gov.ie/en/publication/e6b3a7-where-are-we-now-examining-irish-economic-developments-in-real-time/
^^ The Department's Economic Indicators Dashboard is available at:
https://www.gov.ie/en/publication/f712c-dashboard-of-economic-indicators/