

explanation for the slowdown in consumption, a fall in inflation could boost consumption.

In the latest *Annual National Accounts for 2022*, the CSO revised recent historical household consumption considerably higher. Given the importance of consumer spending data in assessing macroeconomic conditions, Box B analyses the performance of Irish consumption data relative to other OECD countries. The findings include that Ireland's consumption revisions over five-year periods are double those of the EU15.

Box B: Revisions to Irish consumption data

Irish macroeconomic data has tended to be among the most volatile and heavily revised macroeconomic data in the developed world (Casey and Smyth, 2015). Much of this is due to distortions created by the presence of a few large multinational enterprises. Yet the scale of revisions for parts of the economy that should be less affected by multinational distortions are also unusually large.

Because of the distortions to Irish macroeconomic data, a lot of the focus is on indicators of underlying economic activity that are not distorted by multinational activity. These indicators include modified domestic demand, modified gross national income and personal consumption expenditure. As a result, having accurate and timely estimates of these indicators is vital for informing and framing policy.

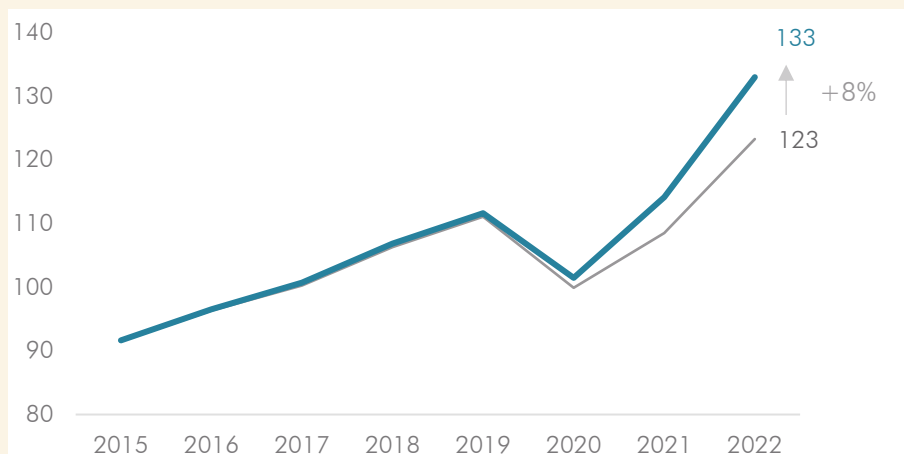
However, even these indicators of the underlying Irish macroeconomy are among the most heavily revised in the developed world. This box looks at revisions to Irish private consumption data and how this compares to international norms.

Recent revisions to consumption data

In the latest *Annual National Accounts* release, Irish consumption data was heavily revised upwards (N^o11). The level of nominal consumption in 2022 was revised upwards by almost €10 billion, or 7.9%. This was somewhat predictable given that several indicators showed higher levels of consumption since the Covid-19 pandemic began, compared to official estimates (Timoney, 2022).

N^o11 Consumption data were revised up significantly for recent years

€ billion, current prices



Sources: CSO; and Fiscal Council workings.

Notes: The pre-revision data is taken from the *Quarterly National Accounts, Quarter 1 2023* provisional release. Revised data is from the *Annual National Accounts 2022* release. [Get the data.](#)

To see how these revisions to consumption compare internationally, we follow the approach of Casey and Smyth (2015). For all OECD countries, we compare how year-on-year growth rates of quarterly real private consumption get revised from the first estimate to the latest available estimate.^{4, 5}

To gauge how large the revisions are we estimate the root mean squared revision (RMSR):

$$RMSR = \sqrt{\frac{1}{n} \sum_{t=1}^n (l_t - p_t)^2}$$

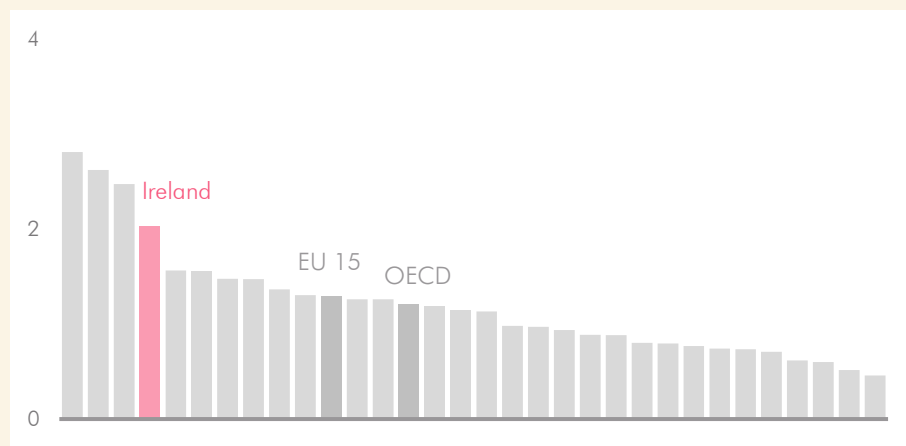
where l_t is the latest estimate for the growth rates in reference period t , and p_t is the preliminary estimate for that reference period.

International comparisons

Figure N°12 shows the root mean squared revision to the year-on-year growth rates for OECD countries since the year 2000.⁶ The revision to Irish consumption data is the fourth largest in the OECD at just over 2 percentage points.⁷ This is almost double the average revision in the OECD and the EU15.

N°12 Irish consumption revisions among highest in the OECD

Root Mean Squared Revision, real private consumption, year-on-year growth rates



Sources: OECD; and Fiscal Council workings.

Notes: Data are from the OECD's Revision Analysis Dataset. [Get the data.](#)

However, as can be seen from N°12, revisions can also occur to data from several years previous. The cumulative result of this series of revisions can be a large level shift in the data. This may not be as apparent from focusing on year-on-year growth rate revisions. For example, while the level of nominal consumption in Ireland in 2022 was revised up by 7.9%, the year-on-year growth rate for 2022 was revised up by only 2.9 percentage points, from 13.6% to 16.5%.

To try to take account of this fact, instead of looking at revisions to year-on-year growth rates, we also look at revisions to the five-year growth rates.^{8,9} On this basis, Ireland's

⁴ We focus on growth rates because the reference period from which prices are held constant changes across data vintages. This results in level shifts in the data between different vintages even without any revisions to the underlying data occurring. Using growth rates abstracts from this.

⁵ These data are only available on a seasonally adjusted basis. As a result, part of the revision may be down to changes in seasonal adjustment models, rather than revisions to the underlying data. However, the revisions to seasonal adjustment are likely to be greatly outweighed by the revisions to the underlying data.

⁶ Only countries that have data available prior to 2010 are included. This means that eight OECD members are excluded: Costa Rica, Columbia, Lithuania, Latvia, Estonia, Israel, Slovenia, and Chile.

⁷ The countries with a larger revision are Turkey, Luxembourg, and Greece.

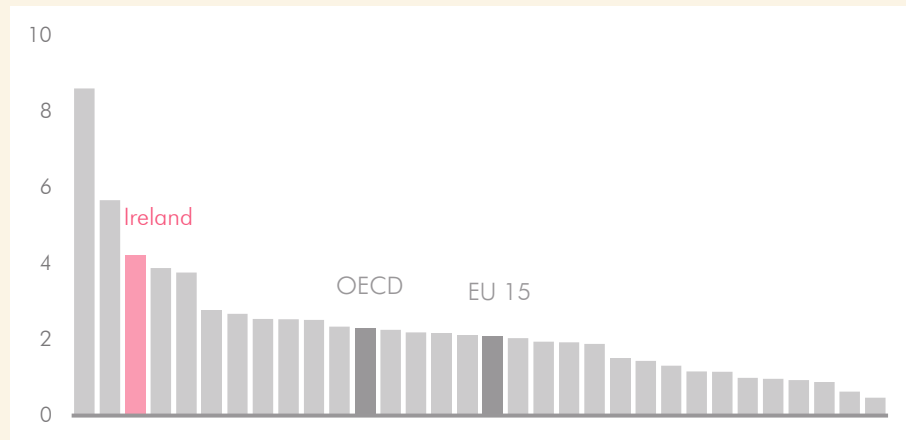
⁸ That is, we look at the revisions to the growth of consumption from year $t - 5$ instead of $t - 1$.

⁹ As mentioned above, it would not be possible to look at revisions to the levels of consumption given that the base period from which prices are measured changes over time.

consumption data are the third most heavily revised in the OECD and double the revision of the EU15 countries (N°13).¹⁰

N°13 Ireland's revision is double the EU15 average

Root Mean Squared Revision, constant prices private consumption, five-year growth rates



Sources: OECD; and Fiscal Council workings.

Notes: Data are from the OECD's Revision Analysis Dataset. [Get the data.](#)

Given the lack of distortions from multinational activity, consumption is one of the key macroeconomic indicators on the health of the Irish economy.¹¹ It is also an essential component in the estimation of the household savings ratio, which is an important variable for understanding sustainability of economic activity. For these reasons, timely and accurate estimation of consumption is vital for informing policymaker decisions.

Some revisions to data are expected—and indeed, welcome—as more granular and better-quality data sources become available. However, the accuracy of initial estimates of consumption is poor relative to international peers, and in recent years some of these revisions were somewhat predictable given the performance of other high-frequency indicators like VAT and bank card statistics.

Given the importance of consumption as an indicator, more resources should be dedicated to the compilation of timely and accurate consumption estimates. To that end, timelier and more frequent *Household Budget Surveys* should help. In addition, more resources should be dedicated to the potential use of administrative datasets like VAT data and Central Bank debit and credit card statistics in the compilation of consumption estimates. This could also facilitate a more granular quarterly breakdown of consumption of goods and services into categories such as durable, semi-durable, non-durable, and services, which has become the norm for published consumption statistics in other EU countries.

As a result of the revisions noted in Box B, household savings were revised considerably lower. Savings represent a key indicator of the sustainability of economic activity, but recent historical estimates have been too high because of underestimated consumption. At 10.5%, the Department's projected savings ratio in 2024 remains above its pre-pandemic forecast of 7.3% in *Budget 2020* (N°14). However, *Budget 2020* was based on an assumed disorderly Brexit, and this may limit the comparability of this projection with recent forecasts.

¹⁰ Turkey and Mexico are the countries with a larger revision to consumption.

¹¹ Consumption is also the main building block for another key indicator of the underlying economy – modified domestic demand.