Box C: Underlying Measures of the Irish Economy

Issues with interpreting Irish economic data

Irish economic data has long been bedevilled by the effects of globalisation. Unlike many developed economies, gross national product (GNP) for Ireland is substantially lower than gross domestic product (GDP) as a result of activities by foreign companies that lead to large net factor income flowing back to the rest of the world. As a result, GDP is not a reliable proxy for the tax base as it is in many other countries.

For many years, contemporary understanding of Irish economic data held that transfer pricing and other factors related to globalisation resulted in a distorted flow of recorded exports sold by firms operating in Ireland, initially concentrated in goods and extending to services over time. To the extent that profits related to these export sales accrued to foreign-owned multinational firms, rather than to Irish firms, these profits could be expected to flow back out of Ireland – either through royalties payments (services imports) or net factor payments. GNP, which nets off income flows to foreigners, was used as a proxy for underlying Irish activity.

However, in recent years, some of the increases in exports have not been flowing back out of GNP, resulting in a distorted profile for GNP. The composition of gross product measures has been complicated by the move to measuring activity on an ownership basis. This change has also affected investment through higher recorded investment and imports, and the associated issue of contract manufacturing (FitzGerald, 2016). The impact of contract manufacturing has been discussed in previous Council publications, for example the June 2018 *FAR* (IFAC, 2018c). Further issues related to depreciation on intangibles and re-domiciled firms have provided additional challenges to the interpretation of trends in the national accounts.

Alternative indicators of activity, income and savings

Efforts to address many of these challenges have been ongoing in recent years. The CSO has been implementing various changes to the presentation of national accounts data, in response to end-user suggestions and the findings of the Economic Statistics Review Group (ESRG). Table C.1 summarises the Council's preferred alternative indicators and the adjustments required in the derivation of these indicators.

Table C.1: Underlying measures of the Irish economy

2017 nominal € billion amount

Indicators and Adjustments	Modified nominal GNI	Modified current account	Domestic GVA	Modified domestic demand	Underlying domestic demand
Original aggregate	234.2	24.9	272.2	198.5	198.5
Less:					
Re-domiciled PLCs	-4.9	-4.9			
Depreciation on R&D service imports and trade in IP	-43.1	-43.1			
Depreciation on aircraft leasing	-5.1	-5.1			
Net aircraft activities related to leasing		6.6		-6.6	
R&D-IP imports		14.0		-14.0	
R&D-IP exports		-3.1			
R&D service imports		12.8			
Foreign GVA*			-107.2		
Planes and intangibles					-39.2
Underlying total	**181.2**	**2.2**	**165.0**	**177.9**	**159.3**

Source: CSO.

Note: * Foreign GVA corresponds to GVA by NACE sectors 20, 58-63, 18.2, 21, 26, 27 and 32.5.

Modified gross national income (GNI*) has gained some traction as a more relevant nominal indicator. As such, the use of GNI* has become more prevalent as a denominator for assessing trends in debt and deficit ratios, for example, which are understated when scaled by GDP or GNP. A top-down adjusted measure, GNI* subtracts certain items from gross national income. These adjustments are the factor income of re-domiciled firms (as Irish residents will not benefit from any resulting profit flows), and depreciation on each of research and development (R&D) service imports, trade in intellectual property (IP) and aircraft leasing (as the Irish employment does not depend on the savings required to replace these capital assets). At present, it is only available annually and as a current-prices series. Further planned developments include its publication as a constant-prices series, and to publish quarterly GNI* updates.

A **modified current account (CA*)** aims to provide a picture of underlying Irish savings with (or borrowing from) the rest of the world. It makes the same adjustments as GNI*, but further excludes net aircraft acquisitions related to leasing, R&D-related IP imports and exports, and R&D service imports. These adjustments result in a far more relevant profile for CA* than shown for the headline current account, which should represent a key sustainability measure for the economy.

The CSO has long published a decomposition of gross value added (GVA) between sectors that are dominated by foreign-owned multinational firms, and the remainder. The **domestic GVA** series provides a reasonably consistent profile for both nominal and real economic growth, but like GNI* it is only available annually, and the CSO has described the compilation of a quarterly version of the data as a “project in the medium term” (CSO, 2017).

The *Institutional Sector Accounts* also provide additional details on economic conditions in Ireland, particularly those facing households and non-financial corporations. Besides detailing the household savings ratio, a more recent inclusion is the breakdown of non-financial corporations into a top 50 group and all other firms (as ranked by GVA). Recommended by the ESRG, this decomposition is intended to provide a better understanding of indigenous economic activity (ESRG, 2016).

Alternative indicators of domestic demand

Domestic demand has previously been a relevant aggregate for assessing economic growth as explained by personal consumption, government consumption and gross domestic fixed capital formation. However, increased purchases of aircraft (outright or for leasing purposes), and onshoring of intellectual property assets by large foreign-owned multinational firms (depreciation on which are included as investment in the form of intangibles) have limited the relevance of headline domestic demand in recent years.

The CSO have begun publishing a quarterly **modified domestic demand** series, in both constant and current prices, which excludes aircraft for leasing and R&D-related IP imports. The constant-prices series performs reasonably well in terms of mirroring annual employment growth, and the Department of Finance has been using modified domestic demand as its preferred measure of core activity for the domestic economy. However, at a conceptual level, the Council prefers to exclude all aircraft investment and all intangibles, since they reflect activity in sectors which are dominated by foreign-owned multinational firms, with little value-added likely to accrue to Irish residents. This indicator is termed **underlying domestic demand**, and has been used extensively in Council publications in recent years.

Using the underlying measures in economic forecasts

The Council would welcome a more widespread adoption by official and private-sector forecasters of alternative measures of economic activity in Ireland, including those described above. This would help to focus forecasts on the most relevant developments for the Irish economy and make forecasts easier to communicate on a consistent basis by setting aside the most volatile components with weak connections to domestic developments.

Some publications have begun to include alternative measures – for example, the *Quarterly Bulletin* by the Central Bank of Ireland has included underlying domestic demand excluding stocks in its summary forecast table since the July 2018 update (Central Bank of Ireland, 2018), while the Department has lately emphasised modified domestic demand. However, many other forecasters continue to report the traditional components of GDP and an unmodified current account profile as a share of GDP or GNP. These provide very little relevant information to users.

Further planned enhancements to official economic statistics produced by the CSO should broaden the capacity of forecasters and policymakers to understand changes in economic conditions. Further progress should be a priority. The value of the data enhancements to users is reduced unless they are included prominently in the main tables of forecast publications by public- and private-sector forecasters.