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Is Ireland really the most prosperous country in Europe?

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Is Ireland really the most prosperous country in Europe?

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The well-known distortions affecting Ireland's GDP complicate international comparisons. Ireland is a prosperous country, but per capita GDP data mislead by placing it second only to Luxembourg in the EU. Other measures, such as the Human Development Index, are also marred. Modified data provide an indication of the extent of the re-ranking that it is warranted.

Most people know that Ireland is not really the most prosperous economy in Europe. Yet, if we ignore the small city state of Luxembourg, Ireland has the highest GDP per head, even adjusted for differences in price levels. So whereabouts does Ireland really rank in terms of average economic prosperity?

Of course, no single indicator like GDP can really give an adequate answer to such a question. Any serious study will want to take account of multiple dimensions on social and environmental indicators, such as are targeted in the Sustainable Development Goals of the United Nations. Still, it is extremely common for a single indicator to be used in international league tables, and when it is, either Gross Domestic Product (GDP) or Gross National Income (GNI) is usually the measure used, despite well-known deficiencies in these as measures of wellbeing. Even when alternative single number measures are used, such as the UNDP's Human Development Index, it is generally a composite in which GDP or GNI has a large weight.

It is not straightforward even to compare GDP across countries, because of the widely differing pattern of relative prices (and different preferences) that prevails in different countries. Each country's GDP needs to be adjusted for these cross-country price differences. A major data collection exercise has been conducted at six yearly – now moving to three-yearly – intervals to

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enable this price adjustment (known as purchasing power parity); the latest data (for 2017) was recently published by the World Bank.

In these latest statistics Ireland's per capita GDP comes in at fifth highest of the 182 countries in the data, or third (after Qatar and Singapore) if we exclude countries with population of less than half a million – and first in Europe.

Although Ireland's economy has stalled again in the pandemic recession, its GDP has probably done better in 2020 than most other advanced economies. This will consolidate Ireland's apparent GDP leadership position in Europe.

This seeming strength is largely due to the continued increase in exports of pharmaceuticals and IT generated by multinational corporations (MNCs/MNEs) and masks the sharp collapse in employment and economic activity in most sectors.

But anyone who has been following the Irish economy is well aware that there are acute shortcomings of GDP as a measure of economic welfare especially because of the activities of multinationals.

So, this first-in-class ranking is clearly misleading. Where, then, could Ireland be more accurately ranked? When we dig into the available data in the more relevant parts of per capita income and consumption, we find that Ireland's relative international position is somewhere between 8th and 12th in the European Union – a lot lower than is commonly presumed. The lower ranking comes not only from removing the distortions from multinationals but also from taking account of the fact that consumer prices in Ireland are relatively high.

Distortions from the activities of foreign Multi-National Corporations

The large profits being reported by foreign multinational corporations (MNCs) have tended to flatter Irish GDP growth rates for years. But most of these profits were attributable to foreign parents. They did not distort another standard international measure, GNI, where the N stands for National, and which accordingly excludes profits going to foreign owners.

But two other large and even more volatile distortions induced by the activities of multinationals have grown substantially in recent years. These affect GNI as well as GDP. The biggest of these distortions relates to the very large capital assets owned by multinationals operating in Ireland. Some of these are intellectual property (IP) assets (such as patents) of information technology companies; the large aircraft fleets of resident leasing companies are also relevant. It is not that the acquisition of these assets from abroad contributes to GDP; it does not. But once acquired, the depreciation of the

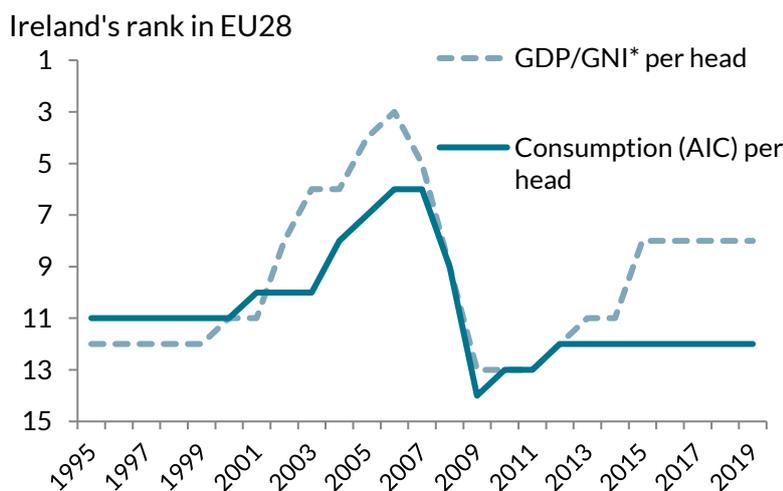
assets must be included in GDP and GNI, because depreciation is exactly what the G (for Gross) means. It was the jump in depreciation during 2015, following MNC decisions to move a large block of IP into the ownership of resident affiliates, that led to the 26 per cent GDP growth rate in that year.

The other GNI distortion relates to multinationals that have re-domiciled (i.e. moved their global headquarters) to Ireland, despite having little domestic economic activity in Ireland. Their undistributed profits – which already exceeded 5 per cent of GNI in 2012 before falling back somewhat – are also included in GNI even though their shareholders are mostly non-resident.

In order to help in analysis of the Irish macroeconomy, a special measure, GNI*, which excludes these distorting factors, has been calculated by the Central Statistics Office (2016).¹ In 2019, GNI* was about 40 per cent below the level of GDP, whereas GDP and GNI are about equal in most countries. The available data for GNI* now goes back to 1995, when the modified series was already 8 per cent lower than GDP. If we simply substitute this modified series for GDP (or GNI) to make an international comparison we find that Ireland in 2019 was not in second place in the EU (behind Luxembourg) but instead appears in eighth place. That is a somewhat crude procedure, but it indicates the scale of the adjustment that needs to be made. Ireland is not even in the top quarter of EU countries, when the comparison is made in this way.

But that is not all.

Figure 1 | Ireland’s Rank Among the 28 Countries of the 2019 EU, using GDP and Actual Individual Consumption at Purchasing Power Parities, but substituting GNI* for Ireland’s GDP.



Source: Author’s calculations based on Central Statistics Office, Ireland and Eurostat

¹ GNI* subtracts from GNI factor income (mainly profits) of re-domiciled companies, depreciation on aircraft leasing and on imported intellectual property (R&D service imports and trade in IP); Lane (2017) describes the components of GNI* in detail. Note that there is no subtraction for IP produced in Ireland by MNCs.

“Actual individual consumption”

An alternative aggregate national indicator of household welfare used in international comparisons is known as “actual individual consumption” (AIC). This measure is part of GDP; in essence it adds together consumption by households and consumption spending by government on individual services such as healthcare, education and housing. AIC does not include collective government spending (such as that on defence, policing, debt service and the like), nor does it include capital formation (spending on X), whether by households, government or businesses. So it is far from being a comprehensive characterization of the macroeconomy. On average across the world, AIC includes about two-thirds of GDP, but the ratio varies widely. Still, if one is going to use one of these available national data series as a rough measure of *current* living standards of households, AIC, adjusted for price differentials across countries, seems a good option..

The international data collection exercise mentioned above, leading to purchasing power parities, does present AIC data adjusted for those differences in international prices. Ireland ranks less high on this measure.² Ireland’s AIC rank in the EU28, having jumped from 11th in the late 1990s to 6th in 2007, fell precipitously to 14th in 2009, after which it recovered, but only to 12th place by 2019. On this measure, then, Ireland falls behind not only the UK but all six of the original founder members of the EEC, along with Austria and the three Nordic member states.

Indeed, Ireland’s AIC per capita is only about 95 per cent of the EU average, down from 115 per cent in 2006-7. No wonder many questioned the quality and extent of economic recovery even before the pandemic hit. Of course growth in per capita consumption resumed, cumulatively totalling 15 per cent in the five years 2014-9, but other countries were growing also.

Several factors have diverted some of the national economic recovery away from consumption. Part of the reduction reflects the fact that government borrowing had to be reined in: Government net saving, boosted by a sizable increase in taxation, has increased substantially. Household saving is also somewhat higher now than it was before the 2008 crisis. These savings have, of course, strengthened the ability of households to cope with the financial consequences of the pandemic.

But an additional factor only becomes evident when we look at differences in the average level of prices for consumption in Ireland and elsewhere. Although, thanks to the weakness of sterling since the Brexit referendum, Irish prices in 2019 were only about 10 per cent higher than those in the UK, much larger differences emerge from a wider comparison with the euro area

² Ireland’s AIC represented 58.3% of GDP in 2011; 40.3% in 2017.

(where exchange rate movements are not a distracting factor). While Irish prices (as collected for the international comparisons) were about equal to the average of those in the other euro area countries when the ECB was founded in 1998, they rose progressively to 27 per cent *higher* than the average by 2008. Although they subsequently fell back (to about 16 per cent above the euro area average by 2012), Irish prices then resumed their acceleration relative to other euro area countries and were back around their previous peak by 2019 (largely due to the surge in the price of housing as measured in the PPP). No wonder returning emigrants find Ireland expensive – and not just for housing.

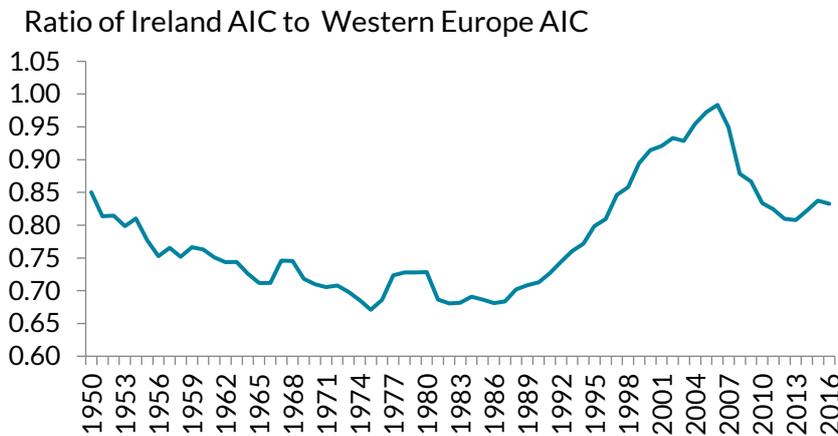
The wider world

What about Ireland in the wider world? The International Comparison Program, on which most of these consumption and price indicators ultimately depend, has been running now for several decades and data is available going back to 1950.³ Ireland's position relative to the US moved little for the first four decades, and indeed it fell relative to the average of the main countries in Western Europe as they recovered from war into the "three glorious decades". Taking the US as a reference point and again concentrating on the AIC per person consumption measure (adjusted for purchasing power) we find that Ireland began at about 47 per cent of the US level in 1950; the same figure was recorded in 1993. There had been just a brief few years 1978-81 when unsustainable borrowing enabled Irish consumption levels to exceed 50 per cent of the US benchmark. After 1993, though, there was a steady increase to 68 per cent (by 2007) before the borrowing binge of the early 2000s came to an end, after which the ratio came down to 60 per cent. At this level, Ireland's average per capita consumption ranks 21 in the world (ignoring countries of less than a million population). Ahead of Ireland are the EU countries mentioned above as well as Norway and Switzerland, along with four "Anglo" countries (US, Canada, Australia and New Zealand), and four jurisdictions in East Asia (Hong Kong, Japan, Singapore and Taiwan). Spain,

³ For more than 20 years, the ICP has been managed by the World Bank, which has produced comprehensive updates for the benchmark years 2005, 2011 and 2017. Earlier years were covered by a team based at the University of Pennsylvania; their Penn World Tables (PWT), which draw on the same underlying price data but use somewhat different approach to the calculation of purchasing power parities, and interpolate between benchmark years, run to 2017, but have not yet been updated with the 2017 benchmark price data. Eurostat and the OECD also calculate PPPs on a slightly different basis; their data series runs from 1995 to 2019. As an indication that the difference matter little for Ireland, AIC (GDP) relative to US=100 for 2017 was 59.9 (130.5) for PWT; 59.9 (130.4) for ICP; 59.7 (129.6) in Eurostat. For 2011 the figures were 60.4 (88.5); 61.9 (90.1) and 61.8 (90.0). The methodological differences are discussed in Neary (2004) and Deaton and Heston (2011). See also Honohan (2020).

Cyprus and a handful of Gulf oil-producing countries have been ahead of Ireland from time to time in recent years, but not at the latest data.

Figure 2 | Actual Individual Consumption per Capita: Ireland Relative to Average of Main Western European Countries (AT, BE, CH, DE, DK, ES, FI, FR, IT, GB, NL, NO, SE), 1950-2019.



Source: Penn World Tables.

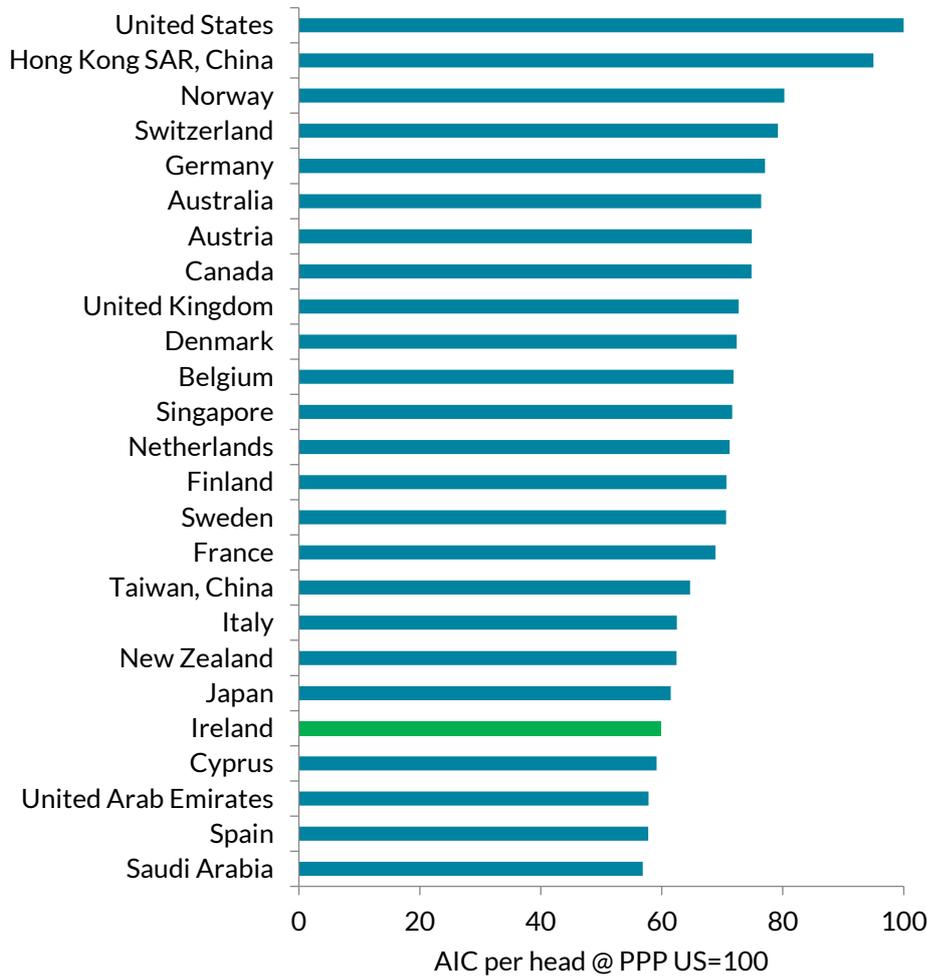
Human Development Index

As mentioned, many other single number measures of economic performance are also contaminated by the distortions induced by the activities of multinationals, because among the ingredients in the formula generating such measures we typically find either GDP or GNI. A prime example is the UNDP’s Human Development Index (HDI), which combines income with health and education indicators. In the 2020 HDI Ireland ranks second in the world, behind Norway. But here too the MNC-distortion matters, as the ICP numbers for GNI are also used in the HDI. Scaling down GNI by the ratio of GNI* to GNI (0.759 in the relevant year) reduces Ireland’s HDI score and moves Ireland down the global ranking from second to ninth place.⁴ A similar effect applies to the Inequality-adjusted HDI and the Gender Development Index.⁵

⁴ Using the formula set out in the [2019 Human Development Report technical note](#).

⁵ Though not to the Multidimensional Poverty Index which is published with the HDI.

Figure 3 | Actual Individual Consumption per Head in 2017 for the 25 Countries with Populations of over One Million, Index Measured at Purchasing Power Parities with United States = 100.



Source: World Bank (ICP 2017 index.xlsx)

Conclusion

Ireland is a prosperous country, but not as prosperous as is often thought because of the inappropriate use of misleading, albeit conventional statistics. There is less consumption per capita than in the United Kingdom, and on this metric we are closer to New Zealand, Israel and Italy, than to the United States, Switzerland or Norway (which is where the GDP comparison would put Ireland). The same conclusion is drawn if GDP is replaced with the Ireland-specific GNI* indicator. Using GDP as a measure can mislead analysis of such matters as debt, carbon-intensity and inequality.

References

Central Statistics Office. 2016. [*Report of the Economic Statistics Review Group*](#).

Coyle, Diane. 2014. [*GDP: A Brief but Affectionate History*](#). (Princeton University Press).

Deaton, Angus. 2020. [“Why the World’s Richest Countries Are Not All Rich.”](#) *Financial Times*. October 5.

Deaton, Angus and Alan Heston. 2010. [“Understanding PPPs and PPP-based National Accounts.”](#) *American Economic Journal: Macroeconomics*. 2(4):1-35.

Fitz Gerald, John. 2018. [“National Accounts for a Global Economy: the Case of Ireland.”](#) *Quarterly Economic Commentary* (Dublin: Economic and Social Research Institute).

Honohan, Patrick. 2020. [“Using Purchasing Power Parities to Compare Countries: Strengths and Shortcomings.”](#) Peterson Institute for International Economics *Policy Brief* 20-16.

Lane, Phillip. 2017. [“The Treatment of Global Firms in National Accounts.”](#) *Economic Letter Series*, Central Bank of Ireland, Vol. 2017, No. 1.

Neary, J. Peter. 2004. [“Rationalizing the Penn World Table: True Multilateral Indices for International Comparisons of Real Income.”](#) *American Economic Review*. 94(5): 1411-28.



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