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Questioni di Economia e Finanza

(Occasional Papers)

The Irish GDP in 2016. After the disaster comes a dilemma

by Roberto Tedeschi

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THE IRISH GDP IN 2016. AFTER THE DISASTER COMES A DILEMMA

by Roberto Tedeschi*

Abstract

How it happened that the economic statistics — gross domestic product, balance of payments, industrial production... — that describe one of the advanced Western countries (Ireland), compiled according to international best practices, turned totally unreliable and useless one day in 2016 (and were duly replaced). The controversial issue to disentangle is the following: in official statistics, the economic substance of facts should prevail on the legal form, and sticking to business accounting reports/rules to compile statistics may severely undermine the “quality of statistics”. However, a massive rewriting and reclassification of firms’ reports may be way too costly and result in a lack of perceived impartiality of statistics. The answer should be the outcome of a discussion between statisticians, economists and institutions.

JEL Classification: C82, E01, F62.

Keywords: macroeconomic data estimation, impacts of globalisation.

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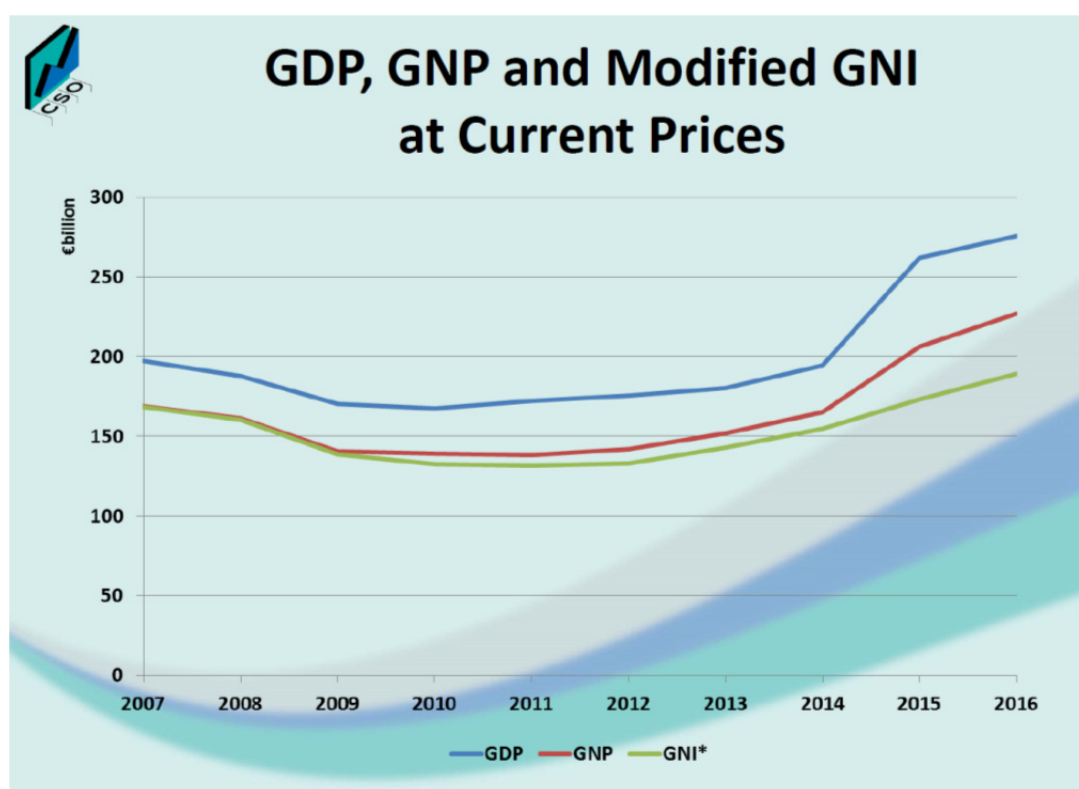
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* Banca d’Italia, DG Economics, Statistics and Research.

1. Introduction¹

In July 2016, the Irish Central statistical office published the National Accounts and Balance of Payments data for the year 2015. That year, GDP at constant prices had grown by 26.3 per cent on the previous year, and Gross National Income by 18.7 per cent. At current market prices, GDP was 32.4 per cent greater than in 2014 (figure 1, blue line). The value of exported goods reached 81 billion euros in 2015 compared to 2014, about half the GDP of the previous year and marking an increase of around 70 per cent, in a country where exports were already high. Imports were up by only 11 per cent. Other items, e.g. imports of research and developments services and business services, jumped too. Ireland's net international investment position (IIP) was in deep negative territory at the end of 2014 at about -160 per cent of GDP. It is important to note that according to EU legislation a negative IIP of more than 34 per cent of GDP signals a main macroeconomic imbalance. One year later, at the end of 2015, Ireland's IIP plummeted to -275 per cent of 2014 GDP, which is a figure unheard of for a country of such size and global standing.

Figure 1



Source: CSO (https://www.cso.ie/en/media/csoie/newsevents/presentations/NAQ12017_Presentation.pdf)

¹ I am very grateful to Andrea Brandolini, Riccardo De Bonis, Stefano Federico, Alfonso Rosolia e Gabriele Semeraro for discussion and comments on previous versions of this paper. Any error remains the author's responsibility. The views herein expressed are those of the author and not of the institution represented.

In a matter of days Eurostat issued a statement declaring that Ireland’s 2015 GDP data was compliant with international standards. The Irish national statistical institute (CSO) soon promoted an ad-hoc “Economic Statistics Review Group” to give the CSO recommendations “on how best to meet user needs for greater insight into Irish economic activity”.

The final report, issued by the Economic Statistics Review Group in December 2016, recommended to complement the national accounts produced according to the international standards with a set of adjusted main indicators: “supplementary statistics that are more appropriate to the measurement of domestic economic activity are needed that will be comprehensible and stable over time”. These “supplementary statistics” include a modified Gross National Income (GNI*), a modified balance of payments Current account (CA*), a modified Total Domestic Demand* and a modified Industrial Production index (IPT*), which have been published since July 2017. These indicators give a very different picture of the Irish economy when compared with official “July 2016” figures (highlighted in the lower right panel in the chart issued by CSO reproduced in figure 2 as “removing the effect of globalisation”).

The paper describes in chapter 2 what happened to statistics in Ireland in 2016, according to official sources, which are the facts described by the 2016 vintage of data and how facts and methods conjured in composing a picture that sounds as a severe misrepresentation; in chapter 3 a number of cases of elusive representation or misrepresentation of economic facts are discussed, along with the vulnerabilities in international agreed methods, that turned relevant in the Irish case; chapter 4 presents a summary, with some technical detail where necessary, of the solution proposed and implemented and of the open issues highlighted by the Irish GDP case. Chapter 5 concludes.

Figure 2



Source: CSO (https://www.cso.ie/en/media/csoie/newsevents/presentations/NAQ12017_Presentation.pdf)

2. What happened to statistics in Ireland in 2016

2.1. The real issue

The interpretation of the Irish statistical experts in the Economic Statistics Review Group on the “July 2016 vintage” data regarding GDP was: “the results reflect the long-standing, significant and growing multinational presence”. As argued, implicitly and explicitly, by a large literature, it reflected also the successful effort of some (not all) multinational enterprises to represent their “economic reality” in a tax friendly way, with the result of deeply confusing any economic analysis. This paper is not about fiscal investigations and this opinion is relevant only as long as it may clear issues pertaining to the link between an economic fact and its statistical representation. The comments on the July 2016 data that appeared on the international press testify that the link was broken.² From the point of view of the quality of statistics, a disaster.³

In a matter of days, Eurostat issued a statement declaring that the Irish data for 2015 was compliant with international standards.⁴ However, in a very short span of time the Economic Statistics Review Group decided to advise the CSO to depart from international standards. If a figure is a bad representation of reality and unfit to steer citizens and institutions analysis and decision, to the point that the CSO parted from the official definitions to provide better guidance, then the basic logic sends us a warning message. Why are internationally agreed statistics “not appropriate” to represent economic activity and are to be complemented (=substituted, for economic interpretation) with ad-hoc statistics? At the moment, Eurostat took note of the modified indicators without any further debate “from specific to general”, preferring to narrow the issue to one of timely and prompt communication from National statistical institutes to Eurostat and from NSIs to the public.⁵

² See <https://www.bloomberg.com/news/articles/2016-07-12/ireland-s-economy-grows-26-as-u-s-companies-chase-lower-taxes> (“Ireland’s Economists Left Speechless by 26% Growth Figure”); <https://www.ft.com/content/8a1ebc9c-4846-11e6-8d68-72e9211e86ab> (“Irish tell a tale of 26.3% growth spurt Rate attributed to multinational inversions — or ‘leprechaun economics’”); <https://www.economist.com/europe/2016/07/16/not-the-full-shilling> (“Not the full shilling - Why GDP growth of 26% a year is mad”), <http://www.irisheconomy.ie/index.php/2016/07/27/that-26-growth-rate-two-weeks-on/>; Paul Krugman revived the term “leprechaun economics” <https://twitter.com/paulkrugman/status/752841032870551552>; for a more moderate “insider” view, see the comments in the Irish economists site [irisheconomy.ie](http://www.irisheconomy.ie/index.php/2016/07/27/that-26-growth-rate-two-weeks-on/), for example <http://www.irisheconomy.ie/index.php/2016/07/27/that-26-growth-rate-two-weeks-on/>. For an official recognition of the disruption in statistics see the Ministry for Finance statement in September 2016 https://www.oireachtas.ie/en/debates/question/2016-09-29/70/#pq_70. The eco did not fade out: as recently as in the August 2018, at the Irving Fischer Committee Conference, the Head of National Accounts at OECD in a keynote address reported that the 2016 episode has been named by a statistics’ user “It’s complete bullshit, it’s Alice in Wonderland economics” https://www.bis.org/ifc/events/ifc_9thconf/vandeVen.pdf.

³ “Quality of statistics” is summarised in the principles contained in the European Statistics Code of Practice (Eurostat, 2018).

⁴ http://ec.europa.eu/eurostat/documents/24987/6390465/Irish_GDP_communication.pdf.

⁵ See Stapel-Weber and Verrinder (2016). The paper is a mix of recognition of the problem raised by the Irish GDP and of restrained annoyance for the Irish decision about modified indicators. Later, the de facto position of the European

2.2. Why the statistics reported such a big jump in GDP

We now propose a summary of what happened in 2015 that disrupted the statistics. For the sake of simplicity we will limit the description to the main items and the larger effects. The reconstruction of what happened is based in deductive reasoning derived from simplified hypotheses about what could originate such a large swing as that described in published data. Once again for the sake of simplicity we will have only one fictitious firm in the starring role.

In the first quarter of 2015, a non-EU manufacturing company relocates to Ireland and transfers Intellectual Property (IP) capital to Ireland as a result. In this scenario, the company, which will now be referred to with the dummy name “Banana”, moves the majority of its economic activity to Ireland besides a large but smaller domestic share in its home country.⁶ The coordination activities of Banana were already established in Ireland thus the local increase in employment is zero. Banana sells finished goods (drugs, phones...) to the final consumer and has a somewhat special distribution structure: it sells from Ireland any and all the goods it in fact sells “to” customers in Europe, Asia and Africa. When the consumer located in one of those three areas buys in a neighbourhood shop the Banana device, the seller acts only as a deliverer, while the property of the device changes from the headquarter in Ireland directly to the consumer (=an export of goods from Ireland in statistics).⁷ The seller earns an intermediation fee paid by Banana (registered in the balance of payments as an import of business services in Ireland). The device is not made in Ireland. It is made across the world on account of Banana: the foreign factories that supply the physical inputs and the foreign ones that assemble the output are simply providing a manufacturing service while both the components (inputs) and the final contraption are owned by Banana. This type of international transaction is called “trade in goods for processing” in trade statistics manual,

Commission seems to have turned more practical, and the official economic analysis of the Irish economy is based on the modified indicators as well as the official ones, see the “Country Report Ireland 2018” prepared in March 2018 for the Macroeconomic Imbalances Procedure (https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-ireland-en_1.pdf). The same adoption of ad-hoc unofficial statistics involved OECD, that in the Economic survey on Ireland published in March 2018 formulates the first of its policy recommendations in terms of GNI* and not GDP, and publishes as first graph in the executive summary a pretty unheard of “Gross value added excl. MNE-dominated sectors” <https://www.finance.gov.ie/wp-content/uploads/2018/03/OECD-survey.pdf>.

⁶ We here take for granted the opinion of Patrick Honohan, former governor of the Bank of Ireland, that suggests in a published preparatory paper for the ESG report (Honohan, 2016) that the pharma company Allergan – representing in 2015 €75 billion euros in value added – accounts for 30 per cent of “Banana” and the firm Apple for the remaining 70 per cent. Brad Setser, in a comment on the quality of Eurozone economic data (<https://www.cfr.org/blog/ireland-exports-its-leprechaun>) and Cole Frank in a comment on the Irish balance of payments (<https://www.cfr.org/blog/tax-avoidance-and-irish-balance-payments>) report on the likely key role of Apple. On the Apple relocation see also note 10.

⁷ European Union (2017) “Apple set up their sales operations in Europe in such a way that customers were contractually buying products from Apple Sales International in Ireland rather than from the shops that physically sold the products to customers. In this way Apple recorded all sales, and the profits stemming from these sales, directly in Ireland.”

or “contract manufacturing”.⁸ A firm like Banana is smartly called “factoryless goods producer” in the recent international discussion of National accounts methods.⁹ The key issue, “never seen before”, is one of quantity: the largest share of the final value of the device sold by Banana is the intellectual property capital contribution “added” to the physical components.

In the first quarter of 2015, the intellectual property capital of Banana was relocated to Ireland,¹⁰ and from that point on the IP has been Ireland property. As for any other relocation based on a merger of the head office abroad with the subsidiary in Ireland and the parallel decision to establish the new head office in Ireland, no buying or selling of capital was involved, so no flow had to be registered in the balance of payments, only the change in stocks.

Due to the large value of IP capital, Banana can count the corresponding large depreciation as an “expense”, or an identical reduction in profits passing from gross to net, in its balance sheet. For this expense, Banana buys a lot of research and development abroad, which is registered in balance of payments as an import of services in Ireland, to reconstruct depleting capital. In Ireland national accounts this is equal to a domestic investment. In short, additional investment to feed the new stock of IP capital accounts for one fourth of the steep increase in gross value added in 2015 in Ireland and additional net exports of goods processed abroad accounts for three fourths, with an overwhelming share of value coming from the use of the IP capital newly located in Ireland, which before 2015 they should have been registered as net exports of other countries. The total additional investment is largely constituted by additional imports of R&D and business services that appear with minus sign in the net exports. The new domestic firm Banana makes very large gross profits:

⁸ “contract manufacturing”, the term preferred in Ireland, has gained popularity, notwithstanding in the ESA 2010 manual “goods for processing” has a paragraph devoted to it while “contract manufacturing” does not appear at all. See also Eurostat 2014, “*Manual on goods sent abroad for processing*”.

⁹ UNECE, Eurostat and OECD “The Impact of Globalization on National Accounts” (United Nations, New York and Geneva, 2011) and UNECE Guide to Measuring Global Production (United Nations, New York and Geneva, 2015).

¹⁰ Apple confirmed publicly to have relocated in 2015 some of its activities in Ireland <https://www.apple.com/ro/newsroom/2017/11/the-facts-about-apple-tax-payments/>, a news already known since the EU Commission ruling on the state aid to Apple in 2016 http://ec.europa.eu/competition/publications/infographics/2016_07_en.pdf. Three years after, the debate on the facts and the arguing on the effects is still open, see for example the opinion, if partly hypothetical, in <https://www.bloomberg.com/view/articles/2018-06-25/eu-antitrust-crackdown-hasn-t-made-u-s-tech-change-its-behavior>: “...Here’s how the report describes the alleged new strategy: Apple transferred the intellectual property license, which still consumes most of its European profit, onshore in Ireland, where it is now owned by its Apple Operations Europe (AOE) unit. To make the purchase, AOE borrowed billions of dollars from another Apple subsidiary, which is probably based in the tax haven of Jersey. It is now making tax-deductible repayments from Ireland to Jersey with money received from another Ireland-based firm, Apple Distribution International (ADI). This company executes the iPhone maker’s non-U.S. sales and uses most of its revenue to AOE for the use of the intellectual property. In addition, one of the Irish companies has a cost-sharing agreement with Apple, Inc. in the U.S.: It pays its parent company for research and development conducted in the U.S. For tax purposes, this is considered an investment in R&D in Ireland, creating credits for Apple. This setup, according to the report, allowed Apple to pay an effective tax rate in Ireland that was much lower than the statutory 12.5 percent. The most realistic assumptions based on Apple’s financial disclosures point to a rate of between 1.7 percent and 5.6 percent.”. See also the documents quoted by Seamus Coffey in the recent <http://economic-incentives.blogspot.com/2018/01/what-apple-did-next.html>.

in fact almost all the value added goes to profits and none goes to wages, due to the lack of change in local employment. No dividends are distributed.¹¹

STEP BY STEP, ECONOMIC SUBSTANCE AND FORM

1. In the first quarter of 2015 the Banana headquarter for Europe, Asia and Africa relocates to Ireland
2. Around 200 billion euros of IP capital goes to Ireland with the relocation, the net International Investment Position of Ireland falls by around the same amount, due to the additional amount owned by foreign shareholders of Banana
3. In 2015 Banana buys from “California” R&D services for 20 billion euros, which are registered in the import of services item in the balance of payments; in National accounts this amount is counted as investment
4. Banana engages in factoryless production of a device/product that it sells in Europe, Asia and Africa, and the amount sold is counted as an Irish export of goods although the device never physically enters or leaves Ireland
5. Because the material inputs Banana buys for its products are delivered to the foreign factories where the final device is assembled by the input’s producers, these intermediate products never physically enter Ireland, However, these items are still considered an added import in Ireland
6. Banana pays a fee to each of foreign producer/assembler, which is registered as an import in Ireland of manufacturing services that corresponds to the income of workers and capital (wages and profits, i.e. value added) of the foreign producers/assemblers
7. The difference between the imported good inputs, the service fees paid and the value of production — equal to the value of exported goods— is very large due to the contribution of the intellectual capital (brand, goodwill, etc.) in the final product. In national accounts this balance, i.e. the Irish net exports added in 2015, is counted as domestic value added
8. Since the value added referred to in No. 7 is obtained with no added employment and is due to IP, it corresponds to “profits” in the distribution of income. Unfortunately balance of payments and national accounts standards do not treat all the value added/gross income as income of the final owners of Banana (only partially, more on this later). If this were the case, the residence of the legal owner would be superseded by the residence of the final owner in the distribution of the value added, and the location of IP would be perfectly neutral in terms of GNI.¹²

3. Statistics: misrepresentation and methodology

3.1. Misrepresentation: old and new

Why did we introduce the difference between GDP and GNI from the beginning of this paper? Everybody in the news speaks of GDP, European Treaties on Economic Union have GDP related measures at the core. But for many years the Irish economy has not been appropriately represented by the GDP measure. The Irish economy has been the most “foreign owned” advanced country in the world (as the deeply negative IIP figure reported above demonstrates). This translates to a large share of what is produced in the country that is unavailable for the residents’ consumption and investment. It is instead paid (“shifted”) abroad in the form of profits on foreign owned capital.

¹¹ When the firm distributes a dividend to the foreign owners/shareholders they pay taxes on income, while retained earnings kept as “liquidity” increase the value of shares; if taxation of capital gains is lower than that on dividends, incentives are strongly in favour of no distribution.

¹² For a more formal treatment of measurement issues with numerical examples see Avdjiev et al., 2018.

To give a more realistic picture of the economy the GNP, nowadays called GNI, was revived and proposed as a key indicator.¹³ “Realistic” in that the GNI shows the ability of a country to make available goods and services to residents and to sustain their welfare improving role it in the future; as Sir Charles Beans said recently, GDP is “not a measure of welfare, though invariably [is] used as an indicator of whether ‘things are getting better’”. While GDP is a measure of goods and services produced in the “territory” by local factors of production, GNP excludes the production that comes from the (combination of) factors —labour, land and capital— that are made available “in the territory” but owned by non-residents. In practice, this may be a large figure only for foreign “capital”.¹⁴

Something new was added to distort the “traditional” GDP in recent years called a tax inversion or corporate inversion. In the words of CSO: “Beginning in 2008, possibly as a reaction to proposed changes to corporate tax in the United Kingdom and the United States, a number of multinational corporations relocated their group headquarters to Ireland”.¹⁵ The statistical methods allowed in most cases to record the outflow of profits so as to obtain a balancing effect of the added value added on national accounts and balance of payments. However, the “complexity in interpreting Irish economic data” strongly increased. One case, for example, is aircraft leasing companies. Almost all flying aircraft in the world seems to be, “at a first sight”, owned by an Irish company and leased to the different airline companies. Technicalities abound and if the analysts are unaware of them, large errors in interpretation are behind the corner. Large figures in a small economy, even if they are at the end balanced by other compensating items somewhere else in the statistics, bring a lot of difficulty in interpretation.

Tax inversion or corporate inversion is motivated by the use of the fiscal loopholes kindly or inadvertently left open by the vast constellation of national legislations by multinational enterprises (firms that produce and sell across many different countries which are hardly a new phenomenon). Because of this, the correct and effective representation of the economic activity may slip into the

¹³ According to Eurostat Glossary “Gross national income, abbreviated as GNI, is the sum of incomes of residents of an economy in a given period. It is equal to GDP minus primary income payable by resident units to non-resident units, plus primary income receivable from the rest of the world (from non-resident units to resident units).” Gross National Product disappeared from official methods with ESA 2010; the previous ESA 1995 standard stated, in 8.94, that “Gross national income (at market prices) is conceptually identical with gross national product (GNP) (at market prices), as hitherto understood in national accounts generally.” The CSO, with undoubted subtlety, states that “GNP is the equivalent to GDP plus or minus Net Factor Income (NFI) from the Rest of the World (...). GNI is equivalent to GNP plus EU subsidies minus EU taxes. Alternatively it may be described as GDP minus primary income payable by resident units to non resident units plus primary income receivable by resident units from the rest of the world”.

¹⁴ The total production less imported inputs gives value added and value added is GDP. Then all value added is distributed to factors of production (through taxes and subsidies the contribution of the government is included in the measurement) and GNI is just the aggregate income of the factors of production (labour, land and capital) resident in the country (the territory).

¹⁵ <http://www.cso.ie/en/releasesandpublications/ep/p-macip/macroeconomiccoreboard2014/headlineindicators/>

background. When the dimension of the “relocated” chunk of economic activity of the multinational enterprise proved too big for a “small country” and was more form than substance, the picture given by statistics turned largely misleading and disrupted a number of key statistics.

3.2. What you see is not what you get? The vanishing definition of economic residence

ESA 2010 (Eurostat, 2013) official definition for GDP is the following: “GDP is a measure of the total economic activity taking place on an economic territory which leads to output meeting the final demands of the economy”.¹⁶ This is what we would like to see represented in statistics, an understanding of the economic substance.¹⁷

Value added comes from labour, capital and their productivity. Nothing else. All value added goes to labour and to capital in the form of income, in short gross wages and gross “profits”, the latter with a number of complexities. Nothing is left, in the real part of the economy (excluding government, for simplicity). The physical capital can be moved between countries incurring in transport and disassembly/assembly costs. Intangible capital, or intellectual property capital, is wholly different from plants and equipment, but is just as “real”¹⁸. As a result of the growing share of IP capital, the international mobility of “real capital” becomes smoother and frictions vanish. IP capital, once created, can be combined with physical inputs and labour in different countries with no trade/transport cost, as when producing a new life saving drug on the basis of a chemical formula. The location of the “capital” changes when the owner changes, by a simple book entry or registration. So, the residence of the owner of the intellectual property brings with it the value added it produces, it is difficult to argue for the contrary. On the other hand, in general legal form is not enough to define residence. To attribute profits to a given resident entity is not a simple matter of registering or incorporating a legally formed business. The proper definition of residence is key. When the MNE has a subsidiary or even the headquarter legally resident in a country where none of their steps of production happen, apart from periodic board meetings (sometimes even by phone), it

¹⁶ Eurostat (2013) 1.133 [...] “There are three ways of measuring GDP at market prices: (1) the production approach, as the sum of the values added by all activities which produce goods and services, plus taxes less subsidies on products; (2) the expenditure approach, as the total of all final expenditures made in either consuming the final output of the economy, or in adding to wealth, plus exports less imports of goods and services; (3) the income approach, as the total of all incomes earned in the process of producing goods and services plus taxes on production and imports less subsidies.”

¹⁷ The Irish GDP case is not the first where statistics are suspected to be biased at the aggregate level. We may mention here the well documented but not solved “Rotterdam effect” that bias Dutch trade statistics (and, possibly, other EU countries trade statistics), see the Dutch statistical office articles (<https://www.cbs.nl/en-gb/news/2017/18/trade-surplus-excluding-re-exports-20-billion-lower>). Among “less significant cases” see the Amazon deliveries in Europe formally originated from Luxembourg and not included in Germany retail sales statistics, a bias corrected in 2017 (only from 2015:

<https://www.destatis.de/EN/FactsFigures/EconomicSectors/DomesticTradeAccommodationFoodServicesActivitiesTourism/DomesticTradeAccommodationFoodServicesActivities/Methods/MethodsRevisionRetailTrade.html>).

¹⁸ See OECD (2010a).

may be questionable to assign the value added that the MNE generates to that country. Physical capital and real workers do have a clear cut residence. The issue get much less clear in the case of the immaterial intellectual property capital.¹⁹

What happens to the income? It goes to the final owners, through a number of passages, or veils. And what happens to the statistical representation? If the final owner(s) does not change location, as in a corporate inversion, the GDP of the new headquarter country increases but the GNI should not change. Moreover, if the principle that to locate a headquarter within a country the senior management that have autonomy of decision in economic matters should be as well located in the country were correctly applied, there are serious doubts that firm and capital location, and so GDP, should change in statistical terms. When transfer prices are imputed as equal to market prices formed in a (more or less) competitive market, then profits are correctly attributed to the right residence. Something similar happens with Special Purpose Entities or other entities in the financial industry.

In international fora, the matter is the concern of OECD Committee on Fiscal Affairs and the related international tax conventions. It is a challenge for balance of payments experts that works to the next edition of IMF Balance of Payments manuals to understand if and how the concept and requirements put in place in the OECD 2010 Report “Attribution of Profits to Permanent Establishments” could be used to define more properly the fundamental concept of “residence” as commonly defined as “centre of predominant economic interest”. The idea, as in the parallel “OECD Transfer Pricing Guidelines for Multinational Enterprises...” (2017), is the following: “the profits to be attributed to a Permanent Establishment are the profits that the permanent establishment would have earned at arm’s length, in particular in its dealings with other parts of the enterprise, if it were a separate and independent enterprise engaged in the same or similar activities under the same or similar conditions, taking into account the functions performed, assets used and risks assumed by the enterprise through the permanent establishment and through the other parts of the enterprise.”

¹⁹ The seminal work on the academic side of economic statisticians is the short paper by Lipsey, 2010, that carries the self explaining title of “Measuring the location of production in a world of intangible productive assets, FDI, and intrafirm trade”. Lipsey is in favour of a complex reallocation of production and trade, by “estimating the location of production that could supersede the present dependence on accounting measures distorted by tax-saving”. But he clearly states that the solution is much less identifiable than the problem: “intangible productive assets, which have no clearly definable location and can be used in many places simultaneously, within the firm, makes any measure of the location of production ambiguous”.

3.3. In principle, statistics work consistently to picture the economic substance

If MNEs correctly represent prices (and profits) no real difficulty arises for statistics on value added. “Traditional” misrepresentation for tax purposes was a result of “transfer pricing” and “tax base erosion”: MNEs with subsidiaries in various countries can concentrate profits in the low-tax country: (1) if evaluating the input sold to the establishment in the low tax place at a price lower than market price and/or (2) if output produced in the low tax place is bought at a price higher than market price by an establishment in the high tax country. International tax treaties and codes tried for years to limit transfer price and base erosion.

THE 2016 BEAN REPORT ON UK ECONOMIC STATISTICS: MNES INCOME SHIFTING

The “Independent Review of UK Economic Statistics”, Charles Bean ed., March 2016, discusses MNEs misrepresentation of their activities in three dense paragraphs:

3.96 Another driver of international financial flows is the choice of location where the ownership of intellectual property patents are registered. Patents are the legal documents that grant their owners exclusive rights to use or licence a new concept or technology for a certain time period. Income derived from intellectual property is often paid where the patent is registered and therefore this income can be highly mobile. A firm can register legal ownership of a patent in a subsidiary located in a low-tax country other than where the firm’s headquarters are located, other than where the innovation was developed, and other than where the innovation will be applied. Royalties on the use of the patent then allow the firm to shift the booking of revenues across national boundaries into the low-tax country. But the flows associated with the attempts to reduce tax liability in this fashion have little connection to where value is actually created.

3.98 Furthermore, as noted, transfers between subsidiaries to pay royalties for the right to exploit this intellectual property create financial flows that distort economic statistics. Consider, for example, a firm in a high-tax country that makes financial transfers to a subsidiary in a low-tax country [=pays and buy] for the right to exploit the intellectual property registered there. These payments are represented as imports and exports of intellectual property services and reduce the profit of the firm in the high-tax country and increase it in the low-tax country. OECD has carried out an examination of international corporate tax avoidance at the behest of the G20 (the Base Erosion and Profit Shifting Project) and found that the ratio of the value of royalties received for spending on research and development of intellectual property in a group of low-tax countries was six times higher than the average ratio for all other countries and has increased three-fold between 2009 and 2012.

3.99 Benefiting from this international income shifting typically requires that the royalties paid for the use of the intellectual property are made at preferential prices. Put another way, the transfer is intentionally inflated above its market value. The pricing of intra-firm transactions is commonly referred to as ‘transfer pricing’ and poses challenges for both the tax authorities and statisticians. To mitigate these distortions, there are transfer pricing rules that enforce a principle that the prices are set as if they took place between unrelated parties – an ‘arm’s length principle’. However, determining an appropriate transfer price creates conceptual and practical difficulties. It is difficult to establish a price without an accurate volume measure – which is absent in the case of intellectual property due to its intangible nature. The value and use of the intellectual property is often unique to the firm and so without a comparable market counterpart. Once more, firms have more information than the tax authorities and an incentive to minimise their tax liability. Detecting inappropriate transfer pricing and making appropriate adjustments in the statistics is thus very difficult.

Because of the different mandate, and of the one-sided incentives, the work done in international fora by taxation specialists seems aggressively interested to a picture of the economy where the substance prevails on the form and on the self-representation by businesses in their

accounts. In particular, the OECD-G20 Base erosion and profit shifting Action deals with an economic representation of MNEs activity to avoid the sometimes paradoxical post-truth of some tax avoiding tricks.²⁰

More recently, thanks to corporate inversion and intangible capital, the manipulation of internal transactions between units located in different countries was no more necessary to concentrate profits in the desired location. The MNE can just state that the profits are generated “there” for the very good and convincing reason that the capital is located exactly there. The parent company merges with the subsidiary in the low tax country and declares that from now on the headquarter is there. The former parent company “disappears” and only a group of foreign shareholders are left.

If the profits of the relocated intangible capital were distributed to the ultimate foreign owners, and declared to the statistical office, as said in point 8 before, the GNI measure would in principle correctly reflect the economic substance — the macroeconomic aggregates. Value added distributed as wages and profits would show up as cross-border capital income. Unfortunately, in practice, dividends are not distributed and the statistician has to estimate “reinvested” earnings (“e.g. funds that stayed abroad and were not repatriated, so they remained tax-deferred”²¹) and moreover two obstacles spring up: there are two “failures” of the standards on the path to make legal location neutral for income distribution, identified in the ESRG report.

First, a directly foreign-owned firm (classified as incoming FDI, when the FDI owner has more than ten per cent of shares) and a domestic firm owned by foreign portfolio investors (portfolio owners are those that collectively may well control the firm, but taken individually have less than ten per cent of shares) with identical profits that decide not to pay dividends (retain the same amount of earnings) generate a different record in GNI: in the first case the domestic profit income is distributed abroad to the ultimate owners on an accrual basis (i.e. calculated by the statistical office), in the second the retained earnings are not to be registered in the balance of payments as income sent abroad (in the liability side of the balance of payments) until effectively distributed to the foreign shareholders. In the second case, the GNI is “inflated” (no difference in GDP).²²

²⁰ The principal initiative on the issue is the “OECD/G20 Base Erosion and Profit Shifting Project” (“Base erosion and profit shifting (BEPS) refers to tax avoidance strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations”). See the 15 Actions, and the Reports, at <http://www.oecd.org/tax/beps/beps-actions.htm>.

²¹ <https://www.cfr.org/blog/impact-tax-arbitrage-us-balance-payments>

²² See BPM6, Chapter II - Reinvested earnings on direct investment: 11.40 and following.

THE TREATMENT OF PROFITS IN THE BALANCE OF PAYMENTS

In Balance of payments profits of foreign owned firms are treated differently according to whether they are owned by a “direct investor” holding 10 per cent or more of capital shares (the firm is a “foreign direct investment” or by portfolio investors (there are “many” small investors). If profits are paid abroad, they are registered as foreign income in the balance of payments in both cases. For FDI firms, if profits are retained, they are estimated by the statistician and added to the distributed flow of profits paid abroad. A corresponding imputed financial flow of investment is then recorded as additional FDI flowing inside the country. The flow of new FDI is registered in the financial account and does not have any effect on the GNI. For portfolio owned foreign firms, on the contrary, there is no estimate and imputation, or registration, of retained profits (they might appear in the IIP as “other accounts payable”, that is as an amount due to a non resident; or they are probably included in the value of the stock of shares evaluated at market price, because the market price is inflated by the increase in liquidity in anticipation of future dividends or shares buy-backs). Only when portfolio-owned firms’ retained profits are paid abroad they are registered in the balance of payments and, as a consequence, in the income account of the economy. In the case of the portfolio investor foreign firm retained earnings should translate in an increase in the value of the firm, to be compensated when the corresponding dividends are paid abroad: a capital gain for shareholders.

Second, in the statistical imputation of retained earnings/profits, the international standards prescribe to calculate profits net of capital depreciation, not as gross profits. This prescription inserts a wedge between the treatment of domestic profits and cross border profits in the case that profits are retained and no dividend is paid. To go back to a treatment of profits that renders “more neutral” the legal location of intellectual property capital, the ESRG proposal required that the starred Current account balance includes the depreciation of domestic capital owned by the foreign investor (called “consumption of fixed capital” in ESA 2010) in income paid to foreign investors, and, consequently, the starred GNI excludes it. The income distributed to the foreign owners that re-includes the depreciation component is then equal to gross profits, in the income account of the starred Current account, against the official methods stated in BPM6 (International Monetary Fund, 2009) and ESA 2010.²³

3.4. Detour: the Irish crash was not an unexpected outcome

“The methods”, i.e. the 727 pages of the ESA 2010, the EU regulation that defines how national accounts are to be compiled in the member states begins with a cautionary statement and a long-sighted list of critical issues (page 35 and followings, emphasis added), of which note in particular No. 6:

“The increasingly global nature of economic activity has increased international trade in all its forms, and increased the challenges to countries of recording their domestic economies in the national accounts. Globalisation is the dynamic and multidimensional process whereby national

²³ See ESA 2010 restatement of BPM6 in 18.49: “Retained earnings are equal to the net operating surplus of the enterprise [...]”.

resources become more internationally mobile, while national economies become increasingly interdependent. *The feature of globalisation which potentially causes most measurement problems for national accounts is the increasing share of international transactions undertaken by multinational companies, where the transactions across borders are between parents, subsidiaries and affiliates.*”

[...]“(2) the increase in toll processing, where goods are traded across international borders with no change in ownership (goods for processing), and merchanting;

[...] (4) the trade and use of intellectual property assets across the world;

[...] (6) *multinational corporations organising their business across national boundaries, to maximise production efficiency and minimise the global tax burden. This can give rise to artificial corporation structures which may not reflect the economic reality;*

[...] (8) re-exports of goods, and in the EU the transport of goods between Member States after entry into the Union (quasi transport);

(9) increase in foreign direct investment relationships, and the need to identify and allocate direct investment flows.”

Five out of the nine reasons of “measurement problems” in the list are perfectly on target in the case of the Ireland GDP. It is also worth noting how, implicitly, the statements confirm that the European Parliament and Commission have in mind an a-priori “economic reality” to be reflected by the statistics we produce. As paradoxical as it may seem, this is a good starting point: put the substance of the concept before the form assumed by the established measure. It is the latter to be ad hoc and not the former, when intellectual honesty is not in doubt.²⁴

4. The solution to the Irish disaster

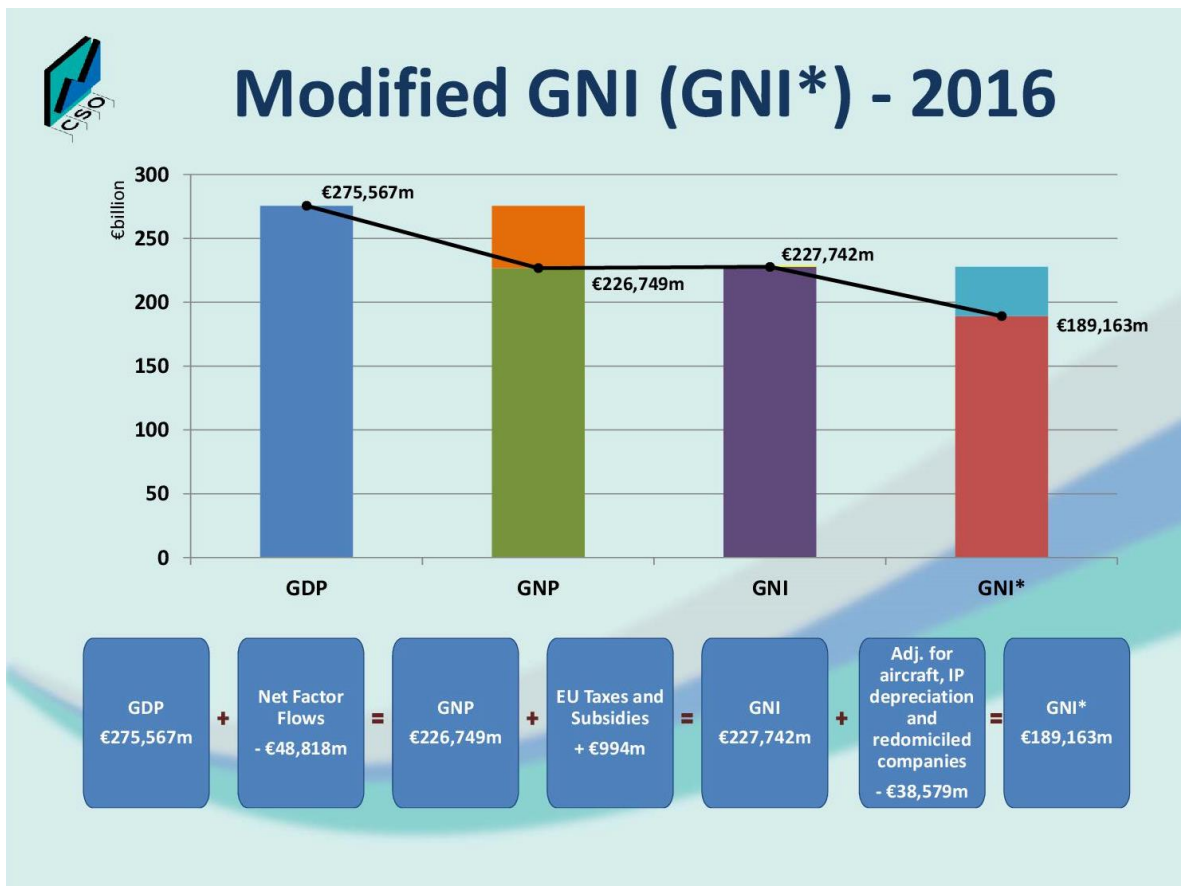
4.1. The solution, for this time

The Economic Statistics Review Group established by the Irish national statistical institute in December 2016 concluded (added emphasis): “EU legislation requires the production of statistics that meet the ESA 2010 and BPM6 standards and the CSO will continue to produce GDP, GNI and related measures. Nevertheless, supplementary statistics that are *more appropriate to the measurement of domestic economic activity* are needed that will be *comprehensible and stable over time*. Such supplementary variables will need to be accessible and publishable, in that the confidentiality of data from individual firms is not compromised, and sufficiently robust in that possible future globalisation-related changes affecting companies will not reduce the relevance of

²⁴ The economic reality in which ESA 2010 is interested in: “(2.01) The economy of a country is a system (...) for the production and consumption of goods and services.”

the series.” That is an honest account of the inability of statistics compiled according to agreed international standards and methods to represent an “appropriate measure” of exactly what they are intended to measure.

Figure 3



Source: CSO (https://www.cso.ie/en/media/csoie/newsevents/presentations/NAQ12017_Presentation.pdf)

Six months after the report, in July 2017, the Irish national statistical institute published the set of modified statistics. From that moment on, the National accounts, the Balance of payments, the International investment position and the short term cyclical indicators of Ireland are no more the ones we are accustomed to, for good reason, which we will now examine. The “adjusted measure” of GNI proposed and published by CSO is GNI without “the retained earnings of firms that are predominantly owned by foreign portfolio investors” and “the depreciation on foreign-owned domestic capital assets” (figure 3, from GDP to GNI*, 2016; July 2017 vintage).

4.2. Are internationally agreed standards fit to provide a decent picture of “economic reality”?

Irish data was compliant with the international standards but the international standards were not spotless. Two of the changes in the ESA 2010 methodology from the previous ESA 1995

(Eurostat, 1996) manual are directly involved in the Ireland 2015 statistics disruption. We will now discuss if the formal “compliance”, or better the formal application of the ESA 2010 definitions were in fact biased: (1) in practice and (2) as for the economic substance of the facts is concerned. The two changes were: first, intangible assets, such as intellectual property (IP, a stock) and research and development (R&D, a flow) were to be treated as capital and investment (in Gross Fixed Capital Formation); second, international trade in goods and services was to be recorded on the base of a rigid, compared to ESA 1995, ‘change in economic ownership’ between residents and non-residents criteria.

The only good news emerging from the 2016 event (which was not unexpected, as said before, if not for the dimension and the intricate motivation) is that the piling up of “special cases” is such that it is unlikely to show off again in a similar way. On the other hand, the likely explanation of why this perverse mix conjured to disrupt statistics is the deliberate will to legally misrepresent the reality of the businesses, to channel profits in the country where they may bypass as many rules on taxation as possible. If this is true, other firms may in the future apply the same “self-representation” and snub good faith statistics again.

The analysis of the CSO and the ESRG, based on a set of preparatory papers, concludes asking for a separate and more detailed breakdown of the economic activity of MNE, in the future. On the other hand, manufacturing sectors where intellectual property is responsible for a large share of the value added are exposed to misrepresentation and volatility of the data. Other “more traditional” sectors are probably less exposed. The ESRG report is complemented by an account of the compilation process (in the contemporary statistical jargon “an inventory”) by the CSO. The CSO is in the best position to correctly understand the economy of Ireland and recognised early the specificity of the MNE activity by creating a large specialised unit in charge of the data of the 75 largest Irish enterprises.²⁵

4.3. The Irish solution (two National accounts, one starred and one not, that paint two significantly different pictures) - Technicalities

What the CSO did was sensible and effective, in terms of the criteria it applied: once decided to change the relevant national accounts “in one country”, first of all avoid too much

²⁵ Unfortunately some of the most courageous and impeccable statements in the Report (ESRG, 2016; p. 33) can be implemented only against the “national interest” to retain the location of MNE-Ireland-denominated-headquarters that “head” practically nothing: “In confirming that an entity’s centre of predominant economic interest is in Ireland, a number of criteria are taken into account including country of incorporation, location of staff, especially senior management and whether the entities can draw up complete sets of accounts and balance sheets and have autonomy of decision in economic matters. Evidence that the management and control of global production chains including the use of intellectual property assets is exercised in Ireland is essential”.

precision in favour of “keeping it simple”, not to add confusion to confusion. In one sentence, the proposal amounts to sterilize the MNEs relocations just by excluding from value added (in practice only from gross national income) gross profits earned and retained in Ireland, but the intention is to exclude profits related to intellectual property capital or immaterial capital of foreign owned firms.²⁶

An alternative could have been to consider as not-real-Irish-capital the one transferred from abroad and whose ultimate property remains foreign. To give a more precise intuition, the statistician can build a different world where the Irish foreign-owned MNEs sector is composed by two kind of firms, one offshore and one onshore. The offshore part comprises the immaterial capital and all the material activities by which the services of the immaterial capital are embedded in material products (goods) or services sold in the world market. The process to transform capital in profits is to add the services of the capital to goods and make the final consumer pay the price (for example of “drugs and phones”). IP capital profit is the difference between the price of material inputs, of the labour and physical capital assembly services, and the final price of the good. The offshore production is realized out of Ireland’s national boundaries and could/should be attributed to a “re-relocated” offshore sector. If the decision were to exclude from national accounts the entire offshore sector there would be no more import of those assembly services that never entered Ireland; no more export of goods assembled abroad that never touched the Irish territory and no more investment of imported R&D services added to the IP foreign owned (and foreign administered) capital.

This alternative treatment of separating the entire “offshore sector” that was annexed to the Irish economy only because of the legal transfer of property of the capital was considered but discarded.²⁷ In practice the new starred Irish balance of payments relocates abroad only the gross retained profits, so to compensate for the enormous amount of value added generated by exports of final goods processed abroad less imported (in the assembly country, not in Ireland) inputs. The only piece of income registered in the Irish starred national accounts is the corporate taxes paid to the Revenue, which are in fact an addition to national resources.

Yet, while the starred Gross National Income corresponds to the value added of the Irish economy less the value added of the offshore sector, the effect is actually to keep on board the

²⁶ See the cases in the discussion by Lane (2017).

²⁷ Patrick Honohan (2016) proposed to create a special sector of MNEs resident in Ireland chosen between those more prone to misrepresentation, that is with more intangible capital (IP, goodwill, patents...), to calculate a “GDP” and a balance of payments of the sector, based as much as possible on the firms balance sheet, then split this “GDP” in two: an offshore and an onshore part. The offshore figures are to be subtracted by ESA 2010 GDP to obtain a “trimmed GDP”. Different techniques of imputation are considered.

misleading content of many of the detailed figures. Industrial value added (and productivity figures) is inflated by the “contract manufacturing” fiction that brings plants and equipment in Ireland when in fact they are located elsewhere just because the firm that owns the product going down the ladder of the “value chain” is located in Ireland. The “arm’s length” principle and the “substance before form” principle are clearly violated.

OPINIONS AGAINST THE CURRENT TREATMENT OF “CONTRACT MANUFACTURING”

In the preparatory documents of the ESRG, FitzGerald (2016) wrote: “The result of this change is that output produced for US (or EU) MNEs on contract in China, or some other East Asian economies, is owned by the MNEs from the time that the production process begins. This means that that output produced with, for example, Chinese labour and Chinese capital but foreign Intellectual Property (IP), is now classified as output in the economy where the MNE resides, not where the goods are manufactured. Thus, if a US MNE has output made for it in China, under the new SNA / ESA the output should be attributed to US GDP. In the Irish case, if a subsidiary of foreign MNE located in Ireland uses its IP (owned by the Irish subsidiary) to produce its goods in China, then the output of the Chinese manufacturing plant, undertaken on contract for the MNE in Ireland, is treated as Irish output. (...) The fact that the distinction between manufacture by a subsidiary and manufacture on contract makes a big difference to the national accounting treatment of MNE activity leaves open the possibility of future big discontinuities. If the legal framework changed to make establishing a subsidiary preferable in certain major Asian economies, the MNEs currently operating contract arrangements could suddenly change the legal form. This could result in output in Ireland or elsewhere suddenly being repatriated in the national accounts to Asia. Alternatively, a shift to a country, such as India, where establishment of subsidiaries is preferred, could also see a major change in output in the country where the MNE’s head office is located. While this approach, if applied across the world, will consistently record world GDP, it poses many problems for the key users of the data. It also leaves open the possibility of future major discontinuities in national data.”

The CSO will keep the range of starred (adjusted) statistic to a minimum for 2017 on, and says that the publication of reclassified sectors will be re-examined later. The modification will impact the income only and the related modified statistics in the balance of payments presentation will be restricted to the capital and income series.

4.4. Questions for the statisticians

There are a number of general issues left open. The first is about internationally agreed methods. What is the leeway that statisticians have in interpreting rules? A simple “stick to the rule” route in the Irish case would have been a catastrophe for statistics credibility and a total “failure to deliver” statistics of good quality, according to agreed quality indicators. It was a wise and educated response by Irish institutions that brought back Ireland and European Union statistics into likelihood. However this had a cost: of questioning whether a single statistic is “credible”? Are multiple representations and accounts preferable, with the result of “do it yourself” statistics?

For the common sense of any analyst not specialised in up to date statistics, the intellectual property “post-truth” residence and the formal use of the “change of ownership” principle undoubtedly introduce a massive distortion of trade statistics when they bring to life the fiction that good imports and exports do not happen where they cross borders, but elsewhere.²⁸

To summarise, the current rules say:

1. The value added generated by the use of intellectual property is attributed to the country of legal residence and not to the country that produces it, i.e. the country that continuously restores, with R&D, the depleted (embedded in goods) capital, even if it is a country that cannot be substituted in that role by any other.²⁹
2. Try to register net transactions, or “trade in value added”, and not the gross price of the good-plus-service-plus-marketing device that we pay when we buy a smartphone or a life-saving drug. But to say that a manufacturing country exports “the assembly services” and not the (assembled) final goods is a bad representation of the economy in a world where the instruments of analysis are modelled to examine the physical final good.

In the case of the economic ownership concept, it is clear that it does not adhere to legal ownership. The striking evidence that statisticians are not bound to the legal form is represented by the long established (since the early 1990s, see the 1993 System of national accounts and BPM5, International Monetary Fund, 1993) and virtuous case of the definition of repurchase agreements as a loan, not a double change of ownership of a bond.

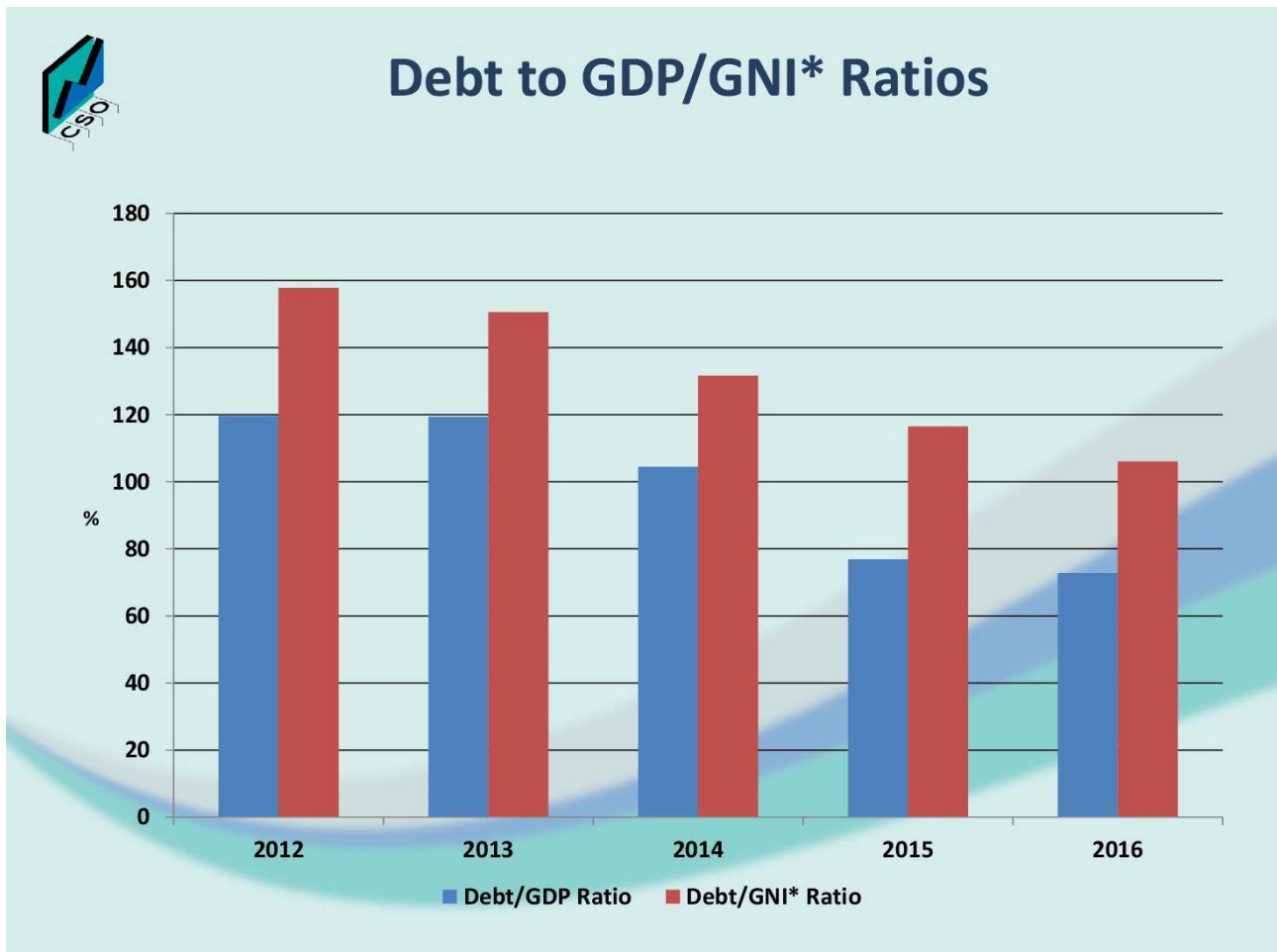
The second open questions for statisticians and economists is: are we internationally consistent? “The size of the economy is a necessary scaling factor” in a number of measures used for public and private decision: is “the aggregate size of the economy”, in level, well measured? Not just the growth rate, that after a level shift may turn correct anew. The growth rate itself may suffer nonetheless from added volatility, and be exposed to further/future level shifts. Debt/GDP ratio, Deficit/GDP ratio, Euro area GDP, Euro area Current account balance are now of sufficient quality? All indicators based on GDP and on balance of payments gross and net items are affected (figure 4). The EU rules evaluate macroeconomic imbalances as a ratio to GDP, or of labour productivity, or

²⁸ The result is to insert a large and growing wedge between the two connected statistics: trade statistics and balance of payments and represents a natural source of confusion. See the 2014 Eurostat “Manual on goods sent abroad for processing” <http://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-14-003> and the “User Guide on European statistics on international trade in goods” <http://ec.europa.eu/eurostat/en/web/products-manuals-and-guidelines/-/KS-GQ-14-014>.

²⁹ As a proof, one firm that recently transferred the legal property of its IP capital in Ireland, Apple, advertises worldwide its products as “designed in California”.

of international trade market shares (based on relative nominal or real export growth). What is left untouched?

Figure 4



Source: CSO (https://www.cso.ie/en/media/csoie/newsevents/presentations/NAQ12017_Presentation.pdf)

5. Conclusions

The scandal (literally “the obstacle on which people stumble”) we described and discussed in this paper is probably due to the voluntary and smartly executed (given the large resources available) intention by some multinational firms “to manage” their tax base and minimise taxes paid. This may lead to a gross misrepresentation of economic facts and effectively did, according to the Irish statisticians. But the conceptual issues involved are difficult and statisticians refrain from being involved in practical fiscal issues or to take part in fiscal-policy debates, to preserve their

neutrality: otherwise, perceived partiality might lead to respondents' reticence or hostility, hence to a systematic distortion of data collected by statistical agencies.

The trigger of the misrepresentation is not in the national accounts methodological standard, but in the balance of payments. In the Irish case, the larger share of the unknown but perceived "error" comes from the application of the balance of payments standard. The shift to the new BPM6 rules, in place from 2013-2014 in most European countries, is not responsible, in the sense that the application of the old BPM5 standard would have probably led to the same result. Similar the result, but the margin of discretion of the old standard was larger: in the new one the stricter application of the "change of ownership" principle meant to stick, in the end, to a legal-formal act, no matter what the substance of the underlying economic facts.

The prevailing "vision" of statisticians across Europe, and in other advanced economies alike, contemplated the application of the following criteria, to improve statistics: try as much as possible to define statistical data to be reported to statistical agencies exactly as in the existing accounting rules/registrations in firms' balance sheets. And use extensively the data collected by public administrations to fulfil their institutional tasks. On the other side the statistician should try to shape businesses accounting standards and public administration definitions, classifications, and forms to satisfy, or near satisfy, the needs of statistics users.

For good reason (to reduce the cost of collecting statistics and the burden on respondents, as well as to avoid confounding them with questions implying definitions of economic facts different from the definitions they are used to apply in accounting, fiscal reports, statutory day to day report to different public agencies) a strong strain have been put on the gold principle of analysis, that substance should prevail on form. To push consistency with accounting means for the statistician to accept a number of conventions inspired by the law and not by economics. In a world of diminishing resources and accelerating complexity (and power) of MNEs, statisticians could not propose to create representations of the economy departing from what is written in business, stock market and banks reports, and newspapers' news without risking marginalisation to a separate world of dubious legitimation.

When, as in the Irish case, the statistical machine breaks down, there are two ways out. The dull one is to say that standards have been respected, and to adapt to the broken machine. The other is to provide corrected statistics first of all able to represent the substance of economic facts. The institutions in Ireland, courageously and effectively, decided for the second way, with technically fine and strongly based arguments.

The “Irish disaster” was not unexpected. Even in the official EU Regulation establishing the new ESA 2010 standards you can find explicit, direct and specific warning to the exact issues, if not to the exact complex mechanism, that triggered the disaster. The economists and the statisticians in Ireland wrote extensively and in advance on the single pieces of the “mechanism”. This means that the statistical community was not taken completely by surprise and from now on should be ready and swift to react, admitting the pitfalls of the standards and changing the instructions most dangerous for statistics compilation. This would be also a recognition of the good work done in Ireland.

The CSO choice has been to change “the least possible” existing statistics, only mimicking a different treatment of non-repatriated profits of MNEs. The phrasing of the explanation is not particularly illuminating³⁰ but the effect is the desired one: to exclude the value added “physically” produced abroad thanks to the combination of foreign labour and physical capital with “Ireland based” Intellectual Property capital owned by the MNEs recently re-domiciled in Ireland. The Troy horse of inflated profit is the difference in the value of (contract manufacturing / goods for processing) imports and (contract manufacturing / goods for processing) exports that never entered or left the territory of Ireland. The difference, the value added, corresponds for a small share to labour and capital services paid abroad and registered in the services account of the current account of the balance of payments (CA), and for an overwhelming share to the value added by IP capital. It is of course in the fiscal interest of the MNE parent firm to magnify the second share and to reduce the first, effectively paid abroad, but there is no doubt that IP capital has really grown to a huge size.

The analysts work issue by issue, by sector and by statistical domain: the level and rate of change of manufacturing exports is an economic indicator in itself, it is not only the balance that counts, and the same may be said of exports in connection with the corresponding imports or with the services account where the “services of physical capital” and “assembly service” provided by third countries labour are registered. The CSO solution corrects for the CA distortion, but leaves the goods balance and the services balance in the balance of payments as biased as before. When the statistical community will re-examine the issue, hopefully in a short time, the “minimum possible intervention on data” approach could be abandoned, in favour of a correct representation of the economic facts not only in the larger aggregates, but also in some of the more detailed ones. And,

³⁰ The modified current account (CA*) “excludes the depreciation of foreign-owned domestic capital (such as IP and Aircraft Leasing). The depreciation on the foreign-owned capital is borne by foreign investors; consequently it does not affect CA*, which is intended to capture the resources generated by domestic residents. This is especially the case if the relocated capital is not deployed in combination with domestic labour but in combination with overseas workers through contract manufacturing arrangements.”

possibly and hopefully, the discussion and decision on such a controversial case should not be left to statisticians, but should involve analysts, economists and economic policy makers. An academic paper calculates that, at the global level, about 40 per cent of profits of MNEs are shifted each year to low-tax countries (Tørsløv et al., 2018): at this order of magnitude the resulting bias in statistics simply cannot, and for that matter should not, be solved by statisticians, who cannot act as David against Goliath (if they choose to rewrite the business accounts to tell a different story while governments and tax authorities just groan about the issue but take no action) nor be a silent partner in inattentiveness (if they accept a biased MNEs representation and undermine the quality of statistics, making them irrelevant).

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