

# **FDI driven growth and its effects on crisis recovery - the case of Ireland<sup>1</sup>**

Heike Joebges<sup>2</sup>

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## Abstract

Since 2014, Ireland has experienced astonishing GDP growth rates in real terms. The European Commission (EC) praised this development as a “remarkable economic rebound” (EC 2016: 1), even before the high growth rates of 8.5% real GDP growth in 2014 and 26.3% in 2015 (Eurostat, Oct. 2016) have been published. Ireland was among the heaviest hit European countries during the financial crisis, but also one with the quickest recovery. The EC attributes this success to reforms that started at the end of 2010 and focused (next to financial sector and structural reforms) on increasing competitiveness (EC 2016: 1). Labour productivity has increased by about 34 % since 2010 and nominal unit labour costs have decreased by about 17 % since 2010 (Eurostat, Sep. 2016), contributing to remarkable export growth since 2014.

Yet, the surprisingly high figures for real GDP growth in 2014 and in 2015 have to be treated with care: First, GDP developments in an economy with a high share of foreign owned companies do not reflect the average standard of living of citizens, as profits are repatriated. Gross national product or income (GNP/GNI), would be more adequate, and has been lower than GDP by about 15 percent in recent years. Second, the high presence of foreign owned companies attracted by low corporate tax rates leads to additional distortions of GDP and GNI measurement. Third, and more importantly, the new EU accounting framework, the European System of Accounts (ESA) 2010, explains the main part of the recent bloated Irish GDP figures.

Nevertheless, even ignoring the recent extreme growth figures, Ireland’s recovery seems to be more successful than the one of other crisis countries, even when GNI instead of GDP is considered. As Irish GDP is by a large extent driven by foreign affiliates of multinational companies, the current paper concentrates on an evaluation of the FDI driven growth strategy during the recent crisis recovery. Did Irish domestic citizens benefit regarding domestic income levels, employment, and wage developments? Doubts do not only stem from the difference between GNI and GDP, but also from forecasts for employment (in persons, AMECO, Sep. 2016) according to which employment will not even reach the 2008 levels in 2016. Similarly, the wage share is expected to decrease to 40% in 2016, down from 53% in 2008, according to official European Commission forecasts.

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<sup>2</sup> HTW Berlin, heike.joebges@htw-berlin.de

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## 1. Introduction

Since 2014, Ireland has experienced a remarkable real GDP growth of 8.5% in 2014 and 26.3% in 2015 (Eurostat, Oct. 2016). The extraordinary high figures are mainly the result of the new EU accounting system (see Eurostat 2016 and below). Yet, Ireland would have shown rates above 5% in real terms even under the old accounting framework. The European Commission (EC) praises this development as a “remarkable economic rebound” (EC 2016: 1). Ireland was among the heaviest hit European countries during the financial crisis, but also one with the strongest recovery. The European Commission attributes this success to reforms that have started at the end of 2010 and focused (next to financial sector and structural reforms) on increasing competitiveness (EC 2016: 1). Labour productivity has increased by about 34 % since 2010 and nominal unit labour costs have decreased by about 17 % since 2010 (Eurostat, Sep. 2016), contributing to remarkable export growth since 2014.

As the Irish growth strategy is special in relying to a large extent on foreign affiliates of multinational companies, the current paper aims at discussing the pros and cons. There is a long-standing discussion about the benefits and drawbacks of FDI driven growth. While correlation between GDP growth and FDI inflows seems to be positive for countries with a certain level of development, causality is unclear. Even more discussed are employment and welfare effects (see e.g. Contessi/Weinberger 2009).

The huge discrepancy between Irish GDP and GNP/GNI of almost 20% indicates some drawbacks of this growth strategy. Yet, this paper will not discuss the general benefits and drawbacks of a FDI driven growth strategy, but rather analyse the developments since the financial crisis in more detail. Did Irish domestic citizens benefit regarding domestic income levels, employment, and wage developments? As the European Commission portrays Ireland as a role model of a country that successfully recovered from the crisis by increasing price competitiveness, the question is in how far Irish citizens benefit. Doubts do not only stem from the difference between GNI and GDP, but also from forecasts for employment (in persons, AMECO, Sep. 2016) according to which employment will not even reach the 2008 levels in 2016. Similarly, the (adjusted) wage share is expected to decrease to 40% in 2016, down from 53% in 2008, according to official European Commission forecasts.

The paper is organized as follows: the next section starts with an explanation of the recent distortions in GDP measurement due to relocations of MNC-headquarters to Ireland combined with changes in EU national accounting rules. Section 3 presents GDP and GNI trends since the 1970s, before the next section analyses the developments during and after the financial crisis. Section 5 evaluates labour market indicators. Section 6 concludes.

## 2. Recent distortions in national accounting

Ireland surprised with real GDP growth of 8.5% in 2014 and 26.3% in 2015. GDP per capita normally serves as a simple indicator for the average standard of living in a country. Yet, all figures related to Irish GDP should be treated with care:

First, Ireland is a country with a high presence of foreign owned multinational companies, driving a wedge between gross domestic production, measured by GDP, and gross national income, measured by GNI. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation

of employees and property income) from abroad (World Bank, no year).<sup>3</sup> Since the 2000s, Irish GNI only accounts for about 85% of Irish GDP (see fig 1: GNI as a percentage of GDP and the section below). This indicates that a relevant part of income generated in the Irish borders flows as factor income to foreign shareholder. It does not stay in the country.

Second, the high presence of foreign owned multinational companies (MNCs) and worldwide production chains also lead to distorted national accounting data following the new EU accounting framework, the European System of Accounts (ESA) 2010. The idea of ESA 2010 was to improve national accounting, by not basing it on physical movements of exports and imports, but by relying on a change in ownership approach, thereby avoiding that goods sent abroad for processing would count as exports.<sup>4</sup> Yet, the changed accounting rules have severely affected Irish GDP, GNI, and current account calculations, leading to an upward revision of 2015 GDP growth that enforced a press release by Eurostat, a Directorate-General of the European Commission, acknowledging the change (Eurostat 2016).<sup>5</sup> According to FitzGerald (2015), the new accounting rules especially overstate Irish GDP and current account data:

An important factor that inflates the trade statistics in national accounting is contract manufacturing of MNCs in other countries, as long as the MNC is the owner of those goods. According to the change in ownership approach in ESA 2010, goods manufactured offshore, and sold to another country, are counted as Irish trade activities, even without any production in or physical contact with Ireland. As soon as the Irish based company “takes delivery” (FitzGerald 2015: 13) of the goods produced abroad, the goods are counted as Irish imports, without touching Irish ground. Once the goods are sold to customers in another country, they constitute Irish exports. As export price values tend to be higher than the production (or “import”) value, this new accounting rule leads to an increase in net exports values and thereby overstates the current account surplus as well as GDP and GNI (FitzGerald 2015: 12ff). The difference between export value according to national accounting in contrast to the value of physical exports, visible in trade statistics, has increased (see FitzGerald 2015: 15).

Table 1 shows the difference between goods exports, goods imports, and net goods exports according to national accounting in relation to trade statistics data that only measures physical exports and imports. As can be seen, national accounting figures have already been higher since 2007 and lead to bloated trade figures. In 2015, goods exports in national accounting are higher by 19 percentage points, goods imports by 30 percentage points, net goods exports by 47 percentage points. The calculation follows Fitzgerald (2015: 15), where he presents merchandise exports in national accounting in relation to trade statistics in figure 6. In contrast to his figure, the differences in table 1 are higher and start earlier. This is probably due to the newer data that already incorporates the backward revision according to ESA 2010.

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<sup>3</sup> GNP is the result of subtracting net factor income received by the country from GDP. GNP is very similar to GNI, the difference are any product taxes (less subsidies) not included in the valuation of output. As the World Bank prefers GNI over GNP, the paper concentrates on GNI.

<sup>4</sup> See [http://ec.europa.eu/eurostat/statistics-explained/index.php/European\\_system\\_of\\_national\\_and\\_regional\\_accounts\\_-\\_ESA\\_2010](http://ec.europa.eu/eurostat/statistics-explained/index.php/European_system_of_national_and_regional_accounts_-_ESA_2010)

<sup>5</sup> The earlier set-up EU website for statistical changes due to ESA 2010 in GDP aggregates from March 2016 does not name Ireland as an especially affected country, see: [c.europa.eu/eurostat/statistics-explained/index.php/Annual\\_national\\_accounts\\_-\\_how\\_ESA\\_2010\\_has\\_changed\\_the\\_main\\_GDP\\_aggregates](http://ec.europa.eu/eurostat/statistics-explained/index.php/Annual_national_accounts_-_how_ESA_2010_has_changed_the_main_GDP_aggregates)

Table 1: National accounting data relative to trade statistics for goods exports, imports, net exports (in %)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Goods exports</b>	116.2	111.3	130.2	136.3	116.6	123.3	117,2	116.8	118.6
<b>Goods imports</b>	112.5	112.5	117.0	117.5	111.1	111.6	112,4	123.3	129.9
<b>Net goods exports</b>	104.3	114.9	101.5	97.4	104.0	96.1	104,6	136.1	147.0

Source: AMECO, own calculations, accessed in Oct. 2016.

Besides the huge effect on exports, imports, and the current account, FitzGerald argues that GNI should be less affected, as profits from the difference between export and import value mainly constitute factor income of foreign shareholders in the case of foreign owned multinational companies (FitzGerald 2015: 16).

In addition, ESA 2010 leads to another distortion, as it also implies a different accounting for aircraft leasing. This seems to be a relevant factor for the Irish economy, as “...almost 20 per cent of the world’s civil aircraft fleet is owned by leasing companies in Ireland” (FitzGerald 2015: 23). According to FitzGerald, it does not affect GDP and GNI, but the Irish current account balance (FitzGerald 2015: 16ff). Yet, the Financial Times argues that it contributes to the high growth rate in 2015 (FT 2016).

Third, relocations of companies’ headquarters to Ireland (“re-domiciled Public Limited Companies”), attracted by low corporate tax rates, increases Irish current account surplus and Irish GNI as well as GDP. The reason is that headquarters tends to receive more profits than it pays to foreign shareholders (FitzGerald 2015: 10). Retained earnings of re-domiciled public limited companies “... are treated as an outflow in the current account of the balance of payments (as reinvested earnings)” (FitzGerald 2015: 10). According to the author, undistributed profits have grown in relevance since 2009 and account for almost 4% of GDP in 2014 and more than 4% for GNI. The same accounting rule also drives up the current account surplus, which is higher by almost 4 %-points in the same year (FitzGerald 2015: 11-12).

Fitzgerald also shows that offshore activities based on patents distort the measurement of GDP. These activities are accounted for in the country of the company owning the intellectual property. “On-shoring” these patents increases Irish GDP. Once patents of pharmaceutical companies are running out, they have the opposite effect (FitzGerald 2015).

All these factors imply that GDP, GNI, as well as the current account and net exports from national accounting are overstating Irish economic activity. This has a distorting effect on all GDP-based figures: for example, labour productivity is bloated, while unit labour costs, fiscal deficit and fiscal debt are biased downwards.

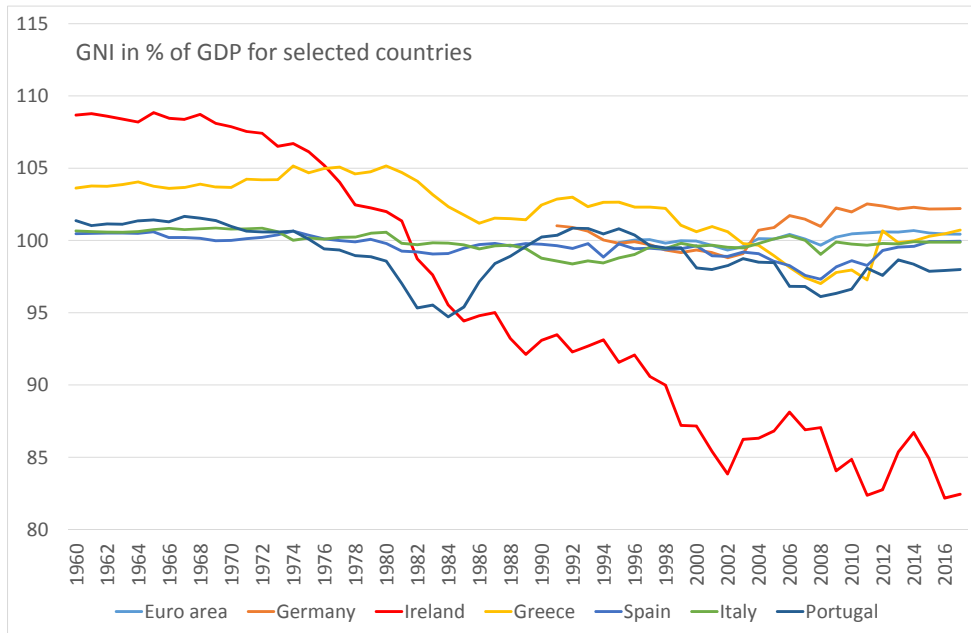
Nevertheless, Ireland’s recovery seems to be more successful than the one of other crisis countries, even ignoring the latest effects of the new national accounting framework, and even using GNI instead of GDP.

### 3. GDP and GNI since the 1970s

Ireland’s economy is special in being heavily dependent on net FDI inflows: Foreign controlled affiliates provide about 80% of domestic value added and turn-over in manufacturing, 47% of employment. Even in services, more than 40% of value added and turn-over stem from foreign controlled affiliates and are responsible for 28% of employment (OECD 2010: 156-7). As profits of foreign affiliates do not necessarily stay in the country, there is a remarkable difference between GDP per capita and GNI per capita. The last indicator only measures the income of domestic citizens

(in contrast to the income generated by domestic production) and only amounts to about 82% of GDP in 2016 (AMECO, download Sep 2016).

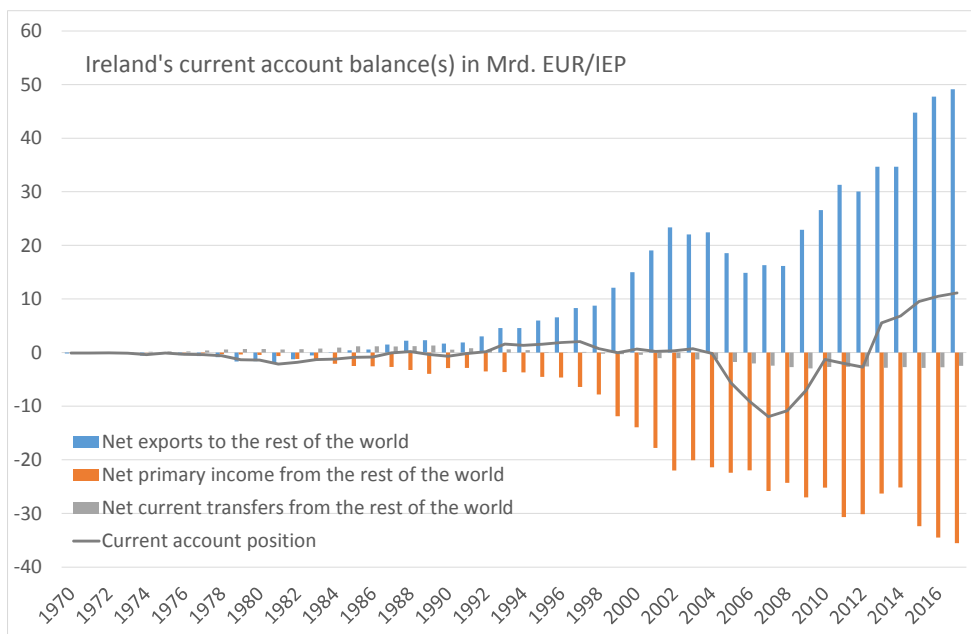
**Figure 1: GNI in percent of GDP for selected peripheral EMU countries**



Source: AMECO, GNI and GDP at current prices (UVGD), own calculations, data download Sep. 2016

The discrepancy between Irish GDP and Irish GNI is not something new, but has already started in the 1970s, as figure 1 indicates. Ireland’s growth strategy has focused on attracting foreign direct investment (FDI) and foreign affiliates since the 1970s. This went in parallel with an improving net exports balance, but the flipside of this strategy were increasing outflows of factor income (dividends, yields, and profits) to foreign shareholders (reflected in negative net primary income from the rest of the world, figure 2).

**Figure 2: The Irish current account balance and its sub-balances**



Source: AMECO, data download Sep. 2016

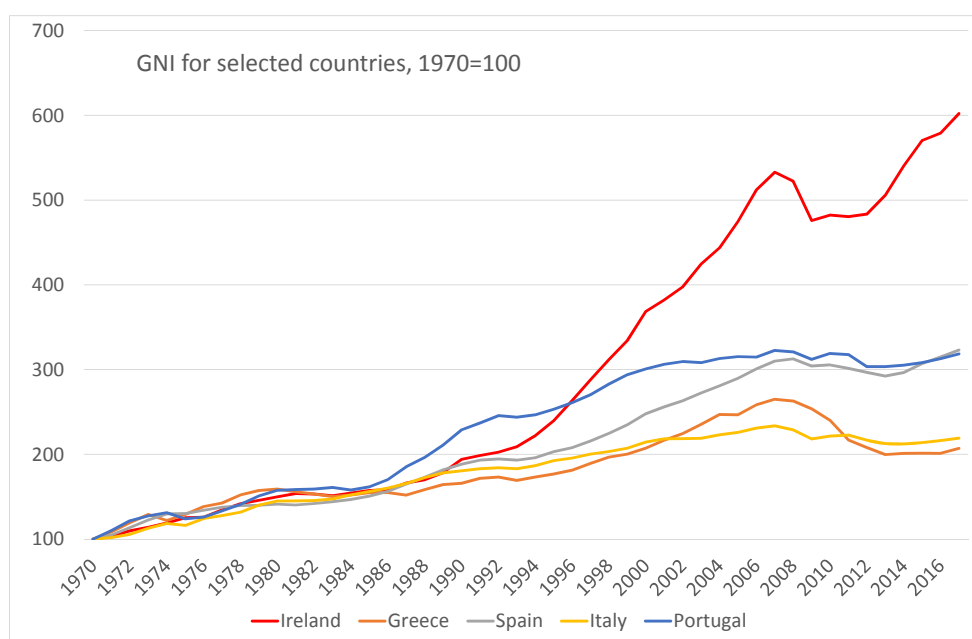
Yet, even though Irish citizens do not fully benefit from all income generated in their borders, the growth strategy has been beneficial overall, as it allowed to catch-up with EU-15 levels of GDP per head of population and even surpass EU-15 levels of standards of living (see table 1). Both GDP and GNI were reflecting steady growth rates. Figure 3 shows that economic growth in Ireland clearly exceeded the one in other peripheral EMU countries during the 1990s and 2000s, albeit starting from very low levels. In order to show that this result also holds for GNI (not only GDP), the figure concentrates on GNI.

**Table 1: Ireland’s GDP per head of population relative to EU-15 average (in %)**

	1960s	1970s	1980s	1990s	2000s	2010s
EUR	62,3	58,3	67,4	82,3	137,3	132,2
PPS	65,6	65,4	68,9	88,2	122,4	125,0

Source: AMECO, GDP at current prices per head of population (HVGDP), own calculations

**Figure 3: GNI for selected peripheral EMU countries, 1970=100**

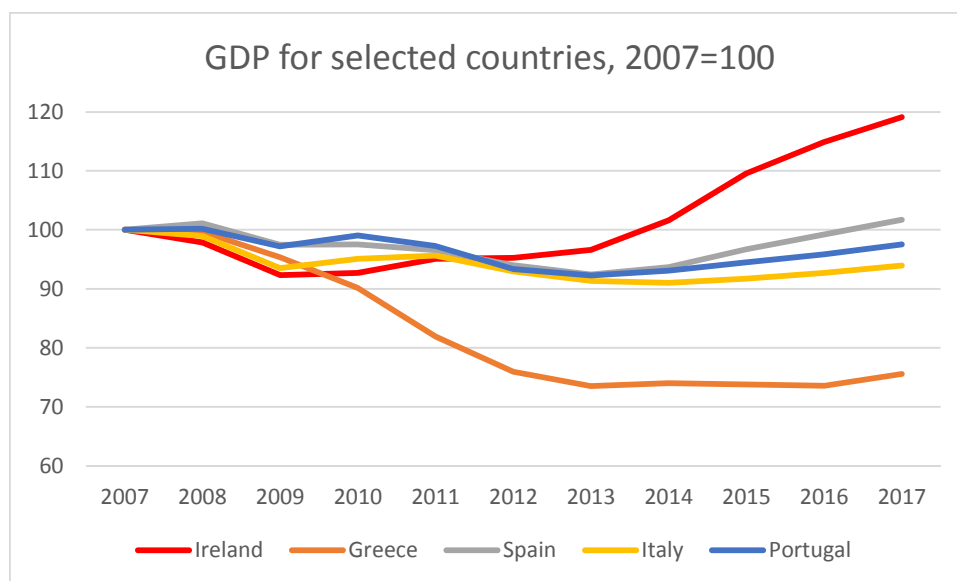


Source: AMECO, GNI at constant prices (OVGD), national currency, own calculations, data download Sep. 2016

#### 4. GDP and GNI developments since the financial crisis

Ireland was among the heaviest hit European countries during the financial crisis, yet, has shown a “remarkable economic rebound” according to the European Commission (EC 2016: 1). Figure 4 portrays GDP developments for Ireland since 2007, in comparison to other peripheral EMU countries. With the exception of Greece, Irish GDP and GNI decreased quicker and stronger than in Italy, Spain, and Portugal, but also recovered quicker and stronger.

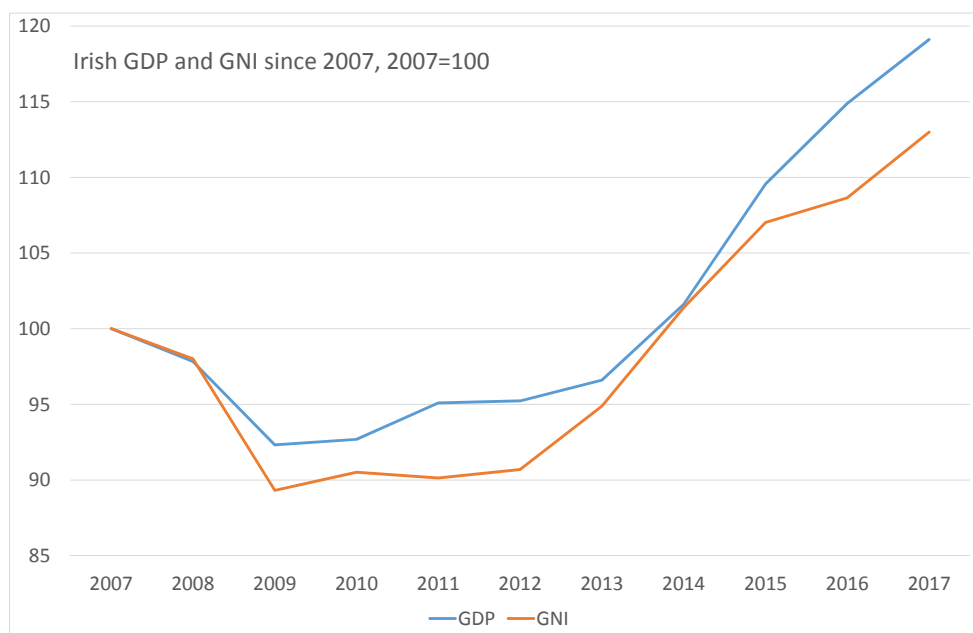
**Figure 4: GDP developments for selected peripheral EMU countries since 2007**



Source: AMECO, GDP at constant prices (OVGD) own calculations, data download Sep. 2016

Figure 5 shows the different GDP and GNI developments since 2007 for Ireland: Interestingly, Irish GNI reacted stronger than Irish GDP, decreasing to 90% of the 2007 value, and has not yet recovered to the same extent as GDP. In other words, the income of Irish citizens was and is more affected than the value of (recorded) production in Ireland.

**Figure 5: GNI and GDP developments for Ireland since 2007**



Source: AMECO, GNI at constant prices (OVGD), own calculations, data download Sep. 2016

The increasing trade surplus in goods and services since the 1990s has been an important factor contributing to GDP and GNI growth. When net exports started to decrease from 2005 onwards, they decreased GDP and domestic income levels. Interestingly, net factor income continued to leave the country at more or less similar growth rates like before, leading to a stronger negative effect on domestic income (measured by GNI) than domestic production (GDP).

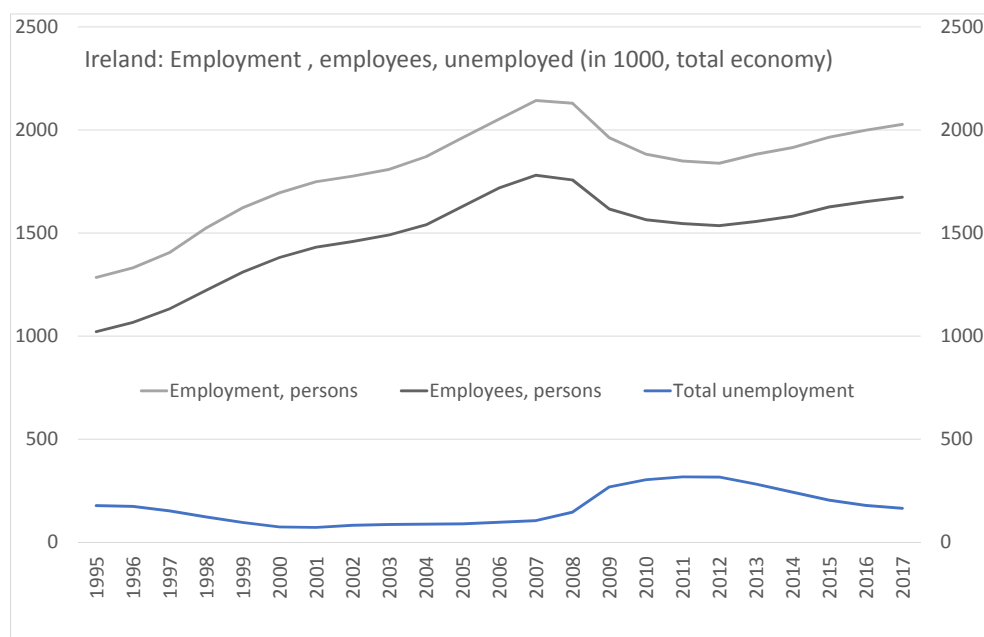


Since the recovery in net exports in 2009, GNI and GDP have both increased, but have so far not converged.

## 5. Effects on wages, employment, and the labour share

Irish citizens do not necessarily benefit from the FDI driven growth, at least not as much as GDP or GNI developments would indicate. This can be seen by employment and wage developments: European Commission forecasts for employment (in persons) do not even reach the pre-crisis levels in 2016 (figure 6). According to official EC forecasts, the (adjusted) wage share will decrease to 40% in 2016, down from 53% in 2008. The decrease in the wage share is in line with findings that part of the decrease in wage costs and unit labour costs were not fully translated to export prices (Joebges 2014) nor to domestic price levels (see Joebges/Logeay 2016), allowing for increasing profits.

Figure 6: Employment, employees, and unemployed in Ireland

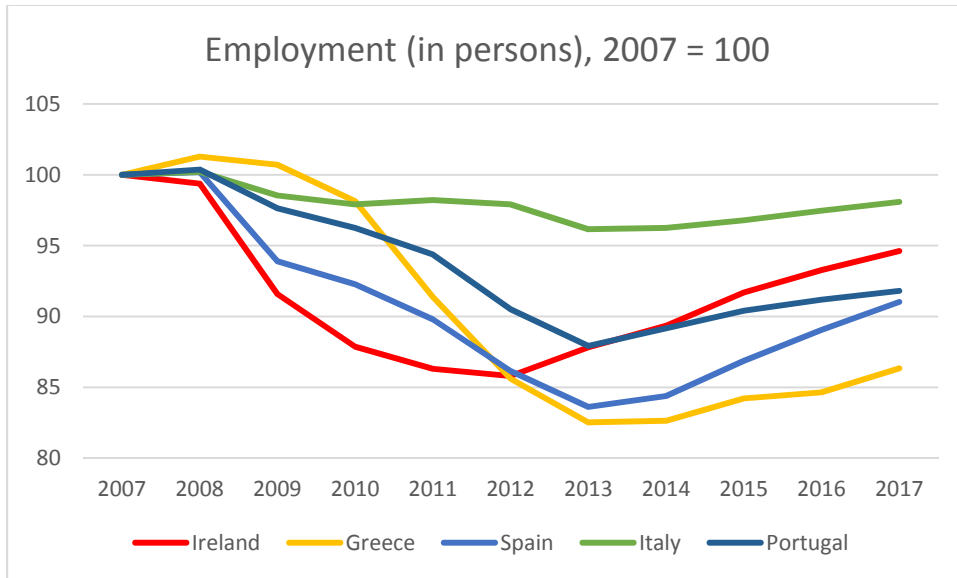


Source: AMECO, data download July 2016

As figure 7 shows, employment still developed better compared to other crisis countries, at least measured in persons: Employment fell quicker compared to the other crisis countries, but also recovered quicker, mimicking relative GDP developments. In line with employment developments, compensation per employee fell quicker than in the other crisis countries, but did not recover to the same extent (figure 8). Compensation per employee has not yet reached 2008 levels – besides the recent recorded GDP growth rates. Only Greece shows a worse development of wages.

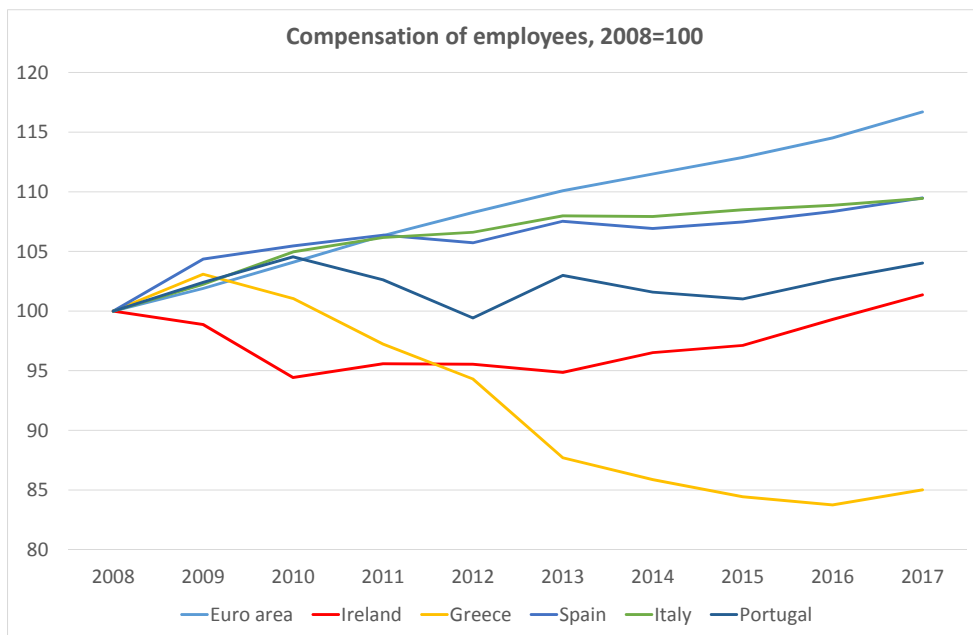
Both findings together explain the strong decrease in the wage share (figure 9). This points to the problem that domestic workers may suffer more from adjustment costs than (domestic and foreign) capital owners may. As the bloated figures for GDP may artificially decrease the wage share, one can alternatively calculate the adjusted wage share based on GNI. The decrease is slightly smaller, going down to 49% in 2016, but effect and trend are the same.

Figure 7: Employment in selected peripheral EMU countries, 2007=100



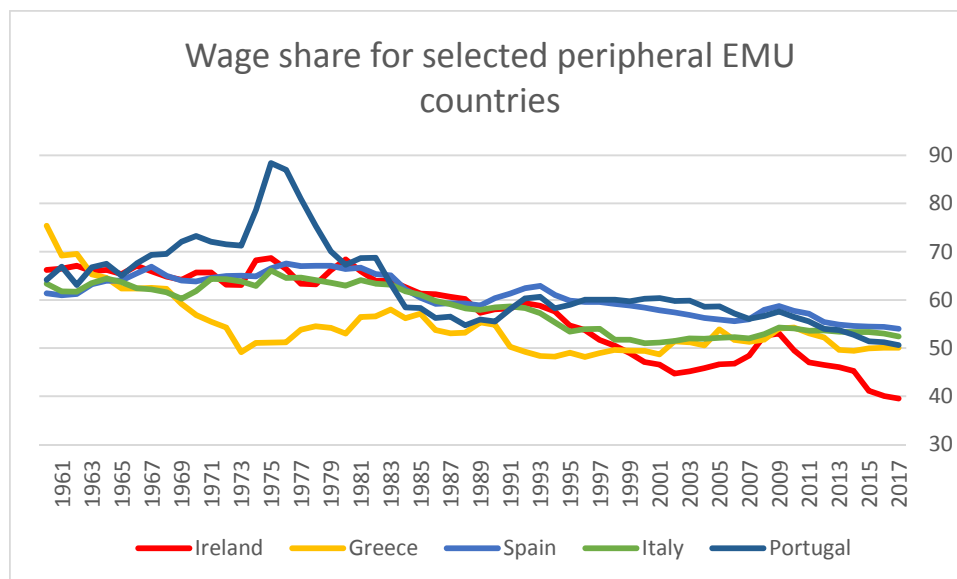
Source: AMECO, own calculations.

Figure 8: Compensation per employee



Source: AMECO, own calculations.

Figure 9: Wage share for selected peripheral EMU countries



Source: AMECO, data accessed in July 2016

## 6. Conclusion

The recent astonishingly real GDP growth rates for Ireland are bloated by new EU accounting rules, and the general problem of an economy characterized by a high presence of foreign owned affiliates of multinational companies. In this case, GDP is not an adequate indicator for domestic citizens income levels. GNI should be used instead. Nevertheless, even this figure may portray a too optimistic picture of national income.

Yet, even besides an over-recording of domestic activity, income levels, and trade activity, Ireland seems to have managed the crisis better than other peripheral EMU countries. Not only GDP, also GNI and employment (in persons), improved quicker than in other crisis countries. The question is if this improvement is also beneficial to Irish citizens. It seems to have come at the cost of still suppressed wage growth, leading to an impressive decrease in the wage share. This results holds when measuring the wage share based on GDP as well as GNI.

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