László Török

Ireland before and after the Crisis

Authoritative but Hazardous Structural Reforms in Financial Crisis Management

Summary: Owing to the significant international exposure of its economy, Ireland was one of the countries suffering the greatest losses stemming from the 2007–2008 financial crisis. After a brief presentation of the nature of the subprime crisis, the study describes the economic conditions of the country before the crisis and the impact of the crisis on the Irish economy. This part of the study provides a detailed analysis of the changes triggered by the crisis in the national budget, in sovereign debt and in tax centralisation. The chapter to follow gives an insight into the economic cornerstones and instruments of the Irish contingency measures before presenting an overview of the results of the structural reforms. The study concludes that Ireland's resolute efforts to restore the budget and to increase the flexibility of the economic structure played a key role in the success of crisis management and in conjunction, these measures resulted in regaining the confidence of the international capital market. In addition, it should not be overlooked that the country recognised the need for and did not hesitate to take recourse to external help in its crisis management. Finally, it is pointed out in the paper that today Ireland is in a position where the economy is well prepared to commence converging to the vanguard of European Union Member States. However, the Irish society will have to pay a steep price for the opportunity of this economic convergence in future, and should also reckon with a number of risk factors in this process.

KEYWORDS: Keywords: Ireland, crisis, structural reform, fiscal policy, convergence

JEL-codes: B30, E62, G01

IRELAND'S ECONOMIC POSITION BEFORE THE SUBPRIME¹

Discussed later in the paper, the drastic surge in budget deficit and public debt shed light on the structural deficiencies of the Irish economy that emanated from the pre-crisis data, facts and processes described below (*Artner*, 2009). In the years preceding the crisis, Ireland boasted growth of around 5 per

E-mail address: methodic@t-online.hu

cent, a stable budget and a public debt that was unprecedentedly low by European Union standards. Exports and imports amounted to 80 and 70 per cent of GDP, respectively, with the United Kingdom (accounting for 19 per cent and 33 per cent of exports and imports, respectively) and the USA (with a respective 18 per cent and 11 per cent share in exports and imports) being the largest trading partners of Ireland. Ireland relied extremely heavily on foreign direct investment during this period. In 2007 the working capital

residing in Ireland amounted to USD 187 billion (representing 74 per cent of GDP), but there was a year (2003) when it exceeded the staggering amount of USD 220 billion (i.e. 140 per cent of GDP). Since the end of the 1990s annual FDI inflows had accounted for 40-110 per cent of gross investment. It aptly illustrates the international exposure of the country that its total external debt was EUR 1.5 trillion at the end of 2007 and EUR 1.7 trillion at the end of 2008 (8-9 times the GDP level), of which public debt amounted to EUR 30 billion and EUR 51 billion, respectively. While public debt-to-GDP had declined rapidly in the previous decade (standing at 25 per cent in 2007), in 2008 it surged to 41 per cent. Until 2008, inflation had stood at 3 per cent and until the end of 2007 unemployment had stayed consistently below 5 per cent. In 2008, however, annual unemployment rose to 6.4 per cent and by February 2009 it reached 10.4 per cent. Within the euro area it was Ireland that was first - and perhaps most severely - hit by the crisis. Growth ground to a halt as early as the second quarter of 2008 and in September 2008 recession set in. Even at the end of the 1990s it was apparent that numerous factors posed risks to the Irish economy, including a creditbased development path, the overheatedness of the real estate market, an extremely strong dependence on FDI, labour market and social tensions, social polarisation, problems of the tax regime, the drying up of EU funds and its consequences, etc. It was owing to these factors that, according to the National Competitiveness Council, the international competitiveness of the Irish economy fell by 32 per cent between 2000 and 2008. Besides a wage increase in excess of any other international competitor, the appreciation of the euro - that was largely independent of the Irish economy - played a special part in this process.2

In addition, the prematurely forced accession of Ireland to the euro area significantly contributed to the abovementioned 32 per cent fall in Ireland's international competitiveness. Ireland had been a member of the EMU (Economic and Monetary Union) since the establishment of the euro area in 1999. It is also true to Ireland that although the adoption of the single currency effectively restricts the sovereignty of individual Member States in terms of economic policy and limits the scope of possible measures, it is far from eliminating them altogether. Upon accession, the lack of an independent monetary policy and the significantly diminished independence of fiscal policy represented the greatest threats. Another risk to consider is the fact that without the option to depreciate its own legal tender, the acceding country's competitiveness and balance of payments may deteriorate easily, and the emergence of asymmetric shocks may give rise to severe indebtedness. Eventually, this proved to be the case in Ireland. Ireland's accession to the EMU posed risks to the country and exacerbated its divergence in economic growth relative to more developed Member States in two areas. The first one is economies of scale (Nagy, 1999), which benefits large corporations in countries with more extended markets. Since large-scale production entails reduced costs, such plants may crowd out smaller Irish companies from the market, which means that easier access to the European market may just be an empty promise to small, poorer countries such as Ireland. It can be also assumed that increased hiring at export firms cannot offset the layoffs at import substituting companies. The second risk is that the liberalisation of trading with less developed countries may put a downward pressure on the wages of unskilled workers and/or increase unemployment among them. This adverse effect is presumably even stronger in poorer Member States that have a higher share of unskilled workers.

This argument was confirmed by the fact that unemployment tended to be higher and job creation programmes proved to be less effective in underdeveloped countries – including Ireland – compared to a large number of more developed economies. However, it is difficult to determine the extent to which trade liberalisation and inflexible economic adjustment or the rigidity of wages and working conditions and mandatory hiring and firing regulations contributed to the high unemployment rate.

By contrast, it was clear that the liberalisation did not exert a materially negative impact on the wage level of unskilled workers. The increase in income disparities is more attributable to the steep rise in high incomes than to the downward pressure on lower wages. It is also a part of the situation analysis of the Irish economy that poor innovation, scant research & development, the circumscribed and unequal rise in living standards, the decelerating growth in employment after 2001, growing wage level disparities and still existing poverty continued to be serious problems at the turn of the millennium. The latter is the consequence of the fact that economic growth had been placed above social development, whereby a privileged few benefited from the spectacular growth while the marginalisation of others continued (Kirby, 2004) and social inequalities widened significantly. Parallel to this, a peculiar monetary policy situation also contributed to the future deterioration of the real estate market. Specifically, EMU membership may have facilitated the emergence and further build-up of the real estate market bubble as, in order to meet the Maastricht convergence criteria³, Ireland had commenced a drastic interest rate reduction: from 6.19 per cent in September 1998, interest rates had been cut to 3 per cent by December. As a result, the conditions on mortgage loans became extremely favourable, which eventually rendered the real estate market situation unsustainable: indeed,

in order to halt the surge in real estate prices the Central Bank of Ireland should have raised the key policy rate in the first place (*Memery*, 2001). Based on the above we may conclude that the Irish "twin crises" (i.e. the recession of the banking sector and the budget crisis) originated from the socio-economic processes of the previous years and from Ireland's strong dependence on the global economy.

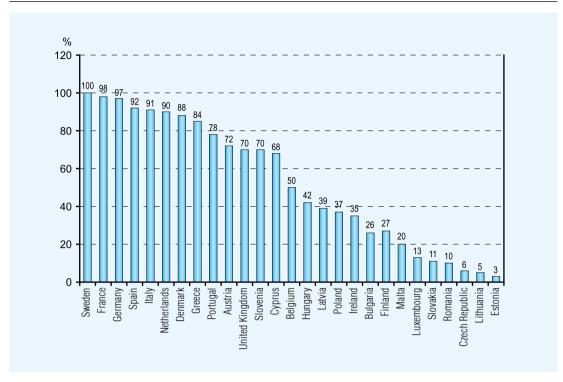
Commercial banks played a key role in the unfolding of the Irish twin crises. According to the Central Statistics Office (2009), between 1997 and 2008 Irish banks disbursed loans to corporations and households - mainly mortgage credit - twice the amount of GDP, an amount that significantly exceeds the European average. In addition, Irish tax laws allowed real estate developers to deduct their costs from their taxes if their developments targeted downtrodden, neglected metropolitan areas. It could be assumed of some of these projects from the start that they would prove to be underutilised in the end. The real estate lending of commercial banks rendered the system extremely vulnerable; therefore, the collapse of the real estate market busted the construction industry first and then the commercial banking sector as a whole. Three large Irish banks the Anglo Irish Bank, Allied Irish Banks and the Bank of Ireland - reported bankruptcy. According to estimates, the costs of the crisis – including the bailouts⁴ – consumed more than half of Ireland's GDP between 2008 and 2012, while sovereign debt approached 120 per cent of GDP (see Figure 2 and Figure 4).

THE ROLE OF THE BANKING SECTOR IN THE UNFOLDING OF THE REAL ESTATE MARKET CRISIS

The Irish commercial banking system had a decisive role in the dynamic growth of the pre-crisis period and in the evolution of the subsequent crisis. The elements of procyclicality can be clearly identified in the Irish financial intermediary system during this period. This means that the Irish banking sector was engaged in excessive lending activity during the boom preceding the crisis, which supported economic growth but also led to the accumulation of significant risks. The unhealthy lending activity was intensified further by the fact that improving growth prospects continuously boosted the demand for credit both among households and corporations. In response, the banking sector eased lending conditions and catered to the increasing (primarily real estate market) demand with abandon. Below the contradictory role of the Irish commercial banking sector is discussed based on Kelly (2010). Irish GNP (gross national product) rose by 5-15 per cent annually between 1991 and 2006 while per capita GNP doubled. The economic development prompted a real estate market boom: Between 1997 and 2008, bank lending to households and corporations grew to 200 per cent of national income, double the euro area average. By 2007, new loans to real estate developers and the construction industry amounted to EUR 96.2 billion (compared to EUR 5.5 billion in 1999), which translates into a seventeen-fold growth. Between 2000 and 2006 residential property prices doubled and continued to rise until 2008. Fuelled by a vast number of Eastern-European immigrants - who provided cheap labour in the short run and created demand for housing in the long run -, bank lending particularly soared after 2004. As a result of the crisis, Irish real estate prices fell by more than 50 per cent during the two years of the crisis - a very rare occurrence in developed market economies. Parallel to the descent in house prices and the increasing number of defaulted payments, the banking sector started to collapse. According to the governor of the central bank at the

time, total losses between 2008 and 2012 may have reached EUR 85 billion, i.e. 55 per cent of GDP. The losses of the banking sector, therefore, were borne almost entirely by the government budget. Was there any alternative to financing bank losses from the central budget? Theoretically, the answer to this question is yes. Instead of nationalising the banks and providing state financing, the government could have withdrawn the state guarantee from banks and, instead of fully repaying the (foreign and resident) creditors (bondholders) of the banks, it could have shared the losses with them through a partial debt for equity swap. In that case creditors can only get their money back if the bank's assets exceed its liabilities. The government could have justified this move by stating that banks had withheld material information before the acquisition, i.e. nationalisation. Alternatively, the government could have chosen to split the banks into chunks as soon as the problems surfaced, separating the valuable retail business lines from the loss-producing portfolio (e.g. household mortgages and loans to property developers). The good bank - bad bank separation would have resolved the situation, preventing the government from absorbing unpredictable amounts of losses year after year. Although the separation was eventually implemented, it was too little too late: it took place only in mid-2010 and was limited to housing loans. Why did the government neglect to choose the quick and resolute solution to straighten out the banking sector? It is difficult to give an exact, research-supported answer to this question. This would require an intimate knowledge of the country's internal and economic policy network at the time, along with the relationship system between the stakeholders. What is public knowledge from the information conveyed by the media, is that the economy of Ireland is small by international standards, with close, personal

PERCENTAGE OF RESIDENT BANKS IN EU BANKING SECTORS BASED ON CONSOLIDATED DATA, 2012



Source: National Bank of Hungary (2013)

relationships between the managements of the largest banks and medium-sized banks specialised in the real estate market, and major local entrepreneurs and property developers. Since the ruling party nurtured a famously good relationship with both groups it should not come as a surprise that the government chose to rescue the banks and thus, some of the business people. Another relevant factor in the bailing out of the banking sector was the overwhelming presence of foreign-owned banks⁵ in the Irish banking sector, in which they represented a 65 per cent share in 2012 compared to the 35 per cent share of domestic banks. This two-thirds majority of foreign ownership is 1.5 times the European Union average (see Figure 1). There was an especially strong dependence on Germany, as the Irish

banking sector (similar to that of Greece) owed 90 per cent of the annual Irish GNP to German investors in 2010.

The prominence of foreign-owned banks in the Irish national economy carried two-sided risks. On the one hand, it increased Ireland's risk of contagion from the parent bank's country ("contagion channel"). This scenario may pose a threat to the stability of individual countries if the "infected" bank has a significant weight in the market of its country, and therefore its failure may trigger a turmoil in the financial markets of that country, and put a considerable financial burden on real economy participants. On the other hand, due to the implicit dual responsibility, foreign bank ownership may distort incentives both for the host country's – Ireland's – supervision and

for the parent bank's supervisory authority, which is more likely to lead to excessive supervisory "forbearance" in respect of certain harmful bank conducts (*Fáykiss et al.*, 2014).

IMPACT OF THE CRISIS ON THE IRISH ECONOMY

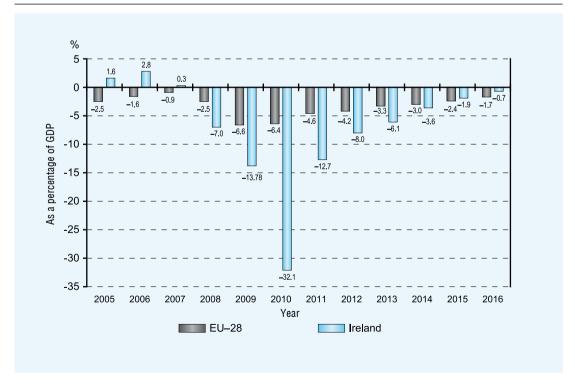
The outbreak of the global financial crisis in 2007–2008 hit individual national economies in various states, and affected the respective economies differently. Perhaps the most devastating effect of the crisis was that it undermined confidence in the invincibility of money markets. Indeed, the most important symptom of the confidence crisis prompted by the subprime crisis was the fact that bank

creditors – who had previously offered ample liquidity – were no longer willing to lend to anyone other than to those perceived as the safest economic partners or, even if they extended a loan, they demanded an excessive risk premium from the borrower. Similar to other economies, Ireland could not remain unscathed from this negative effect. Due to the country's high economic and organisational exposure, the economy of Ireland suffered the most damaging manifestation of the financial crisis. This is aptly illustrated by *Figure 2*.

The Figure indicates clearly that the surplus of Ireland's general government between 2005 and 2007 turned into a deficit from 2008, with a sharp rise in the budget deficit until 2010. Based on a univariate time series analysis⁶, between 2005 and 2010 deficit grew by

Figure 2

BUDGET BALANCE OF THE EU-28 AND IRELAND 2005–2016



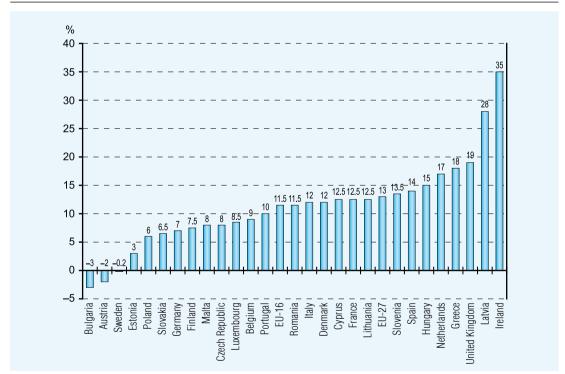
Source: HCSO (2017)

more than 8 per cent on average annually. By 2009 the budget deficit exceeded 14 per cent of GDP, prompting the commencement of an excessive deficit procedure against Ireland.7 Ireland's critical fiscal situation is underpinned by the theretofore unprecedented, 32.1 per cent general government deficit8 recorded in 2010, which was caused predominantly by the costs associated with the consolidation of the losses accumulated by the banking sector. As international money markets froze over and banks were unable to refinance their shortterm loans, immediate government intervention was needed to rescue the financial system. The instruments included an unlimited guarantee covering bank deposits, the redemption of which led to the swift recapitalisation and then nationalisation of numerous banks. According to estimates these steps cost EUR 64 billion, accounting for 40 per cent of GDP. The decline in the revenue side of the budget and the surge in expenditures combined with the costs of the bank recapitalisation led to the abovementioned, unprecedented 32.1 per cent deficit in 2010. (*Győrffy,* 2015).

Data on *Figure 3* reveal that gross sovereign debt declined in three Member States, increased by 13 per cent in the EU–27 and surged drastically (35 per cent) in Ireland. This situation made Ireland one of the nerve centres of the European debt crisis. The country hit the wall in financing its public debt; its credit rating was downgraded by credit agencies to junk status and the spread on Irish credit default swaps (CDS)⁹ jumped to 433 basis points (*Market Watch*, 2010). With this,

Figure 3

INCREASE IN GOVERNMENT DEBT IN THE EU-27 AND MEMBER STATES AS A PERCENTAGE OF GDP (2007 Q3 – 2009 Q3)



Source: Lejour et al. (2010, p. 2)

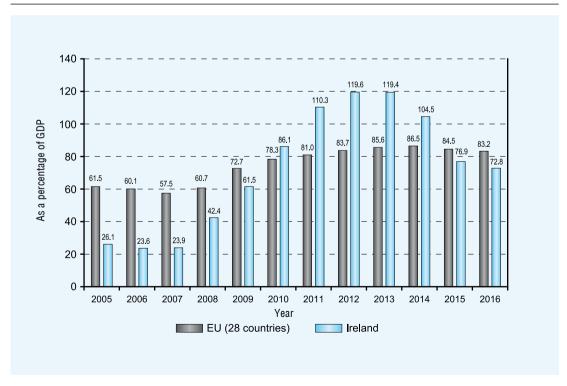
Ireland joined the group of countries that were perceived high-risk, based on the risks surrounding the financeability of their general government. This meant that the risk of the country, i.e. the total risk elements associated with it increased significantly, as is the case with any country whose resident economic participant/ sovereign debtor (in this case, the Irish government) is either unable to meet its payment obligations toward international institutions or another country's government/resident economic participant, or it needs to supplement its own funds (typically by taking out new loans) to be able to meet its obligations. The procyclical behaviour of international money markets was an important contributor to the aggressive increase in the financing burdens of Irish public debt as

it forced the already distressed Irish general government to cope with escalating expenses in an environment of continuously rising interest rates. As illustrated by *Figure 4*, parallel to the soaring deficit of the government budget, gross sovereign debt also embarked on a strong upward shift.

By 2012, the gross sovereign debt of Ireland rose by more than 4.5 times (significantly surpassing the debt of even Greece, which stood at 159.6 per cent at the time but the growth dynamics of Greek public debt was less pronounced); its average annual growth approached 29 per cent. According to the 2010 report of the Irish Department of Finance, Ireland spent EUR 3.2 billion (2 per cent of GDP) in 2009 and EUR 4.8 billion in 2010 on servicing its debt. As shown by the target fig-

Figure 4

GENERAL GOVERNMENT DEBT OF THE EU-28 AND IRELAND, 2005–2016



Source: Eurostat (2018)

ures of the renewed stabilisation programme, the debt interest burden was EUR 5.2 billion in 2011 and over EUR 9 billion in 2015. In 2011, Ireland spent more than 3.8 per cent of GDP and 15 per cent of its tax revenues on interest payments, and by 2015 these values rose to 6.2 per cent and 21 per cent, respectively (*DoF*, 2011). Interests and instalments, therefore, weighed increasingly heavily on the general government, and the country inexorably drifted to a state that pointed towards its inability to finance its debts.¹⁰

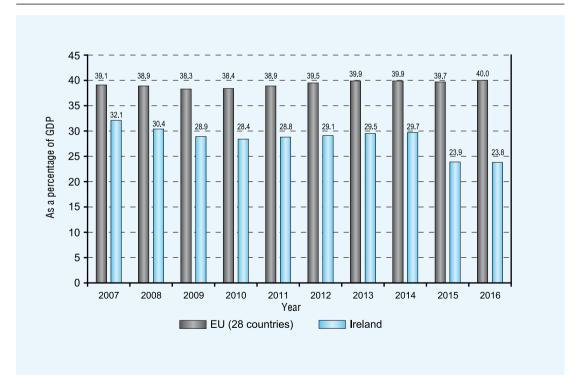
In an effort to sustain its solvency, in June 2012 Ireland ratified (through a referendum) the Fiscal Compact proposed by the European Union and pushed primarily by Germany. Ireland's potential rejection of the treaty would certainly have had a significant impact on the

management of the European (including the Irish) debt crisis. In that case, Ireland would not have been able to benefit from the financial aid provided under the euro area crisis management programme, the European Stability Mechanism (ESM). Signing the Fiscal Compact meant that Ireland could continue to count on the EU's financial support in financing its government debt. As shown by *Figure 5*, the tax centralisation¹¹ of the Irish general government was considerably restructured by the financial crisis.

The data of *Figure 5* demonstrate the unfolding of an unusual trend in Ireland's fiscal finances. Firstly, the relatively low Irish tax burden stands out in comparison to the average tax burden registered in the EU–28, which is also true in comparison to the data

Figure 5

TAX CENTRALISATION IN THE EU-28 AND IRELAND AS A PERCENTAGE OF GDP, 2007–2016



Source: Eurostat (2017)

of OECD countries.¹² With an average value of 31.6 per cent, the tax centralisation value is surprisingly low in the review period - 10 percentage points lower than the EU-28 average. In Ireland, in 2016 the tax-to-GDP ratio declined to 23.8 per cent from 23.9 per cent. At 32.1 per cent, the greatest tax centralisation ratio was recorded in 2007 in the review period. It is informative to compare this value to those of EU Member States. Typically, the ratio was around 40 per cent in the EU-28; it closed 2016 at 40 per cent exactly. The tax-to-GDP ratio of the EU-28 is also high in comparison to OECD members. From 2000, total tax burden showed a downward trend across the EU, but it typically lasted for a few years only. Efforts to push down the ratio gradually started to lose steam: while tax rates tended to fall sharply in 2001, in subsequent years the dynamics of this trend decelerated, then came to a halt overall in 2005 before embarking on a slow hike again. Cyclical factors may also have contributed to this change: during the years following the turn of the millennium, growth in the EU decelerated, which also reduced tax revenues. From 2004, economic growth started to accelerate once again. A decisive factor in this process was the fact that high public debts and general government deficits had to be curbed in a number of Member States, which rendered the reduction of tax rates even more difficult, if not impossible. A high tax centralisation average does not necessarily mean that the tax burden is high in all EU Member States. Member States joining the European Union in 2004 and 2007 typically registered lower tax-to-GDP ratios compared to "old" Member States (HCSO, 2010). According to the indicator, the tax-to-GDP ratio declined in almost all Member States of the EU-28 after the turn of the millennium, and reached its trough (38.3 per cent) in 2004. This moderation came to a halt in the subsequent period and movements in opposing di-

rections were detectable: some Member States experienced an increase, while others observed a decline. The slow but consistent increase in the tax centralisation value of EU Member States means that the tax-to-GDP ratio of the EU exceeds the corresponding values of USA and Japan - the EU's greatest rivals in the global competition) by 12-13 per cent (Pitti, 2008). However, Ireland's tax-to-GDP ratio does not deviate from these values in the review period. In this regard, primarily because of the relatively low tax rates, the country's investment stimulating potential is significant. The Irish economic policy has been striving to take advantage of this potential to this day in order to keep the headquarters of multinational corporations in Ireland or to encourage their relocation to the country.

CONSENSUS-BASED ECONOMIC POLICY INSTRUMENTS OF THE CONTINGENCY MEASURES

Giving an overview of crisis management mechanisms is far beyond the scope of this study; therefore, this chapter is limited only to the most relevant instruments. Besides the undertaking of financial guarantees, taking recourse to IMF support, etc. (which will be described later in the study), the Irish economic policy focused on boosting the international competitiveness of Irish corporations as one of the main instruments of recovering from the crisis. A key to achieving this goal is to reduce the labour share of GDP and in parallel, to increase profit share. This promised an upswing in exports and - in the absence of the possibility of a currency devaluation 13 raising Irish national labour to the level of the real exchange rate, which thus implied a sort of internal devaluation (Artner, 2011). The strategy is consistent with the macroeconomic model of competitiveness. Factor conditions represent one of the six elements of the model, which include all resources required for production (such as wages) and infrastructure as a whole (Porter, 1990). To raise national labour to the level of the real exchange rate, at the onset of the Irish crisis the government carried out a 6 per cent wage cut - while wages continued to grow in the rest of the EU -, reformed the pension system, and worked out a so-called career path model in employment. Although this definitely constituted a part of a long-term strategy, short-term monetary and fiscal interventions were also required to maintain the financing of public debt. For the purposes of this study, only the most relevant interventions are discussed below. Artner (2011) argues that first and foremost, it was the crisis of the banking sector that upset the Irish fiscal balance. In order to resolve this, in autumn 2008 the Irish government undertook a guarantee covering bank securities worth EUR 440 billion. In order to reorganise the four largest commercial banks of Ireland, in the course of 2009 and 2010 the government needed to borrow EUR 48 billion from money markets in the form of bond issues. Meanwhile, all of the banks required another capital injection, which necessitated the EUR 85 billion financing package at the end of 2010, and ultimately, additional austerity measures. By the end of 2010, the measures launched by the Irish government to improve the budget amounted to a total of EUR 14.6 billion. Announced in November 2010, two thirds of the next EUR 15 billion fiscal adjustment (accounting for 9.4 per cent of GDP) consisted of expenditure cuts and one third involved an increase of revenues. 40 per cent of the austerity package (EUR 6 billion) was carried over to 2011. As part of the austerity measures, the salaries and pensions of public sector employees were reduced, the retirement age was raised, and social benefits were curtailed. Since 2008, the budget was

adjusted by EUR 22 billion overall, two thirds of which consisted of expenditure cuts and one third comprised revenue increases. As a result of the retrenchment, between 2008 and 2011 unit labour costs decreased by more than 9 per cent, wages for new employees declined by 25 per cent, unemployment increased, inflation decelerated, and there was even a period of deflation between 2009 and 2011. Theoretically, austerity measures restrain domestic demand; thus service provider and production companies had no choice but to boost export performance which, however, demands further internal devaluation (price and wage cuts). It should not be overlooked that it was primarily the IMF that urged economies to impose fiscal austerity. In the case of a small and open economy such as Ireland it seems to be confirmed that institutional reforms combined with consolidation can indeed boost confidence, assuring international investors that the country is committed to discipline in its economic policy. Improving confidence, in turn, may lead to a positive spiral of lower interest rates and good performance. It is not true, therefore, that austerity automatically entails the deceleration of growth (Győrffy, 2006), and this was directly confirmed in relation to Ireland.

It is also remarkable that the economic policy actions were based on broad-based social consensus. On the one hand, the conclusion of the Irish programme can be considered a success: accomplishing the objectives of the programme and the change in market perception can rightly fill Irish politicians with a sense of satisfaction, especially since they survived an extremely severe crisis in office without having to face any serious disturbance. On the other hand, those shaping economic policy reached the strongest consensus on stimulating exports – a key factor in the Irish economy – and maintaining the taxes imposed on foreign corporations. As an unusual feature

of the Irish fiscal consolidation, the harsh adjustments were carried out without raising the corporate income tax, even though this is a fairly routine fiscal measure in similar situations. In Ireland low corporate income taxes are considered to be one of the main drivers of competitiveness that boosted the country's ability to attract capital to a great degree. In most countries of the world, a crisis of this magnitude would have prompted the political establishment to make certain that its burdens are not only borne by the society. Ireland, however, followed a different course. Political analysts agree that there is strong consensus between the political parties that the existing 12.5 per cent corporate tax rate should not be changed. They believe that even the slightest modification of the tax rate would send the wrong message to the population and to economic participants, and people understand and accept this as the livelihood of much of the population depends on multinational corporations located in Ireland. In light of this, even outsiders can understand why the general government collects 80 per cent of total tax revenues in the form of income and consumption taxes, while the tax revenues from corporations barely account for 10 per cent of the revenues (Portfolio, 2014).

EFFECTS OF THE IMPLEMENTED STRUCTURAL REFORMS

Today, the final results of Irish crisis management can be clearly assessed. For comparison purposes, data for 2016 are used as this is the information that is available in full. The recovery of the Irish economy from the crisis and its stable progress are particularly evident in comparison to the data of the rest of the EU Member states (Eurostat, 2017). For the first time since 2007, in 2016 none of the Member States reported a decline in GDP: 27 Member

States reported an increase, while Greek GDP stagnated. The highest growth rate (5.2 per cent) was registered by Ireland. An analysis of the data of the past decade reveals that the total performance of EU economies deteriorated in the wake of the global economic and financial crisis. Between 2006 and 2015, the average annual growth rate of the EU–28 and the euro area (EA–19) was 0.7 per cent and 0.5 per cent, respectively. According to this measure, between 2006 and 2016 the most robust growth (an annual average of 3.7 per cent) was achieved by Malta, followed by Poland (3.5 per cent) and Ireland¹⁴ (3.4 per cent) (Eurostat, 2017).

As regards the main aggregates of Irish GDP, we can witness a conspicuous structural change in the period of 2006-2016. Undoubtedly, the greatest transformation affected the segments of industry and construction. While the contribution of industry to Irish GDP was merely 23.6 per cent in 2006, by 2016 its contribution grew to 38.9 per cent, which is indicative of an extremely robust growth in this aggregate. The performance of Irish industry is mainly driven by the dynamic growth of exports. Data on industrial output is somewhat biased by the fact that, for tax purposes, multinational companies report their global profits in Ireland; therefore, some of the boom observed is pure fiction. The real, non-fictitious part of the Irish boom, in turn, can be largely attributed to the upswing in the two non-euro area countries that are considered to be Ireland's main export markets (the USA and the United Kingdom) and the resulting demand for exports. It is also important that a substantial part of Irish production is provided by export-oriented, multinational companies with practically no links to the local economy; the wages of such corporations did not appreciate; in other words, this industrial sector has somewhat extricated itself from the problem of the periphery.

Finally, it should not be overlooked that the Irish economy has the most flexible and most mobile labour force in Europe, which was another helpful factor in crisis management (*Horváth*, 2016).

As opposed to industry, construction slumped, falling to 2.6 per cent from 10.7 per cent recorded in 2006. None of the other eight aggregates exhibits such a magnitude of realignment. In comparison to the EU, between 2006 and 2016 industry's share in value added dropped by 0.9 percentage points to 19.3 per cent in the EU-28, while the decline was 1 per cent in construction, from 6.3 per cent to 5.3 per cent (Eurostat, 2017). There were pronounced differences among EU Member States in respect of investment intensity as well, which partly reflects the different phases of economic development and diverging growth dynamics in individual countries. In 2016, gross fixed capital formation stood at 19.7 per cent in the EU-28 as a percentage of GDP (at current prices). The highest values - amounting to 1.5 times the EU average were posted by Ireland (29.3 per cent). It is a particularly positive figure that, after Sweden (16.8 per cent), the highest share of corporate investment was recorded in Ireland (16.7 per cent) (expressed in relative value). An analysis of GDP within the EU-28 from the income side shows that the distribution between the production factors of income resulting from the production process was dominated by the compensation of employees. In 2016 this represented 47.5 per cent of GDP in the EU-28 at current prices. The smallest share (31.3 per cent) of the compensation of employees in GDP was posted in Ireland (Eurostat, 2017). The low share of Irish wages contributed significantly to the strong international competitiveness of the Irish economy and hence, to the post-crisis upswing in exports and to the consistently dynamic export activity in the years to follow. An analysis of the national budget and its data also confirms Ireland's recovery from the economic crisis. From 2013, the improving trend of the budget balance became permanent; in 2016 the deficit was only 0.7 per cent (see Figure 2) and by 2017 the primary balance is expected to turn into the positive domain and with that, structural deficit will disappear. The decline in gross sovereign debt is extremely demonstrative. From 119.6 per cent recorded in 2013, Ireland gradually pushed down this value and closed at 72.8 per cent in 2016.15 There was a sharp decline in the interest rates on the bonds financing public debt; the Irish economy was upgraded, and the country even succeeded in issuing government bonds with a maturity of 100 years, which is undoubtedly an iconic moment in the recent history of the Irish economy. The country reached a state of finance where public debt became sustainable, and any related interest expenses were considerably reduced on the expenditure side of the budget. By 2021, additional GDP growth is expected to reach 2.6 per cent (compared to the basis year), while the primary government balance and debt-to-GDP are expected to stand at 2.3 per cent and 61.2 per cent, respectively (NTMA, 2018).

Finally, the structural changes in tax centralisation should be analysed in more detail. The sharp decline of 4.1 percent between 2014 and 2015 during the period of recovery following the crisis is the result of the previously adopted - primarily austerity - measures. Compared to the rest of the countries, changing the revenues and expenditures in Ireland involved a greater fiscal transformation, reflecting the gravity of the Irish crisis relative to the others. The political leadership intended to implement a sustainable fiscal policy to enable the country to meet its payment obligations at all times (Burnside, 2005). With that in mind, the government introduced strict expenditure-side retrenchments in the budgetary area, including wage cuts for public sector employees and the reduction of social benefits. Tax, customs duty and contribution increases augmented general government revenues, while ad-hoc bank bailouts16 increased public sector spending. Labour market interventions primarily moderated general government expenditures. The main elements of the tax reform are presented according to the European Commission, 2014:36. The personal income tax rate was increased, but a tax allowance was provided for employees' health insurance contributions. At the same time, a number of tax reliefs were granted in the personal income tax regime in order to stimulate company foundations and investment.¹⁷ A tax exemption was created for people starting their own business who have been unemployed for at least 12 months. A reduced rate was applied for construction work (mainly housing) aimed at renovation; a tax credit was approved for research and development activities, and the upper bound of the VAT exemption of small and medium-sized enterprises was raised. The tax relief on electric and hybrid cars was extended, and the rate of the excise duty was raised. Residential properties were subjected to a new local tax rate of 0.18 per cent up to the value of EUR 1 million, rising to 0.25 per cent above this threshold. The fundamentals achieved through successful crisis management (first and foremost, the general government surplus, declining public debt and positive economic growth) point to Ireland's positive growth figures over the medium term; however, this is surrounded by risks emanating from several directions (Wolf et al., 2014). The evolution of the main aggregates is illustrated by Figure 6.

CONCLUSIONS

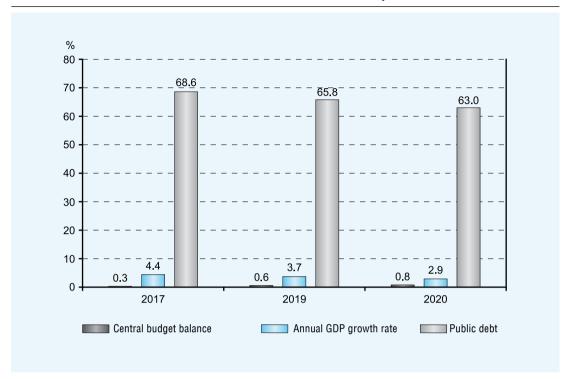
It can be said today that, driven by international pressure and assistance, Ireland has overcome the crisis and the structural transformation of the Irish economy has been com-

pleted. The country boasts adequate economic growth, a balanced general government and decreasing debt-to-GDP ratios while its access to funding from money markets is ensured over the long term. Ireland's resolute efforts to restore the budget played a key role in the success of crisis management, while the country also succeeded in improving the flexibility and resilience of its economic structure. The labour market flexibility of the country – resulting primarily from the implemented wage adjustments – enables it to stand its ground in the global competition. The other factor indispensable for overcoming the crisis was regaining the confidence of capital markets.

Driven by external pressures (primarily urged by the European Union and the IMF), Ireland commenced the consolidation of its budget, in exchange for which it requested financing assistance. At the same time, Irish policy-makers also demonstrated the appropriate and desirable commitment to the implementation of the consolidation. In combination, these factors were sufficient to enable Ireland to regain the confidence of the markets and convince capital market participants to continue financing the Irish economy and its public debt. This, however came with a price: the country needs to abide with limited financial independence. This will remain the case in the form of post-programme surveillance (PPS) until Ireland repays 75 per cent of the loans.

The case of Ireland also underpins that one of the prerequisites of successful financial crisis management is a country's ability to come up with an adequate macroeconomic situation analysis. The Irish leadership evaluated the crisis in accordance with its magnitude and significance and, in the interest of warding off or mitigating the effects of the crisis, it basically arrived at two decisive strategic conclu-

PROJECTION FOR THE CENTRAL BUDGET BALANCE, ANNUAL GDP GROWTH AND PUBLIC DEBT AS A PERCENTAGE OF GDP, 2018–2020



Source: Trading Economics (2018)

sions. Firstly, it became clear to policy-makers that the country would not be able to recover from the crisis on its own, without external assistance. They requested – and received – the assistance of the troika formed by the European Commission, the European Central Bank and the IMF. Secondly, they recognised that the country's leadership must reach a consensus in respect of the directions of development and the tools of the implementation, thereby protecting Ireland's economic policy from the volatility of the prevailing cycles.

The convergence of Ireland – as one of the "old" converging countries of the euro area – to the vanguard of the European Union was severely shattered by the crisis. ¹⁸ The implementation of the convergence process

(which is intended to ensure that there are no marked differences between per capita incomes compared to the leading economies of the EU) suffered a drastic blow in 2009 when this ratio fell by more than 11 per cent compared to 2007. By overcoming the crisis in the way and with the results presented in this study, Ireland entered a new phase in it convergence to the vanguards. It should be considered, however, that a country's growth rate does not only depend on the specific phase of convergence it entered but, to a large degree, it also depends on the distance of its economy's initial income position from the income level to which it aspires to converge. Since this distance, as measured by per capita incomes, is smaller in Ireland's case than the distance to be still covered during its

convergence to the EU's leading economies, the growth rate is expected to decelerate somewhat in the future.

5 By accepting the loans of the International Monetary Fund and of the European Central Bank along with the conditions of their disbursement, Ireland chose the traditional way of financial crisis management for restoring its economy. The consequences of the fiscal authority measures Ireland was expected to adopt in return weighed heavily on the Irish society - which it accepted practically without any resistance -, and Ireland must continue to bear this burden in the future as well. Until 2029, Ireland will only have to pay the substantial amounts of interests on the loans,19 but after that it will have to start repaying the loans (ESM, 2015) themselves, which will put a serious strain on

the national budget. Moreover, in my opinion, Ireland's ability to maintain the previously achieved positive market perception regarding its economy (including its ability to finance its public debt) is subject to two significant risk factors. Firstly, the risk posed by the fact that the non-performing portfolio in the Irish banking sector remains to be high even after tackling the crisis should not be neglected. Secondly, it is an even greater threat that the already high international exposure of the country's economy continued to grow further after the crisis. Consequently, Ireland has become even more exposed to the volatility of global business cycles. In case of a drop in GDP triggered by a potential recession, Ireland's ability to service its debts under the existing conditions would be jeopardised, and may generate another financing crisis in Ireland.

Notes

- The adjective *subprime* has various definitions. In the context of lending, the subprime adjective may refer not only to borrowers' quality rating but also to a debtor's credit rating, to the creditor itself, to the specificity of a mortgage product or to the way in which the product has been securitised. There is vast economic literature on the reasons and consequences of the 2007 financial crisis. For the purposes of this study, I would like to highlight three papers that offer perhaps the best summary on the subject. One of them is the often cited paper published by *Kenneth Rogoff* (2008), the second is a study by *Király et al.* (2008), and the third piece of literature is an analysis by *Móczár* (2010).
- ² It is a fact of economic history that the plummet of the euro's exchange rate against the US dollar came to a halt at the end of 2000. With heightening volatility a slow appreciation began, which accelerated significantly in 2002. One euro now

- corresponded to one dollar, and the strengthening of the currency still continued. It goes from the above that this exchange rate change cannot be explained by the improving economic performance of the euro area. It was not because the euro had become a better currency, but because the dollar's reputation had deteriorated in the international foreign currency markets (*Rácz*, 2003:547).
- ³ Convergence criteria refer to the conditions listed in Article 121 of the Treaty on the European Union (Maastricht Treaty). All EU Member States must meet these criteria in order to enter the third stage of the European Economic and Monetary Union and adopt the euro as their currency. As indicated by their name, the purpose of the convergence criteria that are inevitably required for the establishment of a Monetary Union is the stability of the economies of EU Member States and their convergence to one another.

- ⁴ In agreement with Móczár's (2010) note that the government had to take on the burden of bailing out the distressed banking sector reeling from the consequences of the crisis, we may note that in essence, this was the socialisation of private sector debt.
- The ECB (2010, p. 46) illustrates the phenomenon of foreign-owned banks gaining ground in Ireland. According to the paper, the total assets of the subsidiaries of credit institutions from EU countries rose to EUR 445 billion from EUR 235 billion in the period of 2005–2009, which corresponds to a 90 per cent increase. This ratio is only 42 per cent in the Member States of the EU–27. During the same period, in respect of third countries this value is EUR 79 and EUR 90 billion, respectively; accordingly, a 14 per cent increase was recorded in this segment, while a 2 per cent contraction was observed in the EU–27.
- ⁶ Based on the available statistical data, the dynamics of the changes equal the value of the time series averages calculated in accordance with $a=\sum y/n$, where y means total change in the period and n denotes the number of years in the period.
- ⁷ The EU's Stability and Growth Pact is a body of rules governing the coordination of EU countries' fiscal policies. It aims to safeguard sound public finances and has two arms. The preventive arm ensures EU countries' fiscal policy is conducted in a sustainable manner. The corrective arm lays down how countries should take action in the event that their public debt or budget deficit is considered excessive. The EDP requires the country in question to provide a plan of the corrective action and policies it will follow, as well as deadlines for their achievement. Euro area countries that do not follow up on the recommendations may be fined (*Eur-Lex*, 2018).
- ⁸ Without the budgetary aids extended to Irish commercial banks, the deficit amounted to 11.8 per cent (*SAGE*, 2011, 10).

- ⁹ CDS transactions involving sovereign bonds can be regarded as a form of insurance against a potential sovereign default. The price of such an insurance is the amount paid by the party buying protection to the seller of the protection during the term of the contract, expressed as a percentage of the insured face value (CDS spread). Owing to the CDS market's level of development, such quotes provide the most accurate view of the current value of the given issuer's risk premium. Obviously, everything is relative, and 433 basis points are still dwarfed by the Greek value of over 2,000 basis points registered in June 2011.
- 10 In macroeconomics, there is no exact rule as to the optimal level of a given national economy's debt ratio. According to the IMF, any level above 50 per cent should be considered dangerous; this value, however, is not supported by empirical research. The numerical proportion of 60 per cent specified in the Maastricht Treaty is the product of a conventional agreement; sort of a point of reference. Several examples can be cited to demonstrate that even a country with a debt ratio far above this value can realise balanced economic growth without encountering any problems in financing its debt from the market. Its economic policy, therefore, is driven by other priorities, such as the case in Germany, whose gross debt-to-GDP ratio is 68.1 per cent. The opposite can also be true: in Spain, for example, government debt-to-GDP amounted to exactly 60 per cent in 2010 when the country's initial financing problems surfaced and then escalated even further. We may conclude, then, that the 60 per cent level is clearly not optimal (Török, 2012).
- Frequently used in economic studies, tax centralisation is the simplest aggregate indicator measuring total tax revenues in proportion to GDP. The indicator is intended to measure the portion of GDP collected by the government in the form of taxes.
- ¹² In the period of 2000–2016, the tax-to-GDP ratio of OECD countries moved within the range of 32.3

per cent and 34.3 per cent, reaching its trough in 2009 and peaking in 2016 (*OECD*, 2017).

- ¹³ Ireland is a member of the euro area; consequently, it does not have the option to devaluate its own currency, although instigating the devaluation of a country's own legal tender undoubtedly provides a great deal of leeway to a government to boost economic activity, reduce unemployment, stimulate exports and restrain imports.
- ¹⁴ The Central Statistics Office of Ireland posted a 26.3 per cent increase in gross domestic product (GDP) in 2015; however, the spectacular growth reflected the modification of statistical growth-accounting rather than real economic processes. The jump in growth was primarily caused by the fact that entire corporate balance sheets had been reclassified, reported the Central Statistics Office. As a result, the Irish GDP statement now includes the total global profits of numerous companies relocated to Ireland for tax saving purposes. Originally, 2015 GDP growth was estimated to be 7.8 per cent. This demonstrates that the Irish economy clearly stepped on a growth path with continuously increasing tax revenues, while unemployment had halved (7.8 per cent) since 2012 (The Guardian, 2016).
- ¹⁵ The real factors of the accounts behind the outstanding economic performance data of Ireland have not been unknown to the professional community. First and foremost, favourable taxation conditions prompted numerous multinational corporations to collect their revenues from foreign subsidiaries and report their income in Ireland,

augmenting Ireland's tax receipt. In this way, they can save a substantial amount in taxes and not incidentally, they also generate a drastic upsurge in Irish GDP. In reality, the Irish national economy – in other words, the totality of goods produced by Irish citizens (gross national income, GNI) may be one third less than the official GDP figure (*Blomberg*, 2016).

- Owing to the impairment of corporate loans in Ireland, major bank bailouts were required, which sharply increased the debt-to-GDP ratio of the country (Kiss – Szilágyi, 2014).
- ¹⁷ The differentiated personal income tax refunds were aimed at specific economic policy goals (in particular, the stimulation of employment and investment); however, changes in the Irish personal income tax regime pointed to an increase in the tax burden on personal incomes overall. While the average tax burden stood at 14 per cent in 2008 the year preceding the crisis –, by 2014 this rate rose to 20 per cent (*Healy*, 2016).
- ¹⁸ From 8.3 per cent in 1998 (the highest value among "old" converging countries), the potential growth rate of Ireland dropped below 4 per cent by 2008. It was only in 2014 when Ireland's per capita GDP reached its pre-crisis value of EUR 41 thousand per person, whereas the country had already achieved this figure as early as 2007 (HCSO, 2018).
- ¹⁹ During the 2010–2020 period alone, Ireland is required to pay EUR 4.44 billion in interest expenses (*Gros*, 2016)

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