ВНУТРЕННЯЯ ДЕВАЛЬВАЦИЯ И ЕЕ МАКРОЭКОНОМИЧЕСКИЕ ПОСЛЕДСТВИЯ НА ГРАНИЦАХ ЕС – СРАВНЕНИЕ ПОЛОЖЕНИЯ ИБЕРИЙСКИХ И БАЛТИЙСКИХ СТРАН[1]

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Мировой финансовый кризис и кризис евро оказали сильное негативное влияние на европейскую экономику и выявили ключевую проблему – убытки валютных союзов и систем с фиксированным обменным курсом от внешней девальвации. При отсутствии курсовой политики корректировка и восстановление конкурентоспособности могут происходить исключительно через процесс внутренней девальвации. Внутренняя девальвация – это болезненная перестройка: снижение заработной платы и уровня цен существенно вредит экономике, вызывая экономический спад, высокий уровень безработицы и постоянный дефицит бюджета. В данной статье изучен опыт пяти стран – Пиренейского полуострова и Балтии – по осуществлению внутренней девальвации. В иберийских странах кризис усугублялся, и процесс внутренней девальвации ухудшил экономическое положение стран, в то время как

[1] Статья подготовлена в рамках поддержанного Национальным научно-технологическим и инновационным управлением Венгрии научного проекта NKFIH K 115578 «Факторы, влияющие на показатели экспорта – сравнение трех европейских регионов».

в странах Балтии за быстрым спадом последовал резкий подъем. Простая эмпирическая оценка показывает, что внутренняя девальвация сработала в южном регионе, после чего и началось умеренное улучшение.

Ключевые слова: внутренняя девальвация, фискальная политика, рынок труда, иберийские и балтийские страны.

INTERNAL DEVALUATION AND ITS MACROECONOMIC CONSEQUENCES IN THE EU PERIPHERY – A COMPARISON OF THE IBERIAN AND BALTIC COUNTRIES

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The global financial crisis and the euro crisis had a severe negative impact on the European economy and highlighted a key problem – loss of external devaluation – for currency unions and fixed exchange rate regimes. In the absence of an exchange rate policy, the adjustment and the restoration of competitiveness can exclusively happen through the process of internal devaluation. Internal devaluation is a painful adjustment; the reduction of wages and prices has substantial harmful effects on the economy, such as sluggish economic growth or recession, high unemployment rate and

permanent budgetary deficit. In this article, we examine five countries – Iberian and Baltic – and show how internal devaluation was accomplished through their economies. In the case of Iberian countries, a prolonged crisis evolved and the process of internal devaluation exacerbated the economic situation, while in the Baltic countries a rapid downturn was followed by a sharp
recovery. A simple empirical assessment shows that internal devaluation worked in the southern periphery and a moderate improvement started.

Keywords: internal devaluation, fiscal policy, labour market, Iberian and Baltic Countries.

The global financial system has evolved into a fully integrated complex system where a financial crisis in a country can spread to any country in few months or just in some days (Kose et al. [2009]). This was the case when the global financial crisis erupted in 2008. Despite the fact when the Lehman Brothers, one of the largest United States (US) bank house, collapsed the leaders of the European Union (EU), officials and even economists thought that the crisis would affect only the US economy and financial markets. A few months later the crisis turned into reality in the EU, 2008 was the year of economic slowdown in the continent and in 2009 the Community sank into the largest recession since the Great Depression. Member states of the EU responded individually to the crisis and responses were built on classic fiscal adjustments augmented with country-specific goals an EU-wide coordinated crisis management was not necessary at that time.

A year later, in 2010, in most of the European countries started the recovery process, but the recession stuck in Greece, which created the so-called euro crisis. The unsustainability of the Greek budget led to of rapid loss of credibility and confidence in the market, and spread around the entire periphery of the euro zone, generation a series of crises among southern EU member states (Arghyrou–Tsoulakis [2010]). After Greece, Ireland and Portugal had resort to external help in order to restore their economy, and Spain in 2012 received a financial bailout package. Parallel to discretional reactions during the euro crisis, community responses appeared that aimed to solve crisis in three economic areas. Firstly, the European Central Bank used extraordinary and unconventional monetary policy tools (Cour-Thimann - Winkler [2013]). Secondly, the leaders of the EU strengthened the fiscal framework for the euro zone although it was established at intergovernmental level. And thirdly, the EU created the Banking Union. The euro crisis and the community-level crisis management created a harsh debate among professionals. The EU – following the

German-type prudentialism – pre-eminently wanted to address the fiscal problems of the periphery countries, while professional economists created a different crisis narrative considering the operation of the financial and banking system to a fundamental problem (Baldwin et al. [2015]).

The ECB applied an ultra-loose and accommodative monetary policy with the aim of supporting the periphery states of the euro zone. The ECB's intention was to provide the necessary time to jump-start the economies and restore their competitiveness. The fact that Portugal, Spain and the Baltic countries (Estonia, Latvia and Lithuania) used fixed exchange rate regimes fundamentally determined the path of their adjustments. In contrast to floating exchange rate regimes, the external devaluation as a "good old" adjustment method is not possible in fixed exchange rate regimes, accordingly these countries could not restore their competitiveness through currency devaluation. Thus internal devaluation remained the only method to apply. Internal devaluation is a very painful economic adjustment; the reduction of wages and prices has several negative economic consequences, particularly sluggish or negative growth. The decline in consumption and as well in production in general cause lower level of employment and higher unemployment rate. In this case further constrains on the economy are imposed by the governments introducing austerity measures in order to meet the EU's budget criteria, prohibited to exceed the 3 per cent threshold budget deficit in the long run. Finally, the economy finds itself in vicious cycle with a prolonged crisis period.[1]

Theoretical background

Fixed exchange rate systems have several advantages for the economy, however giving up the external adjustment mechanism is a huge loss. Portugal and Spain were founding members of the Economic and Monetary Union (EMU), the three Baltic states had applied fixed exchange rate regimes – currency boards – since the early 1990s till they joined the euro zone. These five countries lost the ability to use exchange rate policy as an adjustment tool.

The choice between fixed and flexible exchange rate regimes is not a classical dichotomy, many hybrid exchange rate systems exist (Frankel [1999]). Equilibrium currency price in the free-floating exchange rate regime is determined by market supply and demand; meanwhile the monetary authority does not intervene. Therefore, monetary policy and exchange rate policy are independent of each other, so monetary policy can help reaching economic goals such as solid economic growth and higher employment

[1] The problem of internal devaluation is further aggravated if we take into consideration the political sphere. As a consequence of negative economic developments, the government may easily lose political and social support as happened in the southern periphery which culminated in demonstrations and riots in several cities.

level. The main advantage of the floating system is that the nominal exchange rate via nominal depreciation can be used to tackle external shocks, so there is no of low possibility to currency crisis. Flexible exchange rate regimes can properly operate with smaller amount of foreign currency-denominated reserves. The disadvantage is the harmful economic impact of short-term currency volatility, and on the other hand the inflationary effects of the discretionary monetary policy bias. Strictly fixed exchange rate systems (currency union or currency board) apply legal or economic restrictions that eliminate the independent exchange rate policy. This system has many positive attributes that make it attractive: credibility, time-inconsistency problem is reduced or eliminated, promotes the disinflationary process, minor risk of a currency crisis. The transaction costs are low and the interest rate is stable. However, the most important disadvantage is that there is no possibility for nominal exchange adjustment, and there is no lender of last resort in the system. In addition, the emergence of large liquidity crisis is high and there are no clear exit strategies and abandoning the fixed exchange rate regime couples with a huge loss in credibility and confidence.

Prior the global financial crisis periphery countries of the euro area had enjoyed a high level of capital inflow and foreign investments and these countries easily could transform this into unsustainable economic growth. Internal demand and demand for import products were robust in this time. Due to capital and product inflow a huge trade and current account deficit accumulated in the southern periphery and the hidden public and private indebtedness had revealed when the crisis hit these economies. Another important consequence of the liquidity abundance is that periphery economies achieved high labour cost increased even higher than their productivity growth. Thus a serious competitive disadvantage built up in the periphery (de Grauwe [2012]). Solving this problem is not simple, since the exchange rate devaluation in the case of the analysed five countries is not possible, so to correct these imbalances they need to apply some kind of internal adjustment. This internal adjustment is the internal devaluation (Storm - Naastepad [2015], Gibson et al [2014], Alexiou–Nellis [2013] and Stockhammer–Sotiropolos [2012]). Internal devaluation basically aims restoring international competitiveness, the application is mainly conducted in fixed exchange rate regimes when there is no possibility of external devaluation due to the introduction of a common currency – like in Portugal and Spain – or there is consensus in the government not to abandon a fixed exchange rate regime – as in the Baltic States. Regarding the internal devaluation there is no fully acknowledged economic consensus how to implement the adjustment, is it necessary or avoidable. De la Torre et al. [2010] invokes the Argentine economic crisis and supports the possible opportunities arising from fiscal cuts and bailouts. Feldstein [2010] suggests temporary "euro holidays" for periphery countries with a solution that provides possibility to use external devaluation, and after they gained competitiveness re-join the EMU. But this process would risk the whole euro project and would cause disintegration. According to Felipe - Kumar [2011] the unit labour cost based approach is wrong, competitiveness depends on the products that a country exports and not on unit labour costs thus they discard the internal devaluation process. Darvas [2012], by contrast, argues that the internal devaluation can work, but it is a very painful and lengthy process.

The process of internal devaluation puts emphasis on reducing labour costs, which is generally the result of higher-than-covered labour cost growth; the wages rise in a higher pace than the productivity of workers. This process in the long-run leads to competitiveness disadvantages. Downward adjustment in the labour costs occurs when wages decrease or the government reduces the indirect costs of employment, which immediately eventuates in rising unemployment rate and diminishing employment, and finally it culminates in sluggish or negative economic growth. The decline in domestic consumption entails decline in the production, which further aggravates the growth problem. After two crisis – the global financial crisis and the euro crisis – the periphery countries' budgetary positions weakened and the process of internal devaluation cause a growing discrepancy between the revenue and expenditure side of the budget. Governments have no other option than introducing further austerity measures thus public disappointment intensifies. In the case of EU member countries restrictions are necessary due to the euro zone's macroeconomic framework – namely Stability and Growth Pact – which impose strict budgetary rules on economies. The negative economic impact of governments' austerity adds to the economic problems and a vicious cycle develops. Breaking out from this negative cycle takes several years, as you we see the case of Spain and Portugal.

To restore competitiveness (and the overall macro and micro-economic environment) requires a more complex and broader economic policy coordination which is the implementation of structural reforms. The term "structural reforms" covers several economic areas where reforms are necessary to be implemented, but there is no real consensus on comprehensive reform pack, individual or country-specific factors prevail. The IMF [2015] summaries the following measures to implement: financial sector reform, trade liberalization, institutional reform, infrastructure transformation, market deregulation, and innovation. By contrast, the OECD [2015] specifies four areas: product market reforms, labour market reforms, reforming the tax system and public administration, and reform of the legal environment.

Empirical assessment

Internal devaluation aims to restore competitiveness among periphery euro zone member states. Competitiveness caps have emerged due to the fact that labour costs rose in a higher pace than productivity increased. In order to analyse competitiveness we look at two economic indicators, the real-effective exchange rate (REER) and then we calculate difference between productivity and labour cost growth.

The real exchange rate is defined as the ratio of the price level abroad and the domestic price level, where the foreign price level is converted into domestic currency units via the current nominal exchange rate. REER is a measure of trade-weighted average exchange rate of a currency against a basket of currencies after adjusting for inflation differentials. The appreciation of the real exchange rate is an increase, while the reduction in depreciation. The real exchange rate is always changing, so when we examine a fixed exchange rate regime (even after the introduction of the single currency) we can use it. The REER is a basic indicator that is suitable to trace the evolution of the domestic economy's competitiveness, and Germany – the German REER is used as a benchmark. The appreciation of REER in Iberian countries cannot be considered as significant as it was in the Baltic States. Compared to Germany, Spain were strongly, while Portugal slightly overvalued before the crisis erupted, and after a few years of depreciation became highly undervalued. After the crisis REER in the Baltic States is permanently overvalued, in the case of Latvia REER was nearly 60 per cent overvalued in 2008. According to REER statistics, as Figure 1[1] depicts, mechanisms of internal adjustment are really strong in the Iberian countries, on the other side, Baltic countries tend to be substantially overvalued. In order to address competitiveness disadvantages we use a simple arithmetic: the difference between productivity increase and labour costs growth.

Competitiveness disadvantage = Productivity growth per worked hour –
– Labour cost growth per worked hour.

The indicator of competitiveness disadvantage means that if it is positive, then productivity grow faster than labour costs, and if it is negative labour costs grow in a higher pace than productivity. Before the crisis the Portugal and Spanish value were permanently negative, while in the Baltic countries it converged to zero from the positive range. During the post-crisis period, from 2010, we can observe the opposite, the Portugal and Spanish value is located in the positive range and the values of the Baltic countries are lower than zero. Thus we can conclude that a relative adjustment –

[1] Eurostat.

internal devaluation – occurred in the Iberian countries, and they started restoring their competitiveness (Figure 2[1]).

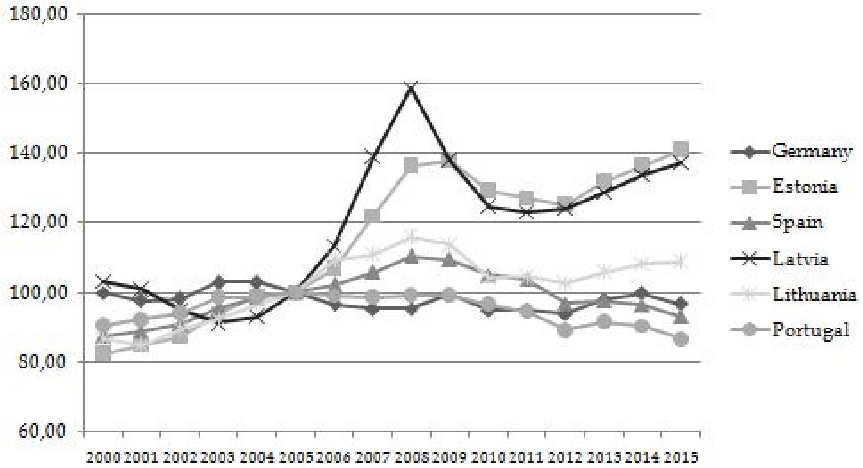

Fig. 1 Real effective exchange rates of the five countries compared to Germany between 2000 and 2015
(deflator: unit labour costs in the total economy – 37 trading partners, 2005 = 100)

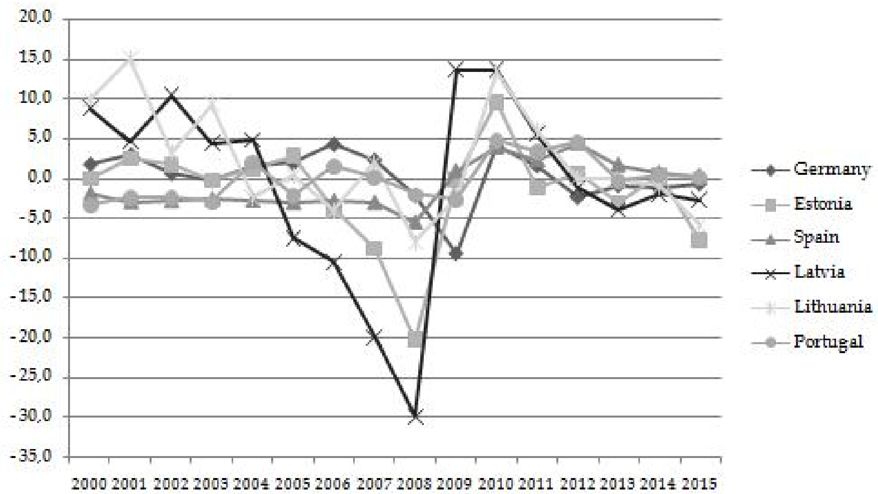

Fig. 2. Competitiveness disadvantage between 2000 and 2015

Aggregating competitiveness disadvantages, we can strengthen the aforementioned tendencies. We split the time period into a pre-crisis (between 2000 and 2007) and post-crisis period (between 2008 and 2015). Before the crisis Portugal and Spain reached a really high competitiveness

[1] Own estimation based on Eurostat data.

disadvantage, the aggregate value reached 10.1 and 21.7, respectively. After the crisis the Portugal and Spanish economy gained competitiveness with a value of 7.8 and 8.7, respectively, which means during the post-crisis period Portugal and Spanish labour cost increase were lower than productivity growth. The Baltic States depict a completely reversed trend.

Aggregate competitiveness disadvantage in the Iberian and Baltic countries and in Germany*

	2000–2007	2008–2015
Germany	15.1	–11.4
Estonia	–4.6	–21.9
Spain	–21.7	8.7
Latvia	-5.2	–7.2
Lithuania	33.0	1.8
Portugal	–10.1	7.8

Source: Own estimation based on Eurostat data

Country case studies–Comparison of fiscal and labour market effects

Iberian countries

The problem of the Spanish economy lies in the backwardness of the productivity. This can be solved with overall structural reforms mainly in the labour market which can increase the competitiveness of the country through the internal devaluation Armingeon–Baccaro [2012]). The implementation of a greater flexibility in the Spanish labour market has been pointed out by a number of authors (Neal–Garcia-Iglesias [2012]), which would mean a flexibility in the temporary employment and could change the privileged status of employees having a long-term contract. This is a kind of historical feature of the Spanish public administration.

The labour-market related measures of the Spanish fiscal adjustment were launched in 2010 when the salaries of the civil servants were decreased by 5 per cent and frozen for the following years. Also the indexing of the pensions was ceased (Godino–Molina [2011]). In 2011 the further planning of the reforms continued with the involvement of social partners where they came to an agreement on the reform of the pension system, the employment policy, the temporary employment, the collective bargaining and sectors of the economy. However the initial steps were far from effective and by 2011–

2012 the periphery of the Eurozone (Spain and Portugal as well) faced another recession.[1]

In 2012 De Guindos (minister of economy and competitiveness) pointed to three factors in connection with the Spanish structural reforms: the transformation of the collective bargaining system from the sectorial level central agreements to the individual companies which could establish the productivity; the simplification of the full-time employment contracts and the promotion of the part-time employment; and an increase of employment in the high-value added sectors. By 2013 the Spanish unemployment rate reached 25 per cent and the youth unemployment surpassed 50 per cent. Only in 2014 could we see a kind of decreasing trend of the unemployment rate. The labour market reforms and the high unemployment rate did not affect the average income in Spain rather there was an extended and stagnant trend without an effective correction between 2011 and 2014 which resulted in dramatically worse economic growth and social effects.

The Spanish economy started to improve in 2014 when the economic growth turned positive. The deficit of the current account was positive in 2013 which can be explained by the fact that the Spanish balance of trade deficit was 100 billion euros in 2007 and starting from 2012–2013 this deficit dropped by its quarter, to 25 billion euros owing to the dwindling domestic demand. The reform of the budget was far from successful, the adjustment of the public expenditures without the effective reform of the revenues did not decreased significantly the current expenditures instead it set them on a slow and decreasing trajectory. In 2015 the public deficit compared to GDP was over 5 per cent.

The Portuguese economy was very weak well before the financial and economic crisis, the average economic growth between 2000 and 2008 was 1 per cent, the unemployment rate was continuously increasing in this period, and the productivity was poor. In the period before the crisis the country could not establish a prudent budget policy which resulted in the continuous increase of the public deficit until the crisis. Reis [2013] explains the economic failure experienced after the accession to the Eurozone with financial globalisation and with the detrimental effects of a sudden influx of foreign capital in case of an economy which is financially vulnerable. The net stock of foreign capital compared to GDP increased by 78.5 per cent between 2000 and 2007 and in the year of 2007 it reached 165 billion euros

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[1] The recovery of the Portuguese and Spanish economies was discouraged by the ever returning Greek credit crisis which negatively affected every country in the periphery of the Eurozone every time it happened. In case of investment decisions the periphery of the Eurozone is treated as one region so the Greek and Portuguese crises and the bail-out lead to a significant decrease in the investors' confidence. This increased the CDS of every periphery country compared to the safe core region.

which equals to the Portuguese GDP. Santos–Fernandes [2015] mentions other structural problems in connection with the crisis-preceding period: backwardness in the education (tertiary and other trainings) in comparison with the core countries, a one-sided specialization of production mainly in those sectors of the economy which produce low or medium value added, the low level of high technology export and the large concentration of export. Beginning from 2010 the Portuguese government faced serious problems, the costs of financing the public debt increased twofold. In parallel, the public expenditures increased significantly, partly because of the automatic stabilizers, partly because of the promised increase in wages by the new government (Reis [2013]).

Owing to the recession, the first austerity measures were announced in 2010 and in 2011 the Portuguese government turned to the European Commission for help. The Portuguese government and the troika (European Commission, European Central Bank and the IMF) signed an agreement in May 2011 with the term of three years and the overall amount amounted to 78 billion euros. The fundamental aim of the programme was to increase the GDP growth by means of increasing productivity and employment (European Commission [2011]). The structural reforms in the programme can be clustered into three larger groups: reinforcing the flexibility in the factors of production, mainly in the labour force, sector specific reforms because of increasing the competitiveness and service quality and the reform of the conditions of the business environment namely introduction of changes in the fields of legal, administrative and competition law. From a budgetary point of view, the adjustment means the increasing the consumption taxes and their bases in the revenue side while in the expenditure side the reduction of the social benefits. The estimation for the size of the fiscal adjustments of the European Commission projected an increase of 5.7 per cent for 2011, 3.0 per cent for 2012 and 1.9 per cent for 2013.

According to Pedroso [2014] and Santos–Fernandes [2015] the more than 200 adjustment programme points in the mutual agreement were not effective and pushed Portugal in a deeper recession and were detrimental to several economic sectors. The budget deficit was far from the 3 per cent threshold, the public debt per GDP reached 130 per cent which is double than the 2007 value. The Portuguese economy gave a similar reaction to the three-year long austerity programme than the Spanish economy to the structural reforms as a slow and long-lasting happened without any kind of real adjustment. In 2014 the economy – after three years – reached positive growth again while the unemployment rate did not dropped to the 12 per cent level (2010). The IMF [2016] report which is a fourth revision acknowledges the success of the reforms: the base of the economic growth became the domestic consumption despite the fact that the mechanism of internal devaluation negatively affects the domestic consumption: the employment increased significantly while the unemployment rate dropped to below 12 per cent in 2016. The opposition between the Portuguese economists and the IMF is based on the different estimation of the success of the structural reforms (and internal devaluation). However the IMF acknowledges the fact that the Portuguese economic recovery stopped in 2016 despite the favourable tail winds in the world economy.

When we take into consideration the budgetary policy, the global financial crisis reached the economy of two Iberian countries in a different state. Spain complied with the rules of the Maastricht criteria even after the establishment of the Economic and Monetary Union and pursued a prudent fiscal policy until the outbreak of the global financial crisis. Starting from 2004 the public deficit evaporated and until 2007 the budget was positive. In 2007 there was a 5 per cent difference between the budget balances of the two countries so Portugal was in a much worse shape when the global financial crisis erupted. However, by 2009 the budget deficit of the two countries reached 10 per cent and the structural reforms could only decrease it but the countries were not capable of reaching the 3 per cent threshold by 2015 (Figure 3[1]).

On the other hand Portugal reached the 3 per cent threshold only three times in the period of 2000 and 2007, in 2004 and 2005 the deficit was more than 6 per cent in the country.

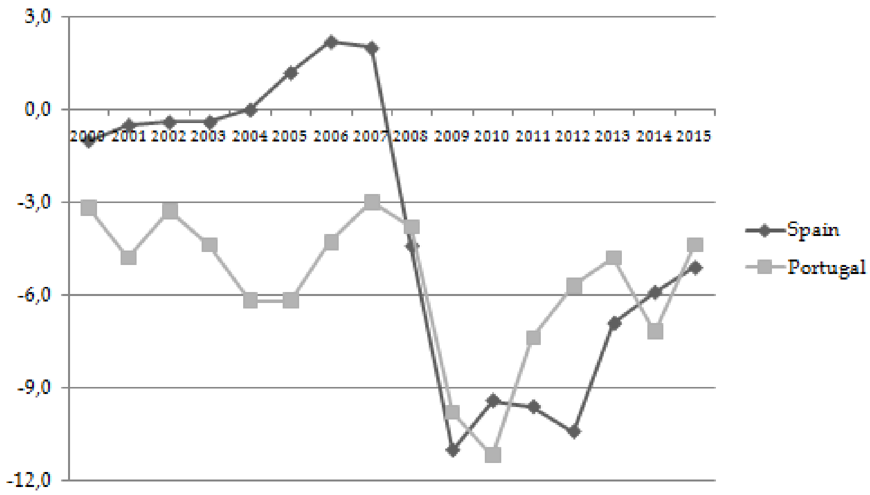

Fig. 3. Budget balance of the Iberian countries (2000–2015) (compared to GDP)

In the Iberian countries the answer to the global and financial crisis was fiscal policy adjustment. The lasting and unfavourable fiscal position

[1] Eurostat.

can be traced back to a number of factors: first of all, the longer lasing euro crisis which resulted in a loss of confidence in the periphery countries, secondly the pressure of subsequent adjustment stemming from the compulsory internal devaluation.

Baltic States

After the global financial crisis, they were the Baltic States which suffered from the largest recession in the European Union. According to Purfield–Rosenberg [2010] the huge real economy slump stemmed from two different springs. First of all, the domestic demand was frozen, the sales of durable goods simply stopped, the investment projects came to a halt because the demand and supply sides of the credit market withered. Secondly, the collapse of the export must be mentioned since the demand for export products abated from the main trading partners (northern countries and Russia) so the real effective exchange rate of the Baltic States appreciated because of the depreciation of the currencies of the main trading partners.

In the absence of external funding the Baltic states had just two options for solving the macroeconomic stability and external imbalances namely to reduce the budget expenditures and to give up the fixed exchange rate system (Medaiskyte–Klyvienė [2012]).

The three countries were committed to maintain the currency board as it served as an economy policy anchor in the way of accessing the Eurozone which have been enjoying a decade long economic and political support. So instead of a nominal devaluation, the three Baltic States opted for internal devaluation which is explained by Purfield–Rosenberg [2010] by four factors. Firstly, because of the euro denominated corporate and household credits the nominal devaluation would have destroyed the value and assets of the private sector which would have had a very negative effect on the financial system and the whole economy. Secondly, the nominal devaluation would have not resulted in appropriate benefit since the lack of suitable external demand the increase of the export competitiveness does not help the economy. Thirdly, the Baltic States are exceptionally resilient economies and countries; they weathered the 1998 Russian crisis and the economic transformation after the collapse of the Soviet Union. Finally, the fixed exchange rate system in the Baltic States has been the source of macroeconomic stability for about 20 years.

The internal devaluation of the Baltic States was done through fiscal adjustment which was supplemented by the adjustment of the nominal wages and by the fixing of the supervision of the financial system and by reshuffling of the balance sheets of the companies and households (Staehr [2013]).

There was much to be said for fiscal adjustment as the three Baltic States complied with the thresholds of Stability and Growth Agreement. The budget deficit of Latvia and Lithuania was close to zero and in Estonia the budget showed an average of 2 per cent surplus when comparing with GDP (Figure 4[1].)

The other building block of the favourable fiscal position was the low level of public debt compared to GDP, the Baltic States did not inherit the debt after the dissolution of the Soviet Union, the fixed exchange rate systems did not allow to stockpile a huge amount of public debt.

Fig. 4. Budget balance of Baltic States (2000–2015) (compared to GDP)

To sum up, the internal devaluation lead by fiscal adjustment had an appropriate background even if the unpopular measures were not supported by the people. As the result of the fiscal consolidation the Latvian and the Lithuanian budget deficit were around 9 per cent compared to GDP in 2009 (in Lithuania in 2011 as well) then by 2011–2012 the deficit level reached the expected 3 per cent.

The Estonian adjustment – compared to GDP – was around 5.5 per cent but the initial level in 2007 was a 3 per cent budget surplus. Friedrich–Reiljan [2015] compared the revenue and expenditure sides of the Baltic States during the crisis and raised the following questions. Why did Estonia outperform the two rivals? In case of crises, the fiscal policy strategy means the decrease of the revenue side of the budget and the increase of the expenditures.

Whereas the Estonian government aimed to increase and stabilize the budget revenues and this triggered a lot of measures: increase in the income,

[1] Eurostat.

consumption and turnover taxes, using the transfers of the state-owned companies, selling of the stocks of the Estonian telecommunication company, selling the carbon-dioxide quotas. The revenue side of the budget – compared to GDP – jumped from 37.1 per cent in 2008 to 43.8per cent in 2009 while in Latvia the increase was 1.5 per cent and in Lithuania it was 0.8 per cent.

In Estonia the reshuffling of the expenditure side was felt in a lot of fields: decrease of public employment, moderation of the public service, reform of the social expenditures and the decrease of defence expenditures. However the budget expenditures did not diminished significantly. In 2008 they were 39.7 per cent compared to GDP while in 2009 they were 44.7 per cent. In Latvia and Lithuania they increased by 4.5 and 7.0 per cent respectively (Friedrich–Reiljan [2015]).

To sum it up, the Baltic countries successfully cushioned the challenges of the global financial crisis, they did not give up their strictly fixed exchange rate systems but they chose internal devaluation instead through fiscal adjustment. Every Baltic countries became very vulnerable to the fluctuations of the world economic trends (asset bubble on the property market) so it was vital for them to pursue a prudent fiscal policy (creating fiscal reserves in case of Estonia).

One of the degrees of success can be the fact that Estonia joined the Eurozone in 2011 but Latvia and Lithuania have also became member countries of the monetary union since then.

Trends in the unemployment rate

Owing to the adjustments made at the time of the crisis, by 2010 the unemployment rate was hovering between 15 and 20 per cent in every country. The decrease in employment and the fast increase in the number of unemployed stand out at EU level as well, merely other periphery countries suffered from similar labour market adjustments.

After 2010 we can see a sharp contrast in the labour market trends of the countries in question. In case of Spain and Portugal the unemployment rate increased until 2013, before the favourable trend while in the case of Baltic countries we have seen an eye-catching decreasing trend since 2010 (Figure 5[1]).

The extended and more serious labour market problems – apart from country specific features – can be explained by the phenomenon of internal devaluation. In the stable decrease of growth the process of internal devaluation played a role which resulted in a vicious circle in the countries of the southern peripheries.

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[1] Eurostat.

So, in this article we analysed the process of internal devaluation in the European Union's periphery. The application of strictly fixed exchange rate regimes – currency unions or currency boards – has several advantages such as credibility, reduced or eliminated time-inconsistency problem and minor risk of currency crisis.

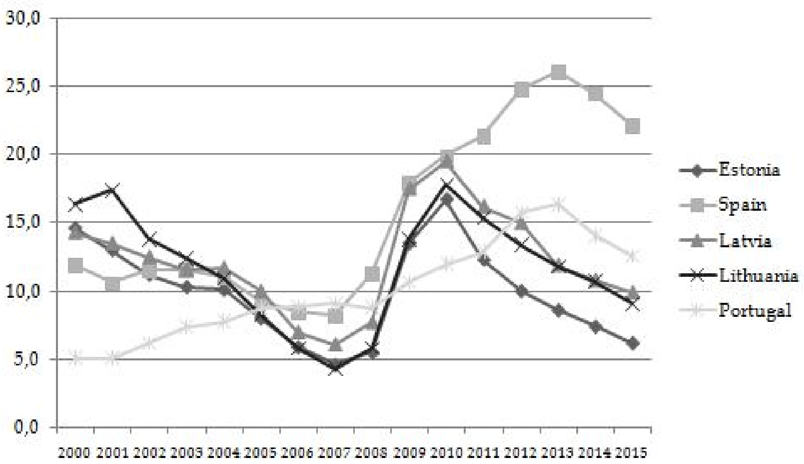

Fig. 5: Comparison of the trends in unemployment rates (2000–2015)

The global financial crisis and the European sovereign debt crisis 'euro crisis' revealed the most important problems of fixed exchange rate regimes, the lack of external adjustment mechanism and the missing lender of last resort. Adjustment can only happen through an internal process, which is the internal devaluation. Downward adjustment in the labour costs occurs when wages decrease which immediately eventuates in rising unemployment rate and diminishing employment, and finally it culminates in sluggish or negative economic growth. The decline in domestic consumption entails decline in the production, which further aggravates the growth problem. Governments have no other option than introducing further austerity measures thus public disappointment intensifies.

The negative economic impact of governments' austerity adds to the economic problems and a vicious cycle develops. Breaking out from this negative cycle takes several years. The necessity of internal devaluation embedded into a broader adjustment process, the implementation of structural reforms, caused a longer term crisis period in the southern periphery. Developments in the real-effective exchange rate and a simple arithmetic – calculating the difference between productivity growth and unit labour cost growth – show that Portugal and Spain somewhat restored their competitiveness. The Portugal and Spanish REER is clearly undervalued against the German REER and in the post-crisis period productivity growth has exceeded the increase in unit labour costs.

The analysis of budgetary position also reveals the difference between the two country groups. The Iberian countries are still struggling with the budgetary deficit to reach the 3% threshold, even though they implemented massive austerity measures in the last few years. In the case of Baltic States we observed a sharp improvement in the fiscal stance, since 2012 all the Baltic countries have meet the Maastricht criteria. Trends in unemployment rates underpin the prolonged crisis as a result of internal devaluation and structural reforms.

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