

INTERNAL DEVALUATION IN EUROZONE – CROSS COUNTRY COMPARISON

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Abstract: Long-lasting unsustainable economic development have recently pushed the Greek economy on the verge of bankruptcy again. Recent escalation of Greek financing problems has cast a doubt on the appropriateness of implemented restrictive fiscal measures. Current economic misery of Greece (e.g. historically high unemployment or an unprecedented fall in incomes) raises a question whether the correct internal devaluation policy (as observed in Baltic countries) might rebuild the economic balance. This paper thus aims to provide a simple cross-country comparison of implemented fiscal measures in Greece and Latvia, which might confirm or reject our hypothesis that the misery of Greek economy has been caused by inappropriate policy-mix adopted by Greek authorities. We find that lack of commitment and often change in ruling government stood behind the stalling progress in Greek economic recovery and partially reflected in undershooting the approved fiscal targets.

Keywords: internal devaluation, financial crisis, Greece, Latvia, AS-AD model

JEL classification: E120, E620, J310, E240

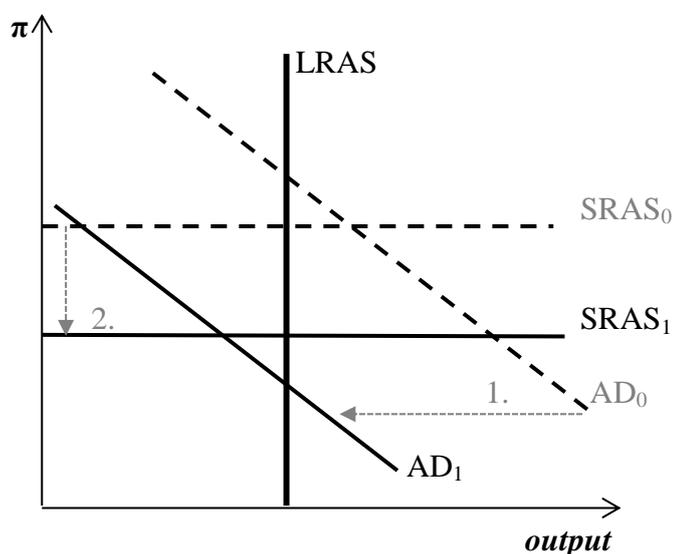
1. Introduction

Economic crisis 2010-2012 challenged the stability pillars of the European economies. Loose government policies, generous pension systems, imperfect financial regulations and flaws in the banking systems have become a fruitful soil for rise of plummeting GDP growths, deepening government deficits and failures of the banking systems. Strong economies (as France and Germany) stumbled under the pressure of worsening economic environment in Europe. Fragile economies mostly from Southern wing of Europe (as Greece, Portugal and Spain) suffered very deep output losses and overall economic deterioration. Output dropped to historical lows, unemployment rocketed and deflation contagion spread through the European countries. In a response, interest rates were cut to the technical zero levels and governments implemented painful fiscal measures.

Countries tumbling on the verge of the economic breakdown (as Portugal, Latvia, Spain, Ireland and Greece) have been given a helping hand from the international institutions (European Commission, ECB of IMF) in a form of adjustment programs. In general, adjustment programs aim to restore the fiscal sustainability, support economic growth, reorganize selected sectors and reinstitute confidence in markets. Each participant of the adjustment program is dosed by a prescribed medicine – policy measures. In order to obtain another dose of cure, country must fulfill criteria established by the international institutions within certain period of time. So far, the participants have been countries either within the Euro area (Greece) or they have the fixed exchange rate regimes (Latvia). In order to restore the market equilibria for such countries, adjustments cannot be carried out through the exchange rate but via the fiscal policies affecting directly the prices in the economy. Even though government cannot directly influence prices, cuts in public wages pressure private

salaries and eventually producer prices (Piton and Bara, 2012). Therefore, the international creditors focus in the adjustment programmes on measures which correspond in economic literature to *deflationary fiscal policy* and *internal devaluation*. Main aim of the deflationary policy is to restore the balance in the economy by intentionally pushing down aggregate demand and finally slowing down domestic inflation. Deflationary (restrictive) fiscal policy measures include increase in taxes, cuts in government spending and improvement of budget deficits. Restrictive fiscal policy is demonstrated as a shift of AD curve in the modified Keynesian AS-AD model down to southwest in Figure 1. Internal devaluation negatively affects wages of the workers and simultaneously increases productivity through lower unit labor costs and higher labor competitiveness. Internal devaluation reflects thus in downward shift of aggregate supply (see in Figure 1 the modified Keynesian model of AS-AD with inflation as an exogenous variable and assumption of sticky prices in the short run).

Fig. 1. Modified Keynesian model of AS-AD



Source: Adopted from Frank and Bernanke (2009) and Horská (2011)

Note: π ...inflation, output...real GDP growth rate, AD...aggregate demand, SRAS...short-run aggregate supply, LRAS...long/run aggregate supply, 1. ...impact of fiscal restriction on AD, 2. ... impact of cost reduction or internal devaluation.

Appropriate mix of deflationary policy and internal devaluation measures restores the market balance faster. Building upon this economic theory, our paper has ambition to analyse the suitability of applied policy mix focused especially on supply side in Greece compared to successful implementation policies in Latvia. Based on this simple cross-country comparison we can then evaluate the key shortcomings of Greek policies and propose potential solution for the path towards its economic recovery.

The paper is organized as follows. Chapter 2 provides a short inside into literature review on internal devaluation policies, mainly in Latvia. Chapter 3 describes arguments which characterize success of Latvian steps of internal devaluation policy. And chapter 4 is a basic cross-country comparison analysis of internal devaluations and undergone fiscal measures in two countries – Latvia and Greece.

2. Literature review

Generally, success of implemented policy depends on the commitment of the current government and its willingness to achieve agreed policy goals. Success of the adjustment programs is no exception. Due to different commitment levels, we can find both successful examples and failures. Latvia is considered by many economists as an example of successfully implemented internal devaluation policy. IMF's director Ch. Lagarde stated that Latvia's willingness to take their medicine quickly instead of suffering from the pain of fiscal restrictions over several years was the key to their noticeable economic recovery (IMF conference, 2012). ECB Board Member J. Asmussen complemented Lagarde with his statement that the speed is essence of fiscal consolidation (Asmussen, 2012). Blanchard, Griffiths and Gruss (2013) also consider Latvia as a shining star of successful internal devaluation. The authors state that great gratitude to the Latvian rebound is yet attributed to the internal devaluation. Obviously, appropriate mix of internal devaluation and deflationary policies managed to increase Latvia's output by 18 percent since the bust, rebalance fiscal accounts and get financial sector back in shape (Blanchard, Griffiths and Gruss, 2013).

Conversely, Krugman (2012) and Weisbrot (2012) clearly disagree with Lagarde's opinion. Weisbrot (2012) argues that Lagarde obviously ignores the social and human costs, which always arise as an externality to all austerity measures. According to Weisbrot (2012) Latvia failed to move its real exchange rate enough to cause improvements in trade balance. Furthermore, Weisbrot (2012) adds that successful internal devaluation occurs only when the country can decrease unit labor costs enough to become more competitive, which is executed by creating mass unemployment and decrease in wages. Latvia succeeded creating mass unemployment jumping from 5 percent to 20 percent within a year. Krugman (2012) complements Weisbrot's argument claiming that Latvia's success in changing its current account deficit into surplus is nothing more than recovery effect, since the dependence between current account and GDP growth is high. As bottom line, both Krugman (2012) and Weisbrot (2012) conclude that economic data do not support the success of Latvia's fiscal measures to the extent to which they are praised for.

Obviously, success or failure of implemented austerity measures may be rather subjective opinion. Word “successful” can be thus misleading depending on the economic scale, which defines the success of fiscal policy. Therefore, in the upcoming chapter we clarify economic scale on which we built our analysis on.

3. Latvia - a shining star for austerity supporters?

Baltic countries were mostly severely affected by the global economic crisis 2008-2010. Latvia experienced due to the latest economic crisis the cumulative output loss in size 21 % in between 2008-2009 (Staehr, 2013). During 2008-2009 Latvian real GDP plummeted as much as in Argentina during 1998-2002. Only the damages in the US output during the Great Depression (1929-1933) could be comparable to the greatness of Latvian losses. The only difference is that the USA suffered this great loss within 5 years unlike Latvia's striking 2 years (Weisbrot and Ray, 2010). Banking system in Latvia was strongly affected (second largest bank – Parex Bank – had to be nationalized and recapitalized). Due to extremely illiquid capital markets (both domestic and international), Latvia had to seek the help at the international creditors (Staehr, 2013).

In December 2009 Latvia signed up for the adjustment program from the European Commission for EUR 7.5 bn until January 2012. Latvia decided to focus the austerity measures on the internal rather than external devaluation (see Table 1). External devaluation was not preferred because large portion of domestic loans had been denominated in euro

(Dudzinska, 2013). Implemented internal devaluation measures combined pension, benefit and wage cuts resulting in a steep decline in the unit labor costs (see Figure 2).

Tab. 1. Internal devaluation measures in Latvia and Greece

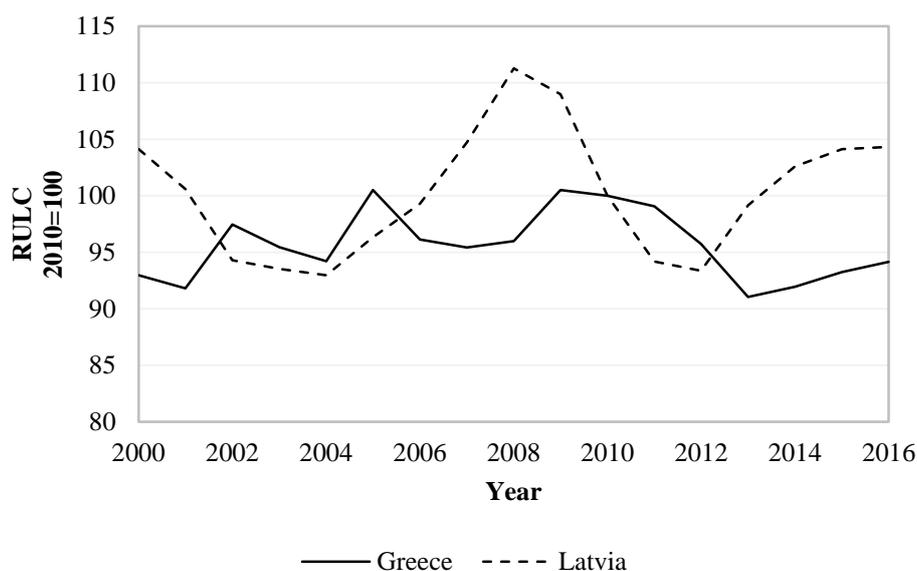
Type of measure	Greece	Latvia
Benefit and/or pension cuts (or freezing)	Yes	Yes
Increased worker social insurance contributions	Yes	Yes
Public sector pay cuts	Yes	Yes
Start period of measures	2010	2009

Source: Avram, S. et al. (2013)

Note: More detailed overview of restrictive fiscal measures in selected countries is available on request.

In order to evaluate the success of particular policies, one should first contradict the arguments, which disagree with Latvia being successful example of internal devaluation. First, both Krugman’s and Weibrot’s arguments can be easily challenged taking a peak on the recent developments of statistical data. Krugman’s argument about strong relationship between current account and GDP clearly omits the effect of external demand.

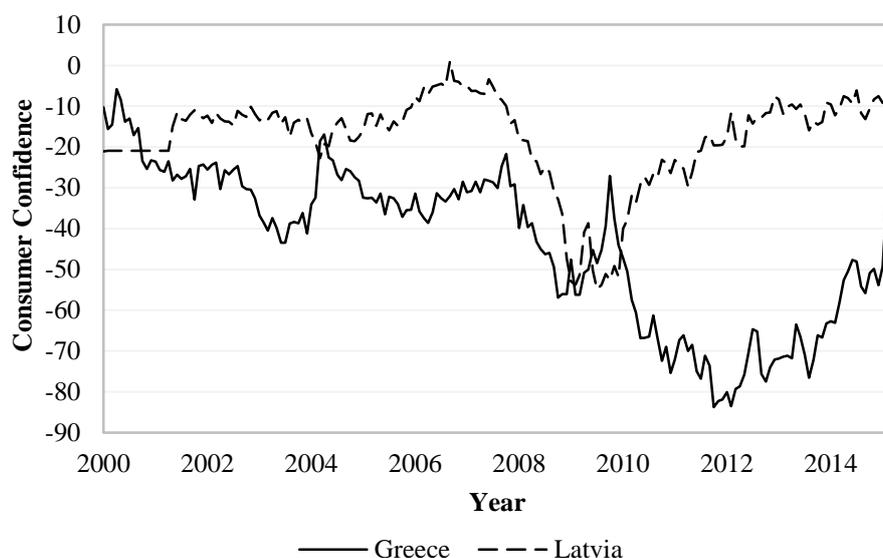
Fig. 2. Real unit labor cost



Source: Macrobond

Baltic countries including Latvia have become very fast and strongly integrated with the rest of the European Union resulting into trade re-orientation. As Table 2 shows, external demand plays much bigger role in the improvements of external balance in Latvia than domestic demand (the coefficient of eurozone’s GDP growth rate is statistically significant and its value is definitely higher than that for domestic demand). Furthermore, Weibrot’s argument with social costs connected to the austerity measures could be evaluated looking at the significant improvements in the consumer confidence of Latvian people right after signing the treaty to the adjustment program and gradually increasing ever since (see Figure 3).

Fig. 3. Consumer confidence



Source: Macrobond

Argument against decrease in the unit labor costs is mostly disputable when the impact of internal devaluation is evaluated. As Figure 2 shows the real unit labor costs (RULC) dropped in Latvia about 14% during the adjustment program periods (2009-2012). Double-digit decline within three years can in our opinion be definitely considered as considerable and significant. Furthermore, the external balance improved, with exports gradually increasing and current account reaching a surplus already in 2009. Taking into consideration all aforementioned arguments we conclude that Latvia can be thus considered as an example of successfully implemented internal devaluation.

Tab. 2. Impact of domestic and foreign demand on current account in Latvia

Model 1				
Current Account/ GDP ratio	Coeff.	Std. Error	t-Stat.	Prob.
change in domestic demand (yoy)	-0.349614	0.101848	-3.432699	0.0012
change in EA gdp (yoy)	-0.766243	0.537526	-1.425501	0.1599
REER	-0.000328	7.21E-05	-4.544313	0.0000
R-squared	0.469351	Durbin-Watson stat	0.310671	
Adjusted R-squared	0.449326	Akaike info criterion	-2.804074	
		Nr. Observations	56	
Model 2				
Current Account/ GDP ratio	Coeff.	Std. Error	t-Stat.	Prob.
change in domestic demand (yoy)	-0.294438	0.113868	-2.585791	0.0126
change in EA gdp (yoy)	-1.068811	0.526224	-2.031096	0.0474
AR(1)	0.884030	0.067404	13.11534	0.0000
R-squared	0.841457	Durbin-Watson stat	2.219478	
Adjusted R-squared	0.835359	Akaike info criterion	-3.999286	
		Nr. Observations	55	

Source: Author's calculations, Macrobond, April 2015.

Note: EA...Euro Area.

4. Greek missteps on its path to recovery

The only country, which suffered bigger output losses due to global crisis more than Latvia or Argentina, was Greece. Greek GDP plummeted approximately by 25 % from 2008 to 2014 (see Figure 3). Since 2008, unemployment kept steeply rising and almost reached incredible 30 % in 2014 (see Figure 4). Confidence of Greek consumers dropped to historical low and only slowly keeps rebounding to its pre-crisis levels (see Figure 3). Similarly as in Latvia, in order to avoid the fully-fledged debt crisis Greece needed to request financial assistance from the international creditors.

Greece signed first adjustment program from the European Commission in May 2010 (obtaining total EUR 72 bn), which was superseded in March 2012 by the second program (total EUR 130 bn) until 2014. Greece agreed for the fiscal measures that focused preferably on the expenditure side rather than increasing the government revenues (see Table 3).

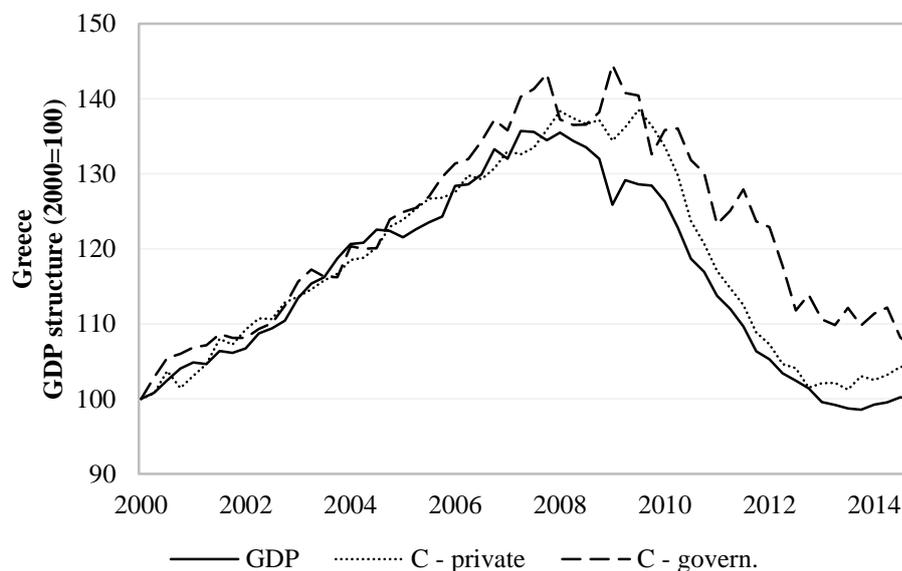
Tab. 3. Planned measures in the adjustment programs for Greece (% GDP)

	Revenue measures		Expenditure measures	
2010	0.5%	increase in VAT and excise taxes, special taxes (green, luxury goods), gaming royalties	1.9%	wage, benefit and pension cuts, public investment reduction, Kalikrates savings)
2011	2.9%		1.2%	
2012	0.7%		1.7%	
2013	-0.3%		2.3%	

Source: European Commission

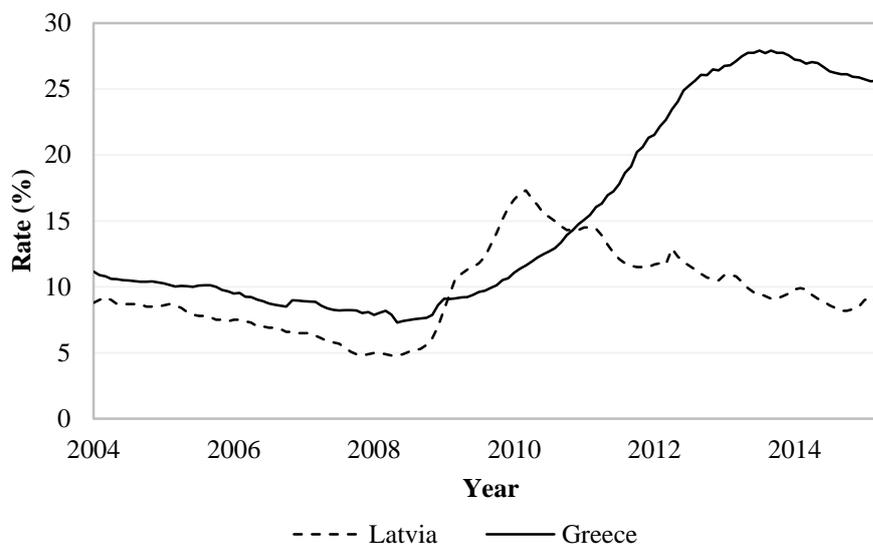
Note: Detailed structure of all available fiscal measures (% GDP) on Greece and Latvia upon request.

Fig. 3. GDP structure of Greece



Source: Macrobond

Fig. 4. Unemployment rate – seasonally adjusted



Source: Macrobond

Greece agreed to cuts in the public wages and pensions, including 13th and 14th allowances, by more than 0.5% of GDP only in 2010. Fiscal expenditure measures for 2011-2014 included mostly public investment cuts and pension freezes, which, however, were not planned to be exceeding 0.1% of GDP per year. Government revenues were not proposed to be changed in the same extent as government spending. Revenue side of the Greek government budget had an ambition to increase VAT and excise taxes (fuel, tobacco) and introduce special taxes (green tax) and further broaden VAT bases (European Commission, 2010a, b).

Even though Latvia also focused its adjustment program on expenditure side, its effectiveness and depth of measures is incomparable with the Greek measures. As Table 4 shows for 2009-2010 Latvia agreed to cut expenditures by astonishing 8.1 % of GDP while Greece kept decreasing the government expenditures by approximately 2 % of GDP year by year for four year period. Latvia also agreed to strongly cut subsidies and grants (in the extent of 4.2 % GDP) and investment (by 1.4 % of GDP), which do not support Latvian competitiveness. On the other hand, Greece agreed to cut investments only by 0.2 % of GDP. Similar scenario can be seen also in the pension and tax system reforms. Latvia signed up for 1.5 % cut in remunerations and 0.9 % in pensions for 2009 while Greece agreed to cut the highest pensions by only 0.5 % of GDP in 2010 (European Commission, 2012). Tax changes in Latvia and Greece slightly differed. While Latvia focused primary on income taxes and increase in VAT taxes, Greece preferred levy excise and special taxes (as gaming and green tax) and pension cuts in 13th and 14th allowances.

Tab. 4. Planned fiscal measures in Latvia (% GDP)

Revenue measures		Expenditure measures	
2009	1.4 %	8.1 %	
	increase in corporate, personal and indirect taxes and non-tax revenues		cuts in pensions, subsidies and grants, reduction of capital expenditures and good/services consumption

Source: European Commission

Note: Detailed structure of all available fiscal measures (% GDP) on Greece and Latvia upon request.

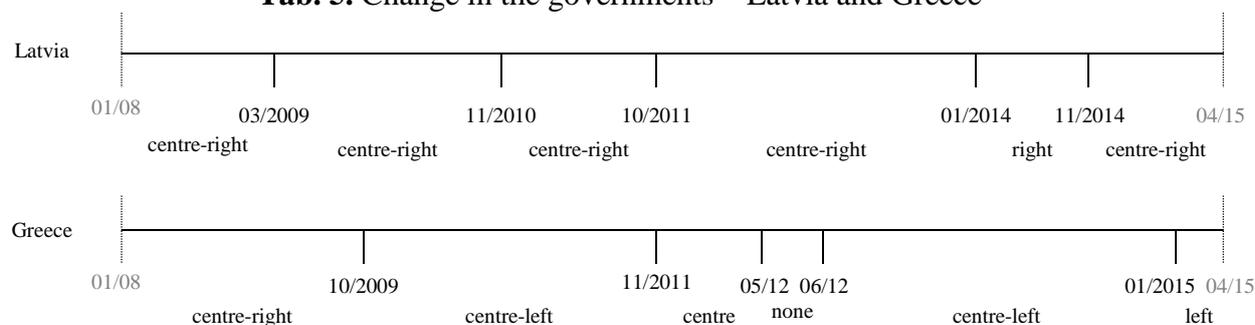
Statistics shows that there has been space for Greek government to increase the taxes more. According to the rough statistical data, tax burden in Greece kept increasing since 2008, however, still remains well below the Euro Area average. In 2011 both Latvia and Greece were the countries with the largest VAT gaps in Europe. VAT tax efficiency ratio (the ratio of VAT revenue to GDP divided by the standard VAT rate) kept gradually decreasing until 2012, where it hit the bottom and remains at those low levels afterwards. Even though Greece agreed to some VAT increase and VAT base broadening, VAT tax efficiency ratio in Greece remains one of the lowest in Europe (European Commission, 2013a, b).

Bottom line, Latvia’s commitment to the radical fiscal adjustments (investment and pension cuts plus tax increases) was obvious already from the beginning of the program, while Greece appeared to agree to some adjustments, which did not prove to be very effective since the Greek economy failed to return to the sustainable growth path.

4.1. Missing the targets

The commitment of Greek government to the adjustment programs was strongly affected by often change in the ruling government in Greece (see Table 5). While Latvia’s government remained relatively stable (only one change during program) and still center-right oriented, changes in the Greek government were strongly affected by moving the ruling government orientation from center oriented through none government crisis period to current strongly left oriented party - Syriza. Irregular changes in the Greek government parties reflected also in the confidence of Greek people towards their government. No-confidence against the Greek government has been gradually increasing since 2008 reaching its top (logically) when no-government stage transpired. Despite continual decrease after 2012, mistrust against Greek government in the past year bounced back to its highest levels (see Figure 6) in contrast with a recovery of confidence into Latvian government (see Figure 7).

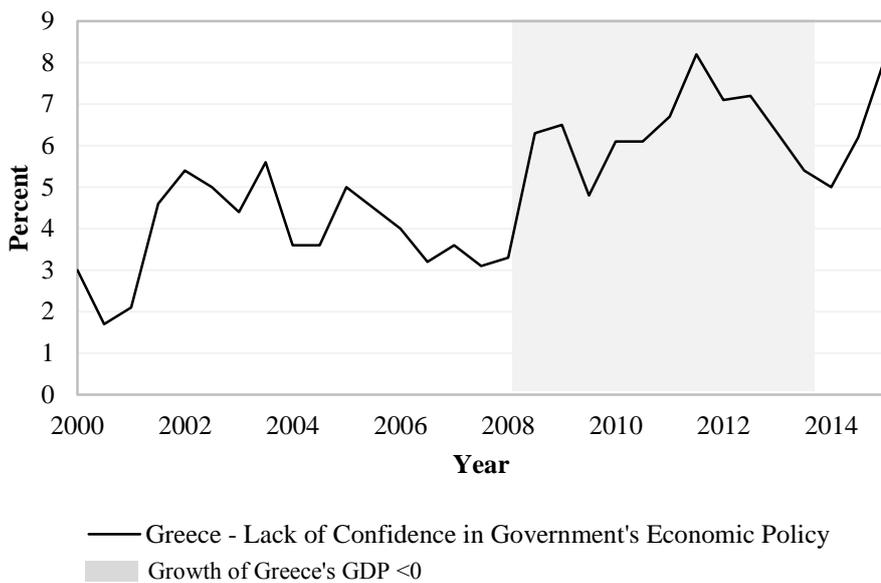
Tab. 5. Change in the governments – Latvia and Greece



Source: European election database (Norwegian Social Science Data Services)

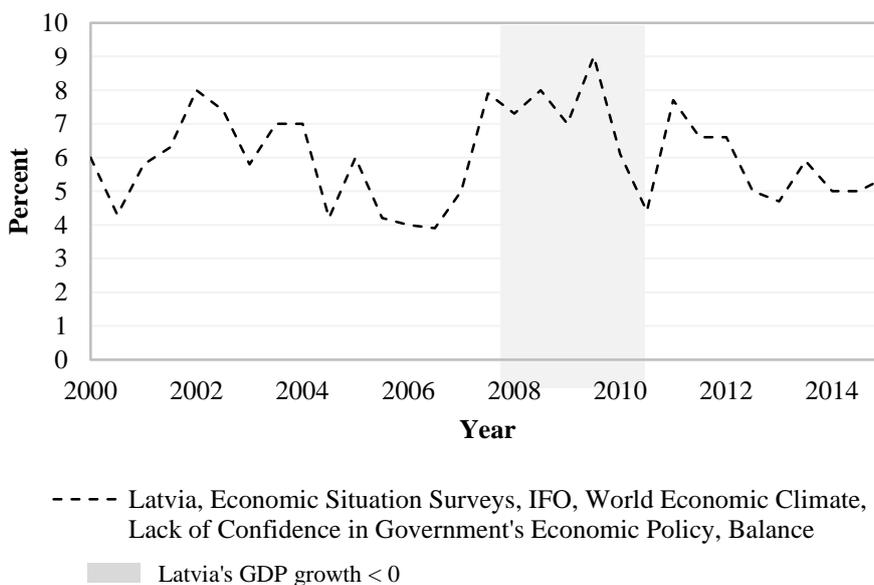
Often political changes influenced the overall progress of the adjustment program and consequently reflected in the speed of reform implementations. While Latvia managed to over-achieve budget deficit target for 2012, tax reform administration in Greece significantly stalled in 2012, tax collection suffered and consequently budget targets were missed (IMF, 2013). Furthermore, European Commission pointed to slower pace of Greek reform implementation, delay in tax bills payments and privatization targets being missed during 2013. As a result, Greece remains the economy with outdated structures with high share of public sector and only 8 % share of industry. Hence, further progress in privatization and improvement in public governance are highly needed in Greece.

Fig. 6. Lack of confidence in Greece



Source: Author's calculations, Macrobond

Fig. 7. Lack of confidence in Latvia

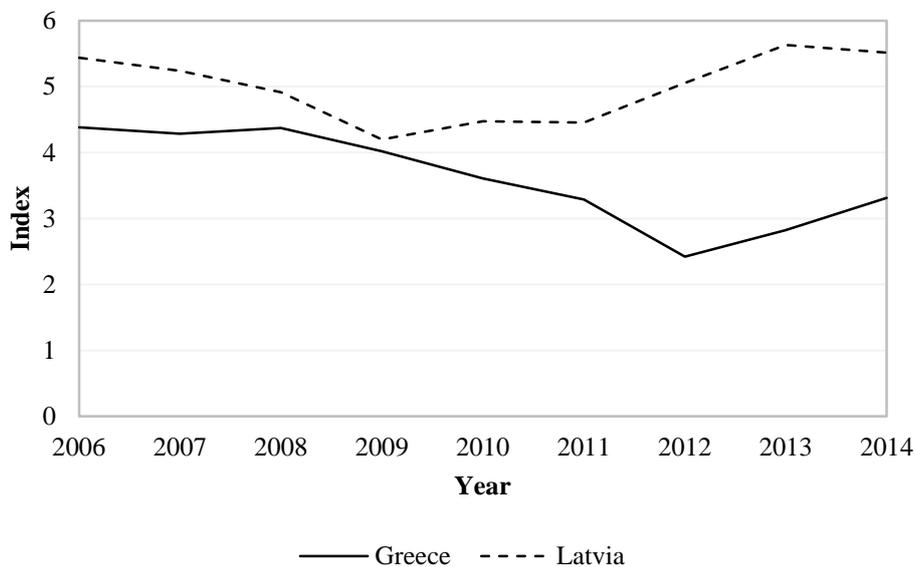


Source: Author's calculations, Macrobond

Impact of internal devaluation measures can be observed in the change of real unit labor costs (RULC) (see Figure 2). Generally, internal devaluation aims to increase competitiveness of the country, make the business environment more lucrative for investors and consequently lure new investments to the country. New investments will further become one of the building stones for economic recovery. For high competitiveness, labor costs should not increase faster than labor productivity. The lower unit labor costs the higher competitiveness. Hence, decline in the real unit labor costs reflects increasing competitiveness of the country. The size and time period within which RULC hit the bottom in Greece is incomparable to effective sharp drop in RULC in Latvia. As Figure 8 shows competitiveness in Greece and Latvia kept widening until 2013 even though the real unit labor costs kept

declining. This only proves our assumption that even though Greece decreased the real unit labor costs the impact on the overall competitiveness of the macroeconomic environment was not as noticeable and significant as in Latvia and thus the implemented measures not as successful.

Fig. 8. Macroeconomic environment competitiveness



— Greece - - - - Latvia

Source: World Economic Forum.

Note: The higher index the higher macroeconomic competitiveness.

4.2. Are Greek people really poor?

As the Greek government turned more left oriented we could have observed rising focus on the pension reforms and pension cuts required by the international creditors in return for their financial assistance. The newest left wing party Syriza has visibly been fighting against further pension cuts, which so far afflicted the low-income category of Greek people.

Most of pension cuts implemented within the adjustment program affected preferably the low-income pensioners and public servants. However, Greek pension system is one of the most generous not only in Europe but in the world. Data itself provide clear picture. According to European Commission, about 30 % of old pensioners receive pensions above 1000 EUR and two out of three pensioners receive supplementary pensions (European Commission, 2013a). Average exit age from the labor force in Greece is at age 61 (OECD average at 62), gross pension replacement rate at astonishing 75 % (for example replacement rate in the USA is 45 %, in Germany 42 %, OECD average 57 %). Early retirement age has increased in Greece from 53 to 60 years; however, it is still lower than the EU average. Public pension spending reached about 13 % of GDP in 2012 while OECD average is about 8 % (OECD, 2013). Hence, statistics speaks for itself: Greek pension system is above the European standards.

On the top of that, the regularly published statistics about the share of population at risk of poverty threshold at 60 % of median equivalised income does not show Greece as a poor outlier (see Table 6).

Tab. 6 Population at risk of poverty threshold

% of population	2007	2008	2009	2010	2011	2012	2013	2014
Euro area (18)		11.9	11.7	10.4	10.2	10.2	8.6	
Greece	12.2	17.1	14.4	12.7	13.2	13.3		
Ireland	11.1							
Latvia		16.7	12.3	16.1	12.5	16	10	
Portugal	8.5	8.8	9.7	9.9	11.9	10.4	12.2	

Source: Eurostat

5. Conclusion

Unsustainable growth of Greek economy and Greek financing problems pushing the country on the verge of the default raise the question about the appropriateness of implemented fiscal measures. Economic crisis strongly damaged Greek economy forcing the country to ask for the help of international creditors. Financing from the international creditors is, however, conditioned by agreed reforms and strict fiscal measures (deflationary policies and internal devaluation for countries in fixed exchange rate regimes), which help restoring the market balance and rebounding the economic growth. Taking Latvia as a shining star of successful implementation of internal devaluation measures, we can provide a simple cross-country analysis which shows whether Greek measurements are about to be as successful as those in Latvia.

Our results show that even though Greece focused on relatively similar fiscal measures as Latvia, their effectiveness and speed are incomparable. Greece clearly stays few miles behind the Latvian’s progress. Effectiveness of tax collection in Greece was much lower than in Latvia, tax reforms visibly stalled and Greece often missed agreed targets. Conversely, Latvia managed to overachieve the budget deficits, restore its competitiveness through sharp decline in the unit labor costs and attract back the investments. Political stability also played significant role in success of adjustment program. While Latvia remained relatively politically stable during the program, Greece experienced a switch of ruling government several time, survived no-government crisis and reoriented from right-center to current left wing government. Instability in government reflected in a sharp increase of no-confidence against the government in Greece and continuous decline in consumer confidence.

Overall picture clearly suggests that Greek lack of commitment to the reforms, political instability and reorientation of government over time could push Greece to a very poor economic stance. The question is how strong the change (or shock) should come to initiate restructuring of the Greece economy. Potential exit of Greece from the Euro Area would strongly challenge the economic and political stability of the Euro Area and consequently the European Union.

Literature

- [1] Asmussen, J. (2012). *Introductory remarks to panel “Lessons from Latvia and the Baltics”*. [online] [cit. 2015-06-15] Available from Internet: <https://www.ecb.europa.eu/press/key/date/2012/html/sp120605.en.html>.
- [2] Avram, S., Figari, F., Leventi, C., Levy, H., Navicke, J., Matsaganis, M., Militaru, E. & Sutherland, H. (2013). *The Distributional Effects of Fiscal Consolidation in Nine Countries*. EUROMOD Working Paper Series No. EM 2/13. Belgium: European Commission.
- [3] Blanchard, O., Griffiths, M., & Gruss, B. (2013). Boom, Bust, Recovery: Forensics of the Latvia Crisis. *Brookings Papers on Economic Activity*, 47(2), 325-388.
- [4] Dudzinska, K. (2013). The Baltic States’ Success Story in Combating the Economic Crisis: Consequences for Regional Cooperation within the EU and with Russia. *PISM*, 54(6).
- [5] Frank, R.H. & Bernanke, B.S. (2009). *Principles of Economics*. 4th Ed. USA: McGraw-Hill.
- [6] Horská, H. (2011). *Aggregate Supply and Aggregate Demand. Internal Balance. Stabilization Policy*. Retrieved from: www.horska.com.
- [7] European Commission. (2010a). The Economic Adjustment Programme for Greece. Luxembourg.
- [8] European Commission. (2010b). *Cross-country Study: Economic Policy Challenges in the Baltics Rebalancing in an Uncertain Environment*. Occasional Paper 58.
- [9] European Commission (2012). EU BOP Assistance to Latvia – First Review under Post-Programme Surveillance. Belgium.
- [10] European Commission. (2013a). The Second Economic Adjustment Programme for Greece – Third Review. Luxembourg.
- [11] European Commission. (2013b). Study to Quantify and Analyse the VAT Gap in the EU-27 Member States. Luxembourg.
- [12] IMF. (2012). *Latvia’s Successful Recovery Not Easy to Replicate*. IMF Survey Magazine: Countries & Regions. [online] [cit. 2015-06-22] Available from Internet: <http://www.imf.org/external/pubs/ft/survey/so/2012/car061112a.htm>.
- [13] IMF. (2013). Greece: First and Second Reviews Under the Extended Arrangement Under the Extended Fund Facility, Request for Waiver of Applicability, Modification of Performance Criteria, and Rephasing of Access—Staff Report. *IMF Country Report No. 13/20*.
- [14] Krugman, P. (2012). *Latvian Competitiveness*. New York Times. [online] [cit. 2015-06-22] Available from Internet: http://krugman.blogs.nytimes.com/2012/06/10/latvian-competitiveness/?_r=0.
- [15] OECD. (2013). Pensions at a Glance. OECD and G20 indicators. OECD Publishing. http://dx.doi.org/10.1787/pension_glance-2013-en.

- [16] Piton, P.S. & Bara, Y-E. (2012). *Internal Devaluation: Nothing but Sweat and Tears?* CEPII. [online] [cit. 2015-06-22] Available from Internet: <http://www.cepii.fr/blog/bi/post.asp?IDcommuniqu=121>.
- [17] Staehr, K. (2013). Austerity in the Baltic States during the Global Financial Crisis. *Review of European Economic Policy*, 48(5).
- [18] Weisbrot, M. *Christine Lagarde's Perverse Praise for Latvia's Economic 'Success'*. [online] [cit. 2015-06-22] Available from Internet: <http://www.theguardian.com/commentisfree/2012/jun/07/christine-lagarde-perverse-praise-latvia-economic-success>.
- [19] Weisbrot, M. & Ray, R. (2010). Latvia’s Recession: The Cost of Adjustment with an “Internal Devaluation”. *Center for Economic and Policy Research*. Washington D.C.