

Besimi, Fatmir; Monastiriotis, Vassilis

**Working Paper**

## The Role of EU Integration in Accelerating Structural Reforms in the Western Balkans: Evidence, Theory and Policy

LEQS Paper, No. 140

**Provided in Cooperation with:**

London School of Economics and Political Science (LSE), European Institute

*Suggested Citation:* Besimi, Fatmir; Monastiriotis, Vassilis (2019) : The Role of EU Integration in Accelerating Structural Reforms in the Western Balkans: Evidence, Theory and Policy, LEQS Paper, No. 140, London School of Economics and Political Science (LSE), European Institute, London

This Version is available at:

<https://hdl.handle.net/10419/303423>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE ■



LSE 'Europe in Question' Discussion Paper Series

# The Role of EU Integration in Accelerating Structural Reforms in the Western Balkans: Evidence, Theory and Policy

Fatmir Besimi & Vassilis Monastiriotis

LEQS Paper No. 140/2019

January 2019





## **Editorial Board**

Dr Bob Hancké  
Dr Jonathan White  
Dr Sonja Avlijas  
Mr Sean Deel

All views expressed in this paper are those of the author and do not necessarily represent the views of the editors or the LSE.

© Fatmir Besimi & Vassilis Monastiriotis



# The Role of EU Integration in Accelerating Structural Reforms in the Western Balkans: Evidence, Theory and Policy

Fatmir Besimi\* & Vassilis Monastiriotis\*\*

## Abstract

Integration with the European Union has been an important driver of economic, political and social transformation in the Western Balkans. In recent years, however, the pace of structural reforms in the region has decelerated and the trend of economic catch-up seen in the 2000s has not resumed after the slowdown of the global economic crisis. This has coincided – at least temporally, if not causally – with a ‘temporary freeze’ in the EU’s enlargement towards the region. Against this backdrop, this paper seeks to investigate the role of EU conditionality on economic reforms and convergence in the Western Balkans. To do so, it provides original, albeit descriptive, empirical evidence showing a strong link between EU-related structural reforms (towards the Copenhagen Criteria) and economic growth; and subsequently presents an analytical model demonstrating the mechanisms of policy decisions for reforms under EU conditionality. The model assumes away sectoral interests, policy uncertainty and coordination problems, allowing the analysis to focus specifically on the tension between two objectives: the pursuit of EU accession, through the implementation of jointly agreed reforms, and the accommodation of domestic policy concerns (maintaining policy stability and public support). Our results unveil a policy dilemma for the EU, having to choose between maximising the reform effort and minimising non-compliance. Drawing on this model, we discuss extensively the policy options that the EU faces in trying to enhance the reform performance, growth trajectories and, ultimately, European perspective of the countries in the region.

**Keywords:** Structural reforms, European integration, Political Economy, Economic convergence

**JEL Codes:** F02, F15, P16, O47

---

\* **South East European University**

Email: f.besimi@seeu.edu.mk

\*\* **London School of Economics and Political Science**

Email: v.monastiriotis@lse.ac.uk



# Table of Contents

1. Introduction.....	1
2. Structural reforms and reform delays .....	4
3. Empirical evidence .....	7
4. A model of endogenous reform delays .....	13
4.1. Model setting .....	14
4.2. Equilibrium .....	16
5. Extensions.....	19
5.1. Direct disutility from reforms.....	19
5.2. Endogenous status quo bias .....	20
5.3. Pro-reforms governments.....	22
6. Policy options for the EU.....	23
7. Conclusions .....	28
References .....	32
Appendix .....	37

---

## Acknowledgments

The authors are grateful to Alberto Alesina for his valuable comments on an earlier version of the model presented here and to Geoff Pugh, Aleksandar Stojkov and Dragan Tilev for their comments and suggestions on the empirical analysis. This work started during Fatmir Besimi's Visiting Senior Fellowship at the LSE Research unit on Southeast Europe (LSEE) in 2016-2017; while part of it was conducted when Vassilis Monastiriotis was Visiting Scholar at the Centre of European Studies at Harvard University in 2017-2018. We are thankful to faculty at both institutions for their hospitality and their comments on earlier versions of this paper. Vassilis Monastiriotis also acknowledges financial support by the Hellenic Observatory.

# The Role of EU Integration in Accelerating Structural Reforms in the Western Balkans: Evidence, Theory and Policy

## 1. Introduction

For over six decades the European Union has contributed to the advancement of peace and reconciliation, democracy and human rights in Europe. In this context, European enlargement has played a significant role in integrating and democratising the transition countries of Central and Eastern Europe. With some problems initially, this proved to be true also in the Western Balkans, where the EU contributed towards peace and stability after decades of conflicts, among others, mainly due to the promise for a better future with political stability and economic prosperity.

However, recent developments in the European Union, with the Eurozone crisis and the rise of Euroscepticism, as well as in the Western Balkans, with the political challenges that emerged recently (Carpenter, 2017), raise questions about the pace and credibility of the EU integration process in the Western Balkans.<sup>1</sup> A recent paper by

---

<sup>1</sup> The crisis also unveiled other problems with EU conditionality, not least with regard to the democratic legitimacy of structural reforms imposed under fiscal consolidation programmes, which have tested the democratic institutions in some countries especially in the Eurozone south. Notwithstanding the importance of this issue, our focus in this paper is specifically with the problems of conditionality and adaptation in the Western Balkans, given the stated shared objective by the counties in the region for political approximation and economic integration with the EU, i.e., without questioning the premises underpinning the enlargement process.

the European Parliament's Policy Department makes this clear: "Despite initial success, the current approach to enlargement has reached its limits, as it seems to be slowing down the integration process rather than accelerating it. In the meantime, in addition to the democratic and economic setbacks in the region, renewed tensions are threatening to undermine fragile regional stability. Moreover, the EU's unfinished business in the Balkans opens the door to various political, economic and security alternatives [...] The current autopilot mode of enlargement cannot continue." (DGEP, 2015). Indeed, according to international reform indicators, in recent years the pace of structural reforms in the Western Balkan countries has slowed down and catching-up after the global economic crisis is slower compared to the New Member States (IMF, 2015a).

Seen from the Western Balkans perspective, besides the delays, EU integration represents the best perspective – as stated also by DGEP (2015): "Even though the strength of the EU anchor has been diminished by both the internal problems of the European Union and the fact that full membership for Western Balkans countries is clearly a long way off, EU approximation is advancing and still represents the best hope for institutional reform." Accordingly, we may say that EU enlargement towards the Western Balkans needs to be accelerated. Additional efforts need to be taken from both sides, the countries of the region and the European Union, to complete successfully the process of European integration and economic modernisation for the Western Balkans.

At the same time, however, EU enlargement passes through the implementation of a large programme of structural reforms and institutional change in the region. This is widely acknowledged in policy documents, which regularly highlight the interplay between domestic structural reforms and the EU association process. For example, in its 2015 Enlargement Strategy the European Commission was arguing that "[e]nlargement needs to be understood as a process which supports reform and the fundamental changes needed to meet the obligations of EU membership. [...] *Enlargement can only be of benefit to the EU and to partner countries if there is genuine,*

*sustainable reform.*” (COM, 2015, p.4; emphasis added). In the latest EU Enlargement Strategy (COM, 2018a, p.1), the European Commission put this more boldly: “It is important to recognise that accession negotiations are not – and never have been – an end in themselves. They are part of a **wider process of modernisation and reforms**” (emphasis in the original).

This reform agenda in the Western Balkans is pursued via a number of channels. Formally, the region benefits from a coordinated policy framework to structural reforms, under the SEE2020 Strategy which, mirroring the Europe2020 goals, aims at achieving “smart, inclusive and sustainable” growth for each country in the region with good governance institutions and deeper economic integration (RCC, 2016). In the economic sphere reforms are also pursued under the free trade agreement of the region, CEFTA (Thomas and Bojicic-Dzelilovic, 2014). Other, more EU-centred processes, however, are much more central for the reform agenda in the region (Uvalic, 2019) as they link more directly to EU pre-accession conditionality – including the Stabilisation and Association process and, more recently, the Berlin process with its promotion of a Regional Economic Area for the Western Balkans (Sanfey and Milatovic, 2019).

Despite this policy activism, there is wide recognition that the intensity of reforms and policy commitment to these has subsided in the region. This is reflected in the almost-agonizing call by the European Commission in its latest EU Enlargement Strategy document for “[t]he governments of the enlargement countries [...] to embrace the necessary reforms more actively and truly make them part and parcel of their political agenda – not because the EU is asking for it, but because it is in the best interests of their citizens.”

It is not difficult to argue that overcoming these problems requires a deeper understanding of how the EU integration process helps accelerate structural reforms and what the impediments to this may be. This paper aims to contribute in this direction, by providing fresh evidence about the role of EU integration for economic



growth and institutional upgrading; and by developing a simple but informative model showing how the EU can act both as a ‘reform accelerator’ and as a source of reform delays in the presence of a slow accession process and domestic resistances to reform. Given the slowdown of structural reforms and of economic growth in the post-crisis period, and the slowdown in the EU integration process of the Western Balkans, these contributions help us derive interesting policy conclusions for accelerating the reform process in the Western Balkans and, through this, facilitating higher economic growth and faster catch-up to the EU living standard.

The remainder of the paper is structured as follows. In the next section we review selectively the literature about the link between the EU integration process and progress with structural reforms. In section three we provide some empirical evidence on this link, drawing on the experience of the New Member States and contrasting this to that of the Western Balkans. In section four we develop a theoretical model which shows how the EU can act as an anchor for reforms but also how EU involvement leads to (perceived or real) reform delays under the presence of status quo bias by the public. In section five we follow through three interesting extensions of the model, which allow us to introduce different assumptions concerning preferences towards reforms by the government and the public. Section six discusses the policy implications emanating from the model, identifying a number of policy areas where the EU, as well as national governments, can place increased emphasis and take increased responsibility. The last section summarises and concludes.

## 2. Structural reforms and reform delays

Following the global financial crisis and the problems that emerged with the economies of the Eurozone, the issue of structural reforms has re-emerged in the international policy agenda. Within the European Union, structural reforms are today believed to be not only important for long-run growth but also essential for “the ability of economies to adjust to shocks” (Canton et al., 2014, p.1). A clear agenda and

procedures for structural reforms have been developed subsequently, in part through the European Semester (COM, 2017; Campos et al, 2018a).

In the case of transition countries and countries belonging to the EU pre-accession process – such as those of the Western Balkans – calls for deeper and faster structural reforms have been perhaps more emphatic, owing in part to a realisation that the pace and commitment to reforms in these countries has subsided after the crisis (EBRD, 2013; Kovtun et al, 2014; IMF, 2015a). For example, already in 2013 the EBRD Transition Report was claiming that “structural reforms continue to face serious obstacles” and that “the economic downturn has eroded popular support for reforms”. Similarly, in its 2015 Special Report on the Western Balkans the IMF also claimed that “the process of structural transformation began to stall in the mid-2000s, in the face of vested interests and as reform fatigue set in, and remains incomplete”, adding that “[e]mbarking anew on deep structural reform is a key policy priority for the region” (IMF, 2015a, p.9); while in its 2016 assessment of the Western Balkans, the European Commission has acknowledged that, across the region, “structural shortcomings persist, notably in the key areas of rule of law and the economy” (COM, 2016a, p.2). Last, in its recent Regular Economic Report on the Western Balkans, and despite seeing overall a positive outlook for reforms in the region, the World Bank also emphasised that it is “important to accelerate the pace of structural reforms to boost medium-term growth” (World Bank, 2017a, p.22).

In the particular case of the Western Balkans, of course, the issue of reforms is particularly complex as it links to wider political, institutional and societal changes and well as to the very accession process (EU enlargement) and thus to the mechanisms of EU conditionality.<sup>2</sup> Indeed, a large literature exists that discusses the problems of institutional transformation and political and economic reforms in the region exactly under the prism of pre-accession conditionality and the so-called ‘EU

---

<sup>2</sup> As noted recently in an EBRD publication, “the long-term EU perspective is a major plus and a unique quality of the region compared with other emerging markets, as it helps to anchor market-oriented reforms and European standards” (Sanfey et al., 2016).

transformative power' (Grabbe, 2006 and 2014; Gateva, 2015). Drawing from earlier contributions concerning the experience of the 2004 Enlargement (Hughes et al, 2004; Schimmelfennig and Sedelmeier, 2005) and building on earlier analyses about the problems of transition in the region (Kuzio, 2001; Anastasakis and Bechev, 2003), this literature attributes the origins of reform delays, or reform failures, in the region on two sets of factors. On the one hand, problems emanating from the side of the EU, including its 'ambivalence' (lack of clarity with regard to the rules of EU accession or of commitment to enlargement – Grabbe, 2014; Börzel and van Hüllen, 2014), its inattention to local institutional conditions and to buying-in local actors and elites (Noutcheva, 2009; Vachudova, 2014), and its reform targets which may be too strict or unrealistic (Uvalic, 2012; Noutcheva and Aydin-Düzgit, 2012). On the other hand, problems specific to the region, such as the unresolved ethnic and statehood issues (Börzel, 2016), vested national and sectoral interests (Vachudova, 2014) and the absence of a "robust local demand for change towards Europeanisation" (Noutcheva et al., 2013).

These issues noted, the wider literature recognises that the EU is a significant stimulus for growth and convergence for associated countries. The substantial institutional transformation, fast economic restructuring and sustained income growth of the CEE countries provides ample evidence for this (for recent causality inferential evidence on this see, inter alia, Monastiriotis et al, 2017, and Campos et al., 2018b). In this regard, it is widely acknowledged that the EU has not only an autonomous effect on growth for the associated countries (e.g., through economic integration and membership) but also, if not most importantly, by incentivising structural reforms.

This creates a puzzle: if the EU association process is growth-enhancing, both autonomously and via the facilitation of structural reforms, then why is it that we see significant reform delays and 'fake' compliance (as identified in the academic political science literature) or significant reform gaps and decelerating reforms (as identified in the economics and policy analyses)? If reforms are both growth-enhancing and a precondition for accession, shouldn't national governments be pursuing (and

implementing) reforms more actively and faster? In the political economy literature problems of reform delays and non-compliance are generally associated with various types of political market failures, not only related to corruption and capture (Innes, 2014) but also related to problems of institutional quality (see, inter alia, Acemoglu et al., 2005; Aghion et al., 2005; Ciccone and Papaioannou 2009), distributive politics (e.g., Alesina and Rodrik, 1994), or even pure information and coordination problems (e.g., time-inconsistency – Kydland and Prescott, 1977; or status-quo bias – Fernandez and Rodrik, 1991). As noted, the literature on EU conditionality in the Western Balkans emphasises instead problems of external policy design (misfit, inconsistency) and problems of domestic compliance (Dzankic et al, 2019).

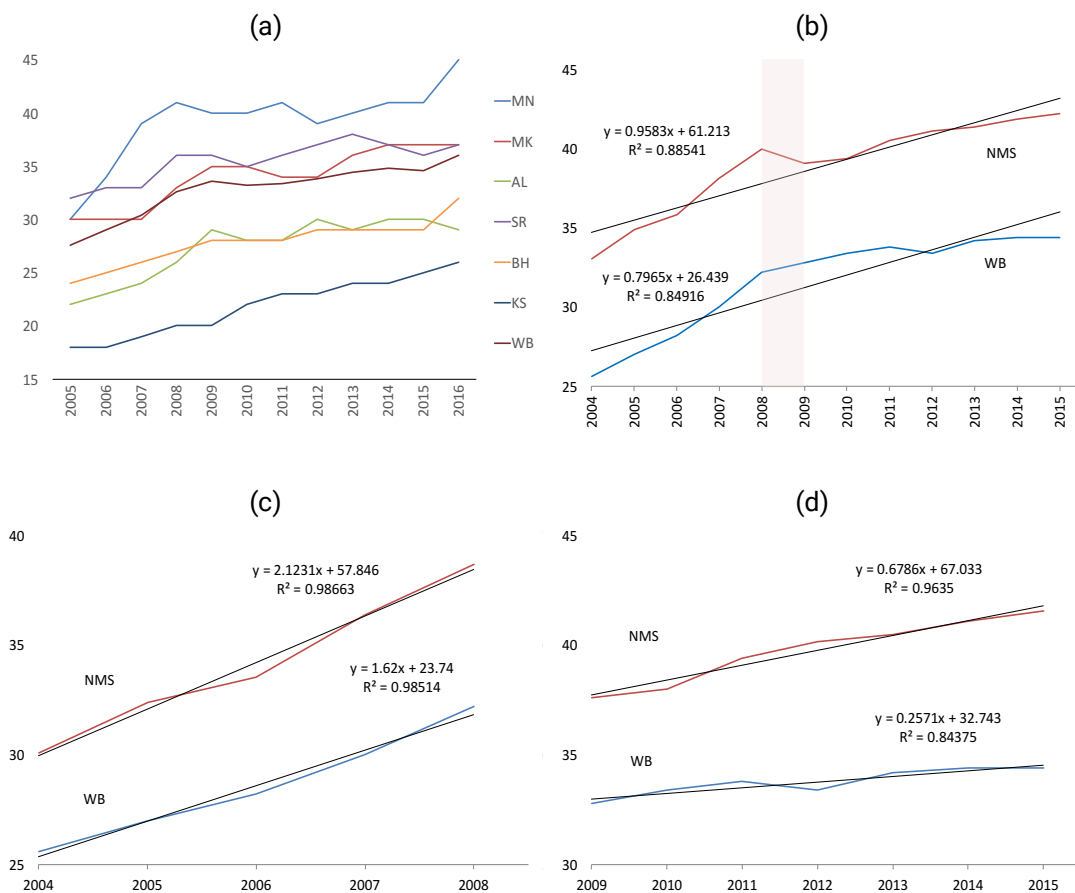
In this paper we provide a bridge between the two literatures, by developing an analytical model offering an exposition of the problem of delayed reforms and reform gaps in the Western Balkans under the stimulus of the EU. Our model incorporates features appealing to the EU conditionality literature, such as the role of the EU as an anchor to shift reform priorities, and ones more formally addressed in the wider political economy literature, such as reform resistance associated with status quo bias – as well as assumptions consistent with the evidence in the empirical literature of reforms, which shows structural reforms to have significant short-run costs despite their long-term welfare benefits (see, inter alia, Babecky and Havranek, 2014; IMF, 2015b; Dabla-Norris et al., 2016). Before presenting this model, in the next section we provide some fresh evidence concerning the impact of EU association on growth and the pace of structural reforms in the Western Balkans.

### 3. Empirical evidence

In the last 25 years the evidence from both the Western Balkans and Central and Eastern Europe shows that there has been significant convergence with the EU average level of living standards both during the transition period of the 1990s and later through the EU integration process (IMF 2015a and World Bank, 2017b). However, in recent years convergence has slowed down, while after the economic crisis catching-

up is slower in the Western Balkans compared to the New Member States. To demonstrate this, we plot in Figure 1 the evolution of GDP per capita in the Western Balkan countries expressed as a share of the EU average (panel a) and then, comparatively, the average growth trajectories in the New Member States (NMS) and the Western Balkans (WB) since 2004 (panel b) and for two sub-periods (panels c-d). As can be seen, perhaps with the exception of Serbia, convergence to the EU average has plateaued across the Western Balkans. What is also important, growth trajectories in the Western Balkans compare unfavourably also in relation to those in the NMS. Over the period 2004-2008 the Western Balkans have followed a flatter growth trend than the NMS and this discrepancy has, if anything, intensified since 2009.

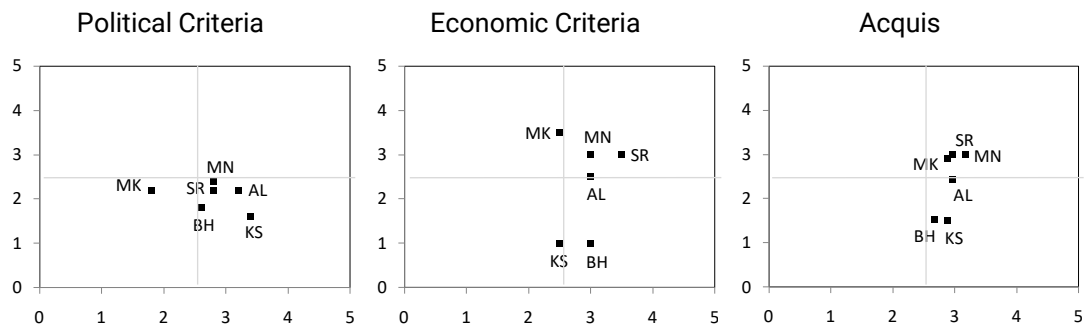
Figure 1. GDP per capita Convergence & Catching-up



Source: Author's calculations based on Eurostat data: GDP per capita in PPS as a share of EU-28 average

As a result, despite past convergence, there is still a substantial gap in living standards between the EU and the economies of the Western Balkans – and a widening gap between the latter and the NMS. It is thus clear that the countries of the Western Balkans need to grow much faster in order to catch-up to the EU level in any reasonable timeframe. Further, analysing across the Copenhagen convergence criteria (Figure 2 – based on the European Commission’s Enlargement Progress Reports), the evidence shows that countries in the region have shown slower progress in fulfilment of the political criteria compared to the economic ones as well as to the one related to approximation with the European ‘Acquis’. This in some way indicates that meeting the political criteria may be more sensitive from a policymakers’ point of view. But, importantly for our analysis in this paper, it also shows that progress with political and economic reforms is generally lagging behind to progress with institutional approximation – suggesting a general under-shooting with regard to reforms despite a general commitment to the EU process.

**Figure 2.**  
Copenhagen convergence criteria: Progress and Readiness

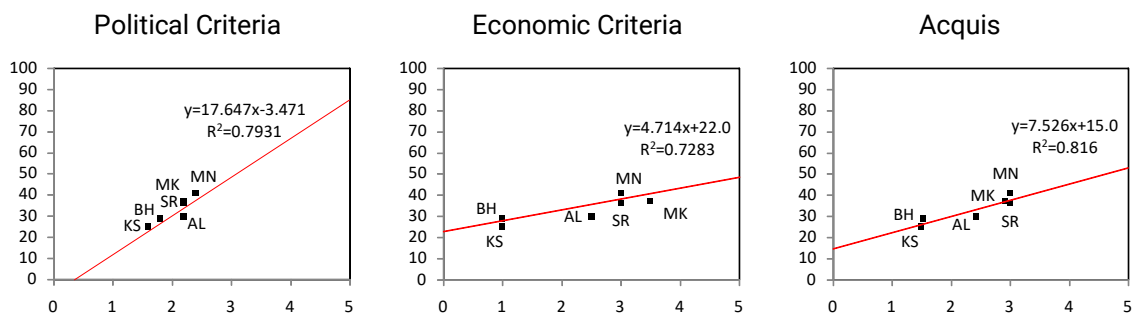


Readiness (vertical axis): 1 – early stage; 2 - satisfactory; 3 - moderate; 4 - good; 5 – advanced  
 Progress (horizontal axis): 1 – backsliding; 2 - stagnating; 3 - moderate; 4 - good; 5 – very good

Source: Author’s illustrations based on European Commission data (COM, 2016a and 2016b)

Our next step is to investigate the relationship between structural reforms and economic convergence. Initially, we look at comparative statistics about the relationship of Copenhagen convergence criteria and GDP per capita of each country as a ratio to the EU-28 average (Figure 3). As can be seen, there is a positive relationship between economic development (measured as the extent of convergence to the EU-28 GDP per capita) and each of the three criteria (political, economic and acquis). Interestingly, in this descriptive correlation analysis, the relationship appears strongest (i.e., a steeper slope for the fitted line) in the case of the political criteria, i.e., exactly the ones where the Western Balkans show the slowest progress and ‘readiness’.

**Figure 3.**  
Copenhagen convergence criteria and GDP per capita as a share of EU-28 average



Readiness (horizontal axis): 1 –early stage; 2 - satisfactory; 3 - moderate; 4 - good;5 – advanced  
GDP per capita (PPS) as a share of EU-28 average (Vertical axis)

Red line represents the simple linear regression with dependent variable: GDP p.c.as % of EU-28 average

Source: Author’s illustrations basen on European Commission data (COM, 2016a and 2016b) and data from Eurostat

To examine this relationship more formally, we implement a regression analysis of the impact of structural reforms on convergence, drawing on a larger sample of countries (including the NMS) over the period since 1996 (depending on data availability) and following the approach of Dabla-Norris et al (2016). Our model includes a control for

EU membership, to account for the known effect that this has on convergence (Campos et al, 2018b), as well as lags of the dependent variable, to account for long-term dynamics.<sup>3</sup> We examine this model for three composite indicators of institutional performance, namely the World Bank's World Governance Index, the EBRD's Transition index, and the Global Competitiveness Index of the World Economic Forum.<sup>4</sup> Specifically, our estimating relationship takes the form:

$$GC_{c,t} = \alpha_0 + \alpha_{1,l} \sum_{l=1}^L GC_{c,t-l} + \alpha_2 SR_{c,t} + \alpha_3 EU_{c,t} + \varepsilon_{c,t}$$

where,  $GC$  is GDP per capita as a share of the EU-15 average;  $SR$  stands for our alternative structural indicators;  $EU$  is a dummy variable taking the value of 1 for the countries and years of EU membership;  $\varepsilon$  is a random error;  $L$  is the number of lags ( $l$ ); and subscripts  $c$  and  $t$  index countries and years, respectively.

Starting with the estimates on the distributed lags of the dependent variable (relative GDP per capita), as can be seen, it appears that there is a very stable long-run relationship between the local and EU-15 levels of GDP per capita. In all models, the sum of the lagged coefficients is statistically equal to 1, suggesting that net of our controls for EU membership and institutional quality relative long-run growth in our sample follows a random walk, i.e., does not produce convergence to the EU average. In other words, relative development levels are rather persistent and no autonomous process of convergence is found. In contrast, convergence is significantly influenced by EU membership, with the estimated coefficients on the EU membership indicator being highly significant statistically across models. Turning to the structural

---

<sup>3</sup> Alternative estimations using fixed effects models and models estimated with GMM produce results in the same direction and are available upon request.

<sup>4</sup> In the Appendix we present results for the disaggregate components of each of these indicators (a total of 25 indicators). The results show high consistence across, with all measures having a positive association with economic performance and the vast majority of them being statistically significant at 1% (exceptions are the Infrastructure, Macroeconomic Environment and Higher Education sub-indexes of the GCI, which fail to be significant at 10%).



indicators, which are of course the main interest here, our results indicate again a positive and highly significant effect statistically. A one-unit increase in the World Governance Index is associated with a higher relative GDP per capita by 1.8 percentage points. The relationship for the Transition index appears flatter (0.7 percentage points) and for the Global Competitiveness Index it appears less strong statistically (significant at 5%), reflecting perhaps the fact that institutions related to the quality of governance are more relevant for economic development than the more narrowly-defined transition indicators and the more broadly defined indicators of competitiveness. It is important to note that these estimates become significantly weaker when not controlling for the persistence in relative GDP per capita, i.e., the inclusion of the distributed lags of the dependent variable. This shows that the benefits from EU membership and institutional reforms materialise in the long-run, while their effects in the short-run can be much weaker and sometimes negative.

**Table 1.** The impact of structural indicators on convergence

Dynamic Panel Data Regression			
Dependent variable: Country's GDP p.c. as a share of average EU-15			
Variables/Reform	World governance index	Transition index	Global competitiveness index
L.gdp15	1.264*** (0.0552)	1.375*** (0.0366)	1.294*** (0.0355)
L2.gdp15	-0.337*** (0.0531)	-0.399*** (0.0378)	-0.545*** (0.0671)
L3.gdp15			0.213*** (0.0522)
L4.gdp15			0.00923 (0.0642)
Structural reforms	1.845*** (0.4130)	0.701*** (0.2300)	1.129** (0.4900)
EU membership	0.565*** (0.1290)	0.337*** (0.1240)	0.878*** (0.2990)
Constant	2.611*** (0.4040)	-1.166** (0.5870)	-3.408** (1.7290)
Years	1996-2016	1996-2014	2006-2017
Observations	208	260	126
Number of countries	16	16	16
ar1p	0.00131	0.00209	0.00096
ar2p	0.0425	0.0798	0.12
hansenp	0.485	0.888	0.257
sarganp	0	0	0.00000472

Note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 (Robust standard errors in paranthesis)  
 More details in Appendix: Tables 1A, 2A and 3A.  
 Data: World governance indicators (World Bank); Transition indicators (EBRD); Global Competitiveness Index (WEF); GDP (IMF, WEO)

All in all, the evidence presented here points to a number of important conclusions: institutional quality and structural reforms have a significant bearing on economic development and convergence with the EU; at the same time, institutional quality – and especially political and, less so, economic reforms – are generally lagging behind in the Western Balkans; while the slowness in the region’s progress with reforms is, at least in *prima facie* terms, correlated with the slowdown of convergence with the EU since the crisis. In the next section we present a stylised model which seeks to explain why this may be, despite the expressed commitment to the European perspective of the Western Balkans, by both the EU and the countries in the region.

#### 4. A model of endogenous reform delays

The main hypothesis of the EU enlargement process is that implementation of the convergence criteria and reforms enhance economic growth and catching-up with the EU living standard. As we have already discussed, however, in the Western Balkans implementation of reforms under the EU enlargement process is below parity, with significant delays and non-compliance even to agreed reforms.

The intention of the theoretical analysis in this section is to offer an analytical perspective of what lies behind these reform failures and help identify the areas where the EU can play a role in enhancing the credibility of structural reforms and accelerating the accession process in the Western Balkans. Our analysis departs from the usual emphasis on vested sectoral interests and elite capture (Noutcheva, 2009; Vachudova, 2014) and instead focuses on problems of commitment to reforms that arise endogenously, due to uncertainty about the rewards associated with these reforms (e.g., EU accession) and the short-term costs of reforms which push the public towards favouring stability with regard to reforms (status quo bias). In the model, both the public and the government value EU accession. Still, under specific conditions, in part relating to the intensity or pervasiveness of reforms requested by the EU, in maximising its welfare the government delivers a lower level of reforms than what it voluntarily agrees with the EU. Our model also abstracts from other potential factors

influencing policy developments in the Western Balkans – and the commitment of the region in particular to the European perspective. Although we acknowledge in this regard the influence that the recent policy activism in the region, by countries such as Russia, China and the Gulf states, may have on domestic policy decisions and policy preferences – and on compliance with EU conditionality in particular – we choose to abstract from these influences so as to maintain the tractability of our model and its focus on the issues that are of direct interest here, namely the problems of compliance that are endogenous to the conditionality process itself.

#### *4.1. Model setting*

*The government.* To ensure general applicability, we assume that the government is reform-neutral, i.e., it does not have a preference for or against reforms.<sup>5</sup> In line with our preceding discussion however, the government has a preference to pursue accession to the EU. To this purpose, it negotiates with the EU on the level of reforms required ( $r_{EU}$ ). Meeting this target raises the utility of the government and, as we shall see later, it also raises the support the government receives from the public (who are also assumed to be in favour of accession). Irrespective of the EU and the level of reforms, the government enjoys an exogenously given level of public support ( $s_N$ ). Negative deviations from this ‘natural’ level of support reduce the welfare of the government, while positive deviations give extra utility to the government.

Under this setting, we can write the objective function of the government as a simple loss function of the form:

$$W = -\alpha_1(r_{EU} - r)^2 - \alpha_2(s_N - s) \quad (1)$$

where  $\alpha_1$  and  $\alpha_2$  represent the weights that the government assigns to pursuing accession and to enjoying public support, respectively; and the second term is linear to reflect the assumption that the government gains welfare by receiving ‘excess’

---

<sup>5</sup> See later for an extension that relaxes this assumption.

support above its 'natural' level.<sup>6</sup> It is evident from eq.1 that the government's welfare is maximised when  $r=r_{EU}$  and  $s=s_{SN}$  (or,  $s=s_{max}>s_{SN}$ , if this is possible). However, this optimal equilibrium is not unconditional, as it depends on the public's attitudes towards the EU and towards reforms.

*The public.* We assume that the public is also in favour of accession and thus gains utility when the government meets its negotiated reform target with the EU, which is a pre-condition for accession. We further assume, however, that the public has a status quo bias, i.e., it derives negative utility from reforms that exceed a specific threshold, in either direction (reform under-shooting as well as over-shooting).<sup>7</sup> Given our model choice not to consider heterogeneous groups in society (no vested interests), this assumption is crucial: assuming away any disutility from reforms under this setting would render the government's policy problem (how much to reform) trivial – with the maximum obtained at  $r=r_{max}$  (infinite reforms). As noted earlier, we also assume that there is a 'natural' level of support that the public has for the government. Under these conditions, we can express the public's objective function (welfare) in terms of the support it lends to the government:

---

<sup>6</sup> In contrast, the first term is quadratic because missing the EU target is costly to the government from any side. This is consistent with our assumption that the government is reform-neutral, but it is also empirically intuitive. In the case of an under-reforming equilibrium ( $r<r_{EU}$ ), this is obvious to see: the EU would respond to under-reforms by lowering its rewards (delaying accession). In the case of over-reforms, this can be rationalised on the basis of signals: 'excess' reforms by the government will likely be interpreted as a capacity signal by the EU, which may end up raising its reform target for the government in the future. Given that reforms are costly (in relation to public preferences, as we shall see below), and also given that the accession process, by its own structure and nature, cannot be significantly accelerated unless wider geo-political conditions are in place, this is a pure cost to the government. In any case, as noted earlier, this assumption is relaxed in an extension of the model (section 5).

<sup>7</sup> In this simple version of the model we consider the extent of status quo bias as exogenously fixed. In section 5 we consider the implications of an extension of the model where the extent of reform bias is determined endogenously. In the same section we also consider the implications of relaxing the status quo bias assumption and simply allowing the public to have a preference against reforms.

$$s = s_N - \beta_1(r_{SQ} - r)^2 - \beta_2(r_{EU} - r)^2 \quad (2)$$

where  $\beta_1$  and  $\beta_2$  represent, respectively, how much the public dislike deviations from the status quo (disutility from reforms) and how much it values accession (disutility from the government missing its EU target). It is clear in this representation (eq.2) that, in the absence of the EU (or of the prospect of accession), the public would maximise its welfare – and, by implication, its support to the government – at the point where reforms remain at the status quo level ( $r=r_{SQ}$ ).<sup>8</sup>

*The EU.* To keep things simple, we assume that the EU sets exogenously the level of desired reforms and rewards complying governments (or penalises non-complying governments) to a value directly proportional to the reform achievement. This implies that any deviation from the EU target represents a direct cost to the government. Although we do not model the objective function of the EU (we treat  $r_{EU}$  as exogenous), our implicit assumption here is that the utility of the EU is constant, i.e., it draws exactly the same amount of disutility from non-complying governments and from the pecuniary loss it experiences by handing out rewards to complying governments. In other words, in this setting the EU is indifferent between any alternative level of reforms implemented by the government. This is of course a simplifying assumption, but it is one which does not affect the direction or quality of our results.

## 4.2. Equilibrium

*Full commitment.* For exposition, let us first consider – before looking at the equilibrium obtained from the interaction between the EU, the government and the public – the welfare equilibrium if the government was to fully commit to the level of

---

<sup>8</sup> Formally, status quo bias can be modelled as a public preference for reforms to stay within a range (say,  $\{r_{SQ}-c, r_{SQ}+c\}$ ) of the existing level (or pace) of reforms ( $r_{SQ}$ ) – with the size of  $c$  showing the public's tolerance threshold for deviations from the status quo (Alesina and Passarelli, 2017). Eq.2 is a simplified version of this, essentially imposing  $c=0$ . As noted, we discuss in section 5 how relaxing this assumption affects our results.

reforms agreed with the EU. In this case, the government would set  $r=r_{EU}$  so that, from (2),

$$s = s_N - \beta_1(r_{SQ} - r_{EU})^2 \quad (3)$$

and, by inserting (3) into (1),

$$W = -a_2\beta_1(r_{SQ} - r_{EU})^2 \quad (4)$$

As it can easily be inferred, in this case public support is below its 'natural' level ( $s < s_N$ ) and government welfare is negative ( $W < 0$ ) for any level of reforms agreed with the EU above (or below) the existing status quo ( $r_{EU} > r_{SQ}$ ). Compared to the case where there is no interaction between the government and the EU and thus also no accession process (essentially imposing  $\alpha_1 = \beta_2 = 0$ ), this is clearly a sub-optimal outcome. As was noted previously, in this latter case the government could simply set  $r = r_{SQ}$  (no reforms) so that it receives its natural level of support ( $s = s_N$ ) and enjoys welfare equal to  $W = 0$  (zero welfare loss). This means that, under our model setting, for any case where EU accession negotiations take place (i.e., for every  $r_{EU} > r_{SQ}$ ), no government will have the incentive to fully comply with the targets agreed with the EU. In other words, defection, or lack of commitment, is an equilibrium outcome determined endogenously by the model parameters. We can see this more clearly by solving the maximisation problem of the government.

**Optimal solution.** To find its optimal level of reforms, following the demands of the EU (i.e., given  $r_{EU}$ ), the government will have to maximise (1) subject to (2). To find this optimal equilibrium, we first replace (2) into (1), so that

$$W = -a_1(r_{EU} - r)^2 - a_2 \left( s_N - s_N + \beta_1(r_{SQ} - r)^2 + \beta_2(r_{EU} - r)^2 \right) \quad (5)$$

and then differentiate the resulting expression (eq.5) with respect to the policy variable ( $r$ ), setting it equal to zero and solving for  $r$ :

$$\frac{\partial W}{\partial r} = 0 \Rightarrow \dots \Rightarrow r = r_{SQ} \frac{a_2\beta_1}{a_2\beta_1 + (\alpha_1 + a_2\beta_2)} + r_{EU} \frac{\alpha_1 + a_2\beta_2}{a_2\beta_1 + (\alpha_1 + a_2\beta_2)}$$

and, by further manipulation,

$$r = \theta r_{SQ} + (1 - \theta)r_{EU} \quad (6)$$

which is a weighted average between the status quo and the EU-driven reform target, with  $\theta = \frac{a_2\beta_1}{a_2\beta_1 + (\alpha_1 + a_2\beta_2)}$ . Given that all parameters in this last expression are positive ( $\alpha_1, \alpha_2, \beta_1, \beta_2 > 0$ ), it follows that  $\theta > 0$  and thus that  $r < r_{EU}$  for any  $r_{EU} > r_{SQ}$ . Thus the optimal policy choice for the government is to 'defect', i.e., to deliver a level of reforms that is below the level agreed with the EU.

As is easy to show, in this equilibrium the level of reforms will *increase* with  $\alpha_1$  and  $\beta_2$  (i.e., with the weight assigned to the accession process by the government and the public, respectively); and *decline* with  $\alpha_2$  and  $\beta_1$  (i.e., respectively, the weight the government assigns to public support and the intensity by which the public dislikes reforms that deviate from the status quo). Perhaps more importantly, the extent of 'defection' by the government will be proportionately greater, the more 'aggressive' the EU is in setting the reform target with the government, in other words the government will appear to lack credible commitment proportionately more, the higher the distance between the status quo and the EU target.

Overall, our model provides a very interesting insight into the question of non-compliance to the EU. Under the specific setting (status quo bias in the public and a reform-neutral government), non-compliance arises endogenously from the model, as the government has to balance between domestic demands and external commitments. We examine the policy options that this implies for the EU later, after first considering some possible extensions to this stylised model.

## 5. Extensions

### 5.1. Direct disutility from reforms

Status quo bias is a special case of public attitudes to reform. A more common assumption in the literature is that reforms carry negative utility, at least in the short-run, so that the public derives negative utility from reforms irrespective of the existing status quo. In this case, eq.2 becomes

$$s = s_N - \beta_1 r - \beta_2 (r_{EU} - r)^2 \quad (2')$$

with  $\beta_1$  now showing directly the intensity by which the public dislike reforms. In this representation, the public faces a trade-off between accepting reforms in exchange of ensuring some progress with the EU process and sacrificing the latter in exchange of not incurring costs associated to reforms. Evidently, in the absence of the EU (or of the prospect of accession), the public would maximise its welfare – and, by implication, its support to the government – at the point where reforms are minimised ( $r=0$ , if reforms are left-censored; or  $r=r_{\min}<0$ , if ‘anti-reforms’ are possible). Although, taken literally, this is a rather unrealistic assumption (namely, that without the EU no country reforms!), it allows us to derive an important implication concerning the government’s reform commitment in the general case.<sup>9</sup>

Specifically, in this case the objective function of the government becomes

$$W = -a_1 (r_{EU} - r)^2 - a_2 (s_N - s_N + \beta_1 r + \beta_2 (r_{EU} - r)^2) \quad (5')$$

and the equilibrium solution to the maximisation problem is

---

<sup>9</sup> If we were to assume, more realistically, that the public may have a preference for some reforms, but still without status quo bias, this could be introduced in the model by replacing the variable  $r$  with a variable measuring the distance between the government’s level of reforms ( $r$ ) and the public’s desired level of reforms ( $\bar{r}$ ). In that case, eq.2’ becomes  $s = s^* - \beta_1 (r - \bar{r}) - \beta_2 (r_{EU} - r)^2$  without any influence on our analysis (so long as  $\bar{r} < r_{EU}$ , i.e. as long as the EU is still relevant for the setting of the reform target).



$$r = r_{EU} - \frac{a_2\beta_1}{2(\alpha_1+a_2\beta_2)} \quad (6')$$

Given that, again, all parameters in eq.6' are positive ( $\alpha_1, \alpha_2, \beta_1, \beta_2 > 0$ )<sup>10</sup>, it follows that, as before,  $r < r_{EU}$  and thus the optimal policy choice for the government is to 'defect'. In this case, however, the extent of the government's under-shooting in relation to the EU target is fixed by the model parameters and thus more ambitious EU targets lead to proportionally lower amounts of defection (in practical terms, smaller reform delays). To see this, simply note that, whereas in eq.6'  $\frac{\partial r}{\partial r_{EU}} = 1$ , in eq.6  $\frac{\partial r}{\partial r_{EU}} = 1 - \theta < 1$ , meaning that in the present case, any increase in the EU target achieves proportionately more reforms than in the case of status quo bias.<sup>11</sup>

## 5.2. Endogenous status quo bias

As noted earlier, our treatment of status quo bias has been rather stylistic, assuming the status quo to be one single point of reform effort. As was noted in footnote 7, a more general representation of status quo bias allows the status quo to be defined within a range of reforms inside a neighbourhood (say,  $\{r_{SQ-c}, r_{SQ+c}\}$ ). Introducing this possibility into our model produces some additional interesting insights. In this case, the public's support function would take the form

$$s = s_N - \beta_1(\kappa)^2 - \beta_2(r_{EU} - r)^2 \quad (2'')$$

---

<sup>10</sup> Note here that if  $\beta_1 < 0$ , i.e., if the public values reforms positively, then the opposite conclusion holds and reforms will be in fact greater than those agreed with the EU, i.e., the government will 'over-shoot'. In this case, of course, no EU target is needed and the policy problem becomes trivial.

<sup>11</sup> It should be clarified that this concerns the proportional 'defection' relative to an increase in the EU reforms target. Whether the actual level of reforms will be higher or lower in the case where the public obtains direct disutility from reforms depends on the actual values of the model parameters, including the level of reforms targeted by the EU and those dictated by the status quo ( $r_{SQ}$ ). In particular, it can be shown that reforms will be higher with status quo bias if  $r_{EU} > r_{SQ} + \frac{\alpha_2\beta_1 + (\alpha_1 + \alpha_2\beta_2)}{2(\alpha_1 + \alpha_2\beta_2)}$ .

with  $\kappa=(r_{SQ}-c)-r$  if  $r < r_{SQ}-c$ ,  $\kappa=(r_{SQ}+c)-r$  if  $r > r_{SQ}+c$ , and  $\kappa=0$  if  $r_{SQ}-c \leq r \leq r_{SQ}+c$ ; and the size of  $c$  showing the public's tolerance threshold for deviations from the status quo (Alesina and Passarelli, 2017).

Focusing on the two cases of interest, namely when the EU-supported level of reforms is within the public's tolerance range ( $\kappa=0$ ) and when the EU-sponsored level of reforms exceeds the latter ( $\kappa=(r_{SQ}+c)-r$ ), produces the following results for the equilibrium level of reforms.

$$(a) \kappa=0 \rightarrow W = -(\alpha_1 + \alpha_2\beta_2)(r_{EU} - r)^2 \quad \text{so that} \quad \frac{\partial W}{\partial r} = 0 \Rightarrow \dots \Rightarrow r = r_{EU}$$

The government commits fully to the EU target so long as the latter falls within the tolerance range of the public's support for reforms (status quo). For EU targets within this range there is no reform gap.

$$(b) \kappa=(r_{SQ}+c)-r \rightarrow W = -(\alpha_1 + \alpha_2\beta_2)(r_{EU} - r)^2 - \alpha_2\beta_1(r_{SQ} + c - r)^2 \quad \text{so that} \quad \frac{\partial W}{\partial r} = 0 \Rightarrow \dots \Rightarrow r = \theta(r_{SQ} + c) + (1 - \theta)r_{EU} \quad \text{and } \theta \text{ is as defined previously. This case is completely analogous to what was shown in section 4: for reform targets above the public's tolerance threshold, the government shows a commitment deficit which is proportional to } \theta.$$

It is of course important to ask what determines the size of  $c$  and thus the likelihood that the EU reform target will be within, or outside, the public's tolerance threshold. In reality, the size of  $c$  will depend on a large range of factors, including historical, political, cultural, as well as economic. In our discussion here we want to highlight two specific factors that may be of direct relevance to policy: the past level of reforms and the progress with EU accession. As is well discussed in the literature, prolonged and pervasive reforms can often lead to what is known as 'reform fatigue', setting public preferences towards maintaining the policy status quo. Similarly, delays in progress with EU accession and concerns about the EU's commitment to enlargement can lead to 'reform disillusionment', again setting public preferences towards maintaining the policy status quo. Both of these factors reduce the size of  $c$  (the public's tolerance threshold for reforms), thus increasing the probability that  $\kappa>0$  and thus also that  $r<r_{EU}$ .

This observation seems to offer a very interesting explanation for the ‘puzzle’ of reform slowdowns that have been witnessed in the Western Balkans since the crisis (see our discussion in section 2). The prolonged and pervasive reforms that predated, but intensified with, the crisis and the EU’s decision, in part due to the crisis, to impose an official ‘freeze’ in future enlargements until at least 2020<sup>12</sup>, may go a long way in explaining the slowdown of reforms in the region. In terms of our model, both factors will have a negative impact on the parameter  $c$ , thus increasing the probability that the government will ‘defect’ from its reform target. This is fully in line with the sense of ‘token compliance’ identified in the literature with regard to reforms in the Western Balkans (Noutcheva et al., 2013; Vachudova, 2014).

### 5.3. Pro-reforms governments

Another interesting question with regard to the policy implications of our model concerns our assumption of reform-neutrality for the government. To examine what happens when this assumption is relaxed, we allow the government to gain additional utility by over-shooting on its agreed reform target ( $r_{EU} < r$ ), so that:

$$W = -a_1(r_{EU} - r) - a_2(s_N - s) \quad (1')$$

Using, for simplicity, the version of the public support function developed in section 5.1 (no status quo bias – eq.2’), we obtain:

$$W = -a_1(r_{EU} - r) - a_2(s_N - s_N + \beta_1 r + \beta_2(r_{EU} - r)^2) \quad (5'')$$

and, by differentiating with respect to  $r$  and setting equal to zero,

$$\frac{\partial W}{\partial r} = 0 \Rightarrow \dots \Rightarrow r = r_{EU} + \frac{a_1 - a_2 \beta_1}{2a_2 \beta_2} \quad (6'')$$

---

<sup>12</sup> The European Commission has more recently expressed its intention to open the next wave of enlargement (for Montenegro and Serbia) to 2025. To a large extent, this maintains the ‘freeze’ in the short- to medium-run.

Based on eq.6'', and continuing to assume that  $\alpha_1 > 0$  and  $\beta_2 > 0$  (i.e., that both the government and the public value EU accession), there is no certainty in the under-shooting equilibrium. Instead, this will depend fully on the relative values of the model parameters. The government will show full compliance with the EU if and only if  $a_1 = a_2\beta_1 \Rightarrow \beta_1 = \frac{a_1}{a_2}$ , i.e., if the public's aversion to reforms is equal to the relative weight the government gives to EU accession vis-à-vis public support. By implication, as governments become more 'populist' (defined as caring more for domestic support than for accession, so that  $\alpha_2$  increases relative to  $\alpha_1$ ), their reform effort subsides; while more 'Europeanist' governments will be more likely to meet and perhaps over-shoot the EU target, for any level of public support to reforms.

## 6. Policy options for the EU

Our standard model, as developed in section 4, identified four key parameters affecting the extent of domestic compliance to EU-sponsored reforms. On the basis of these, the policy options afforded to the EU in its attempt to stimulate reforms are as follows:

- a. *Increase the weight that the government assigns to the accession process ( $\alpha_1$ ), e.g., through the mechanisms of socialisation and lesson-drawing (Schimmelfennig and Sedelmeier, 2005). It should be noted, however, that in our model this will not achieve full compliance; it will simply reduce the discrepancy between  $r$  and  $r_{EU}$ .*
- b. *Reduce the weight that the government assigns to public support ( $\alpha_2$ ). As above, this will only reduce, rather than eliminate, the discrepancy between  $r$  and  $r_{EU}$  (unless, that is, the EU successfully manages to bring  $\alpha_2$  to zero). Note, however, that in practical terms, making the government more unresponsive to public demands may not be *politically* optimal (or even desirable), as it will evidently be (perceived as) undemocratic, heightening existing concerns about the legitimacy of EU conditionality.*

- c. Reduce the weight that the public assigns to reforms ( $\beta_1$ ), i.e., the public's aversion to reforms and/or status quo bias. Again this can perhaps be achieved through the mechanisms of socialisation and information-sharing, although this is undoubtedly a long-term process and not directly at the hands of policy-makers. Nevertheless, this parameter is crucial: as we mentioned earlier, at the extreme the policy problem can become trivial if the EU succeeds in making the public obtain pro-reform preferences ( $\beta_1 < 0$ ).
- d. Increase the weight that the public assigns to the accession process ( $\beta_2$ ), presumably by communicating more effectively the benefits from accession (including non-pecuniary ones). Note here that under the assumptions of our model the EU cannot influence the public's attitudes to accession by raising the material benefits of accession, as this would incur a direct cost to the EU.<sup>13</sup>

We can get a sense of the relative importance of these parameters by examining how the reform gap changes for a unit change in each of these, i.e., by calculating  $r_{EU} - r$  from eq.6 and comparing the values of the derivatives of this expression with respect to each of these parameters. These are as follows:

$$\frac{\partial(r_{EU} - r)}{\partial \alpha_1} = -\frac{\alpha_2 \beta_1}{(\alpha_1 + \alpha_2 \beta_1 + \alpha_2 \beta_2)^2} (r_{EU} - r_{SQ})$$

$$\frac{\partial(r_{EU} - r)}{\partial \beta_1} = \frac{\alpha_2 (\alpha_1 + \alpha_2 \beta_2)}{(\alpha_1 + \alpha_2 \beta_1 + \alpha_2 \beta_2)^2} (r_{EU} - r_{SQ})$$

$$\frac{\partial(r_{EU} - r)}{\partial \alpha_2} = \frac{\beta_1 (\alpha_1 + \alpha_2 \beta_2)}{(\alpha_1 + \alpha_2 \beta_1 + \alpha_2 \beta_2)^2} (r_{EU} - r_{SQ})$$

$$\frac{\partial(r_{EU} - r)}{\partial \beta_2} = -\frac{\alpha_2^2 \beta_1}{(\alpha_1 + \alpha_2 \beta_1 + \alpha_2 \beta_2)^2} (r_{EU} - r_{SQ})$$

---

<sup>13</sup> This applies equally to the alternative option of the EU offering a side-payment to the government, to make it indifferent between defection and full compliance. From (4), this side-payment would have to be to an amount equal to  $\alpha_2 \beta_1 (r_{SQ} - r_{EU})^2$ . Note that in this case the EU would have a private incentive to ask for a lower level of reforms (as the size of the side-payment is proportional to the level of reforms requested).

From these, some further conclusions can be drawn:

- **Status quo bias versus government preferences for EU accession.** Compared to reducing the public's status quo bias ( $\beta_1$ ), raising the emphasis governments place to the accession process ( $\alpha_1$ ) reduces the reform gap by more if and only if  $\beta_1 > \alpha_1 + \alpha_2 \beta_2$ . In other words, when status quo bias is very high, it pays for emphasis to be placed on altering the preferences of the government (raising  $\alpha_1$ ) – and inversely when status quo bias is low and the government emphasis on accession is high.
- **Government preferences for public support versus public preferences for EU accession.** Similarly, when  $\alpha_2 > \beta_2 + (\alpha_1/\alpha_2)$  the reduction in the reform gap for every unit rise in the public's pro-EU sentiment will be greater than that achieved by a unit reduction in the government's sensitivity to public support. It follows that in cases where governments are too 'populist' (high  $\alpha_2$  and low  $\alpha_1$ ), attention to changing public attitudes towards the EU appears most appropriate.
- **Public attitudes to EU accession and status quo.** Reducing status quo bias will be more effective in terms of lowering the reform gap, relative to the alternative of pursuing this via raising the public's support for EU accession, if and only if  $\beta_1 < \beta_2 + (\alpha_1/\alpha_2)$ . Essentially this implies that, concerning public attitudes, policy should focus on the least intense of these: when the public feels more strongly about the status quo, policy should try to influence (favourably) the public's attitudes towards the EU; when the public has strong preferences in favour of EU accession, policy should focus on reducing the public's status quo bias.
- **Government attitudes to EU accession and public support.** The condition for  $\left| \frac{\partial(r_{EU}-r)}{\partial \alpha_1} \right| > \left| \frac{\partial(r_{EU}-r)}{\partial \alpha_2} \right|$  is  $\beta_1 > 1 - (\alpha_1/\alpha_2)$ . This means that when the public's emphasis on EU accession is low, reform gaps can be reduced more effectively by raising the government's emphasis on EU accession than by focusing on reducing the government's attention to public support. Note, however, that

this condition is only met for very special values of  $\alpha_1$  and  $\alpha_2$  (such that  $\alpha_1 < \alpha_2(1 - \beta_2)$ ) and thus it would appear that in most empirical cases the reform gap can be more effectively reduced if policy effort is placed on reducing the attention governments pay to public support than by raising their preferences towards EU accession. As noted earlier, this is inherently problematic, as it can raise concerns about the democratic legitimacy of the process.

It is important to note that in all cases the extent of under-delivery of reforms ('reform gap') depends on the distance between the level of reforms targeted by the EU and the existing status quo. An important implication follows. In line with claims in the literature, that the effectiveness ('transformative power') of EU conditionality is hindered by the EU setting too high or too unrealistic targets (asking for too much too soon – Uvalic, 2012; Noutcheva and Aydin-Düzgit, 2012), in our model the EU can reduce the extent of non-compliance by domestic governments by *lowering its reform target*. Although this will produce, on the whole, a lower level of reforms, it will at the same time reduce the extent of non-compliance. In this sense, the EU faces a trade-off between maximising the reform effort and maximising compliance. While the former has clear economic benefits (at least in the long-run) and can help speed up accession, the latter may have reputational and wider political benefits (e.g., with regard to public perceptions about the legitimacy and effectiveness of EU conditionality).

The extensions of our model provide additional policy options for the EU. As was shown in section 5.1, status quo bias produces, proportionately, a greater degree of non-compliance compared to the more general case where the public derives direct disutility from reforms (eq.2'). By implication, the EU can face a dividend from removing status quo bias (e.g., by encouraging a more open dialogue about the costs of reforms), even if this results in public attitudes that are directly against (any) reforms. This seemingly paradoxical result makes sense in a second-best world.<sup>14</sup>

---

<sup>14</sup> It is also consistent with behavioural traits discussed in the behavioural economics literature (see, vis. Thaler and Benartzi, 2004).

Given that the EU faces domestic publics who are generally not in support of reforms (a possible first-best), the EU can gain by making the extent of defection independent to its reform target. In contrast to the conclusion drawn immediately above, this would allow the EU to set more ambitious reform targets without losing in terms of compliance.

If the EU is unable to remove status quo bias in public attitudes to reform, there is still room for the EU to influence the extent of compliance, by raising the public's reform tolerance threshold, as shown in our analysis of section 5.2. As was argued there, tolerance to reforms that deviate from the status quo increases with the credibility of the accession process as well as with the pacing of reforms. In this respect, policies aiming at bringing the prospect of accession closer ('status before standards' – Uvalic, 2012; 'unbundling' – Trauner, 2009), setting clear 'milestones' (Vachudova, 2014) and careful targeting only the most necessary reforms (Börzel, 2016) can pay significant dividends, potentially eliminating non-compliance (in the terminology of our model, bringing  $\kappa$  to zero).

A last policy option emerges from our analysis in section 5.3. It is intuitive to argue that pro-reforms governments will tend to produce more reforms for any level of public resistance to reforms or status quo bias. As we showed in section 5.3, however, even pro-reforms governments may be non-compliant, defecting from the EU target. In this case, too, much depends on the values of the key model parameters, namely  $\alpha_1$ ,  $\alpha_2$ ,  $\beta_1$  and  $\beta_2$ , in line with our discussion in the beginning of this section. It follows that a strategy aiming at decoupling the pro-reform attitudes of the government from the EU accession process (in the semiology of our model, aiming at linearising the first term in the government welfare function as in eq.5"), as is for example suggested in the latest EU Enlargement Strategy document<sup>15</sup>, may in fact be of limited value: it may help with the pace of reforms but will not eliminate non-compliance for governments

---

<sup>15</sup> See the quote, already cited in the Introduction, calling for governments in the region "to embrace the necessary reforms more actively [...] not because the EU is asking for it, but because it is in the best interests of their citizens."



which do not have strong commitment to the European perspective ('Europeanist') and instead have a high regard for maximising the support they receive from the public ('populist'). In this regard, maintaining the link between the reforms agenda and the European perspective of the region, and indeed bringing the latter forward, remains a significant tool for incentivising reforms in the region, despite the valid claims that reforms are better delivered when there is local 'ownership' (Noutcheva et al., 2013).

## 7. Conclusions

The main hypothesis of the EU enlargement process is that implementation of the convergence criteria and reforms speed up EU integration for associated countries. This should increase the support by citizens and economic agents for reforms and enhance economic growth and catching-up with the EU living standard. However, in recent years the evidence shows a delay in structural reforms and slowdown of EU integration in the Western Balkans.

The international academic and policy literature provides compelling evidence suggesting a positive impact of structural reforms on growth and convergence – however, this impact tends to vary with a country's institutional quality and level of economic development. More importantly, recent evidence suggests that reforms incorporate short-term costs, not only in a distributional sense ('winners and losers') but also globally – with the positive impacts materialising over longer time-horizons. The results from our own empirical investigation in this paper suggest a positive correlation between structural reforms and economic convergence for the Western Balkan countries when long-run growth trajectories are controlled for. They also show that EU membership has a positive effect on economic performance, possibly indicating the role that the EU can have in increasing the credibility of, and commitment to, structural reforms. At the same time, our evidence showed that economic and especially political reforms lag behind in the Western Balkans. A number of explanations have been put forward in the literature for this: from ones

concentrating on the design of EU conditionality to ones raising issues of local ownership and the domestic 'demand for reforms'. Still, the fact that reforms are under-delivered in the region, despite the wide evidence for their long-term benefits and despite the significant impetus (and guidance) offered by the EU process, remains a puzzle.

To shed some light on this puzzle, we developed a political economy model, with reform-neutral governments, public preferences towards maintaining the status quo with regard to reforms, and both public and government support for the EU association process – examining also alternative assumptions (pro-reforms governments, anti-reforms public), for completeness. The main message from our model is that non-compliance ('reform delays') is intrinsic to the process that drives the reform effort, namely the process of EU conditionality. In our model, non-compliance is not the result of information or coordination problems (e.g., time-inconsistency, Kydland and Prescott, 1977) or of sectoral interests and distributive politics (Alesina and Rodrik, 1994; Vachudova, 2014). Instead, non-compliance arises endogenously, even for governments and publics who value positively the EU process (conditionality, accession): for as long as the EU targets reforms above the status quo favoured by the public domestically (or, more generally, above the public's desired level of reforms), even with fully-informed publics and fully-committed governments the end result will – except in very specific and rather unlikely circumstances – be a level of reforms below that agreed with the EU.

This is not to say, of course that governments bear no responsibility for reform delays and the reform gaps observed in the region. Indeed, in our model non-compliance depends not only on public preferences (for reforms, for accession, for the status quo) but crucially also on those of the government. Thus, even without attempting to alter the preference structure of the public,<sup>16</sup> national governments can influence reform

---

<sup>16</sup> Although our stylised model does not allow us to explore the full breadth of actions the government can pursue in this regard, actions such as communicating better the long-term benefits of reforms, taking ownership of the reform agenda in contexts of low public support

outcomes by changing their own structure of preferences (attitudes to reforms, EU accession and public support). Crucially, in this regard, non-compliance is independent of the overall ('natural') popularity of the government and thus the latter cannot be used as an excuse – e.g., in times of wider public disillusionment with central politics – for not implementing welfare-enhancing reforms. It is in this spirit, consistent with the findings of our model, that the European Commission emphasises that for enhancing the EU's engagement with the Western Balkans "[i]t is now up to the countries' authorities, with the support of their societies, to take ownership and deliver on the well-known conditions for accession" (COM, 2018b, p.3).

Besides the responsibility of governments, however, and perhaps more importantly, our model helps unveil a strategic policy dilemma for the EU. As was discussed in section 5.4, the EU seems to face a trade-off between the level of reforms implemented and the extent of reform compliance. Setting too high a reform target increases the level of reforms but also increases the extent of non-compliance. Setting reforms at too moderate a level will increase compliance but will not maximise the level of reforms. If, as our model predicts, this is a fact of life, then *the optimal policy option for the EU is not to try to minimise non-compliance per se but rather to try to ensure a maximum level of reforms given non-compliance*. In its policy menu, the EU may choose to pace reforms and bring forward the rewards of association for the candidate countries (to increase the reform tolerance threshold of the public); place more emphasis on strengthening pro-reform attitudes in the domestic populations (than in the ruling governments), especially where support for EU accession is high; encourage public dialogue about the costs and benefits of reforms so as to reduce the uncertainty that feeds into status quo bias (even if this results in strengthening anti-reform attitudes); and pursue reform targets which are not too testing for the countries implementing them. Above all, EU policy must openly accept that – depending on each country's behavioural parameters – reform delays and non-compliance are a natural outcome of the process and not

---

for the accession process, and paying attention to the distributional consequences of reforms, can unquestionably help with making reforms more popular.

always, or exclusively, the result of poor/malicious implementation or of sectoral reform resistances.

Either way, *the economic position of the countries in the Western Balkans and the political and security importance that the EU association process has for the region, make the process of EU-driven reforms an absolute necessity.* Political and economic reforms can help the countries in the region re-gain the economic dynamism they seemed to have just before the crisis and to support industrial diversification and upgrading, with more investment, greater levels of employment and higher productivity. While EU accession is unquestionably an important anchor for this, we hope that our analysis in this paper has contributed to understanding better the limitations to this process and the ways to overcome them.

## References

- Acemoglu, D., Johnson S. and Robinson, J. (2005). 'Institutions as a Fundamental Cause of Long-Run Growth'. *Handbook of Economic Growth*. Chapter 6. Vol.1. Part A. pp. 385-472.
- Aghion, Ph., Howitt, P. and Mayer-Foulkes, D. (2005). 'The Effect of Financial Development on Convergence: Theory and Evidence'. *The Quarterly Journal of Economics*. Vol. February. pp. 173–222.
- Alesina, A. and Rodrik, D. (1994). 'Distributive Politics and Economic Growth'. *Quarterly Journal of Economics*. Vol.109. No.2. 465-490.
- Alesina, A. and Passarelli, F. (2017). 'Loss Aversion in Politics'. Mimeo. Department of Economics. Harvard University.
- Anastasakis, O. and Bechev, D. (2003). 'EU conditionality in South East Europe: bringing commitment to the process'. *South East European Studies Programme*. pp. 1-20.
- Babecky, J. and Havranek, T. (2014). 'Structural reforms and growth in transition: A meta-analysis'. *Economics of Transition* 22(1). pp. 13-42.
- Börzel, T. A. (2016). 'Building Member States: how the EU promotes political change in its new members accession candidates and eastern neighbors'. *Geopolitics. History & International Relations*. 8(1).
- Börzel, T. and van Hüllen, V. (2014). 'One voice, one message, but conflicting goals: cohesiveness and consistency in the European Neighbourhood Policy'. *Journal of European Public Policy* 21 (7): 1033-1049.
- Campos, N. F., De Grauwe, P. and Ji, Y. (eds) (2018a), *The Political Economy of Structural Reforms in Europe*, Oxford University Press.
- Campos, N. F., Coricelli, F., and Moretti, L. (2018b). 'Institutional integration and economic growth in Europe'. *Journal of Monetary Economics*, DOI: 10.1016/j.jmoneco.2018.08.001
- Canton E., Grilo I., Monteagudo J., Pierini, F. and Turrini, A. (2014), 'The Role of Structural Reform for Adjustment and Growth', *ECFIN Economic Brief*, Issue 34 (June).

- Carpenter, T. G. (2017). 'Renewed Turmoil in the Balkans: Anatomy of a Western Policy Failure'. *Mediterranean Quarterly*, 28(4), 5-13.
- Ciccone, A. & Papaioannou, E. (2009), 'Human Capital, the Structure of Production, and Growth', *Review of Economics and Statistics*, Vol. 91, Iss.1, pp. 66–82
- COM (2015), EU Enlargement Strategy, Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions (611 final), Brussels.
- COM (2016a), 2016 Communication on EU Enlargement Policy, Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions (611 final), Brussels.
- COM (2016b), 'Progress Report', Annual Reports for the Western Balkan Countries, European Commission, Brussels.
- COM (2017), 2017 European Semester: assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011, Communication from the Commission to the European Parliament, the Council, the European Central Bank and the Eurogroup (90 final), Brussels.
- COM (2018a), 2018 Communication on EU Enlargement Policy, Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions (450 final), Brussels.
- COM (2018b), A credible enlargement perspective for and enhanced EU engagement with the Western Balkans, Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions (65 final), Brussels.
- Dabla-Norris E., Ho, G. and Kyobe, A. (2016), 'Structural Reforms and Productivity Growth in Emerging Market and Developing Economies', IMF Working Paper, WP/16/15, Washington D.C. (February 2016)
- DGEP (2015), 'The Western Balkans and EU Enlargement: Lessons learned, ways forward and prospects ahead', Directorate-General for External Policies, European Parliament's Committee on Foreign Affairs, European Parliament, Brussels (PE 534.999).
- Džankić, J., Soeren, K., and Marko, K. (2019), *The Europeanisation of the Western Balkans*, Palgrave Macmillan, Cham.

## *Structural Reforms in the Balkans*

EBRD (2013), 2013 Transition Report, European Bank for Reconstruction and Development, London.

Fernandez, R. and Rodrik, D. (1991), 'Resistance to reform: Status quo bias in the presence of individual-specific uncertainty'. *The American economic review* (1991): 1146-1155.

Gateva, Eli (2015), *European Union Enlargement Conditionality*, Palgrave Macmillan, Hampshire, UK

Grabbe, H. (2006). *The EU's Transformative Power Europeanization through Conditionality in Central and Eastern Europe* (NY: Palgrave Macmillan).

Grabbe, H. (2014). 'Six Lessons of Enlargement Ten Years On: The EU's Transformative Power in Retrospect and Prospect'. *JCMS: Journal of Common Market Studies*, 52(S1), 40-56.

Hughes, J., Sasse, G., and Gordon, C. (2004). *Europeanization and Regionalization in the EU's Enlargement to Central and Eastern Europe: the Myth of Conditionality*. Basingstoke: Palgrave Macmillan.

IMF (2015a), 'The Western Balkans: 15 Years of Economic Transition', *Regional Economic Issues, Special Report*, International Monetary Fund, Washington DC.

IMF (2015b), 'Structural Reforms and Macroeconomic Performance: Initial Considerations for The Fund', *Staff Report*, International Monetary Fund, Washington DC.

Innes, A. (2014). 'The Political Economy of State Capture in Central Europe'. *JCMS: Journal of Common Market Studies*, 52(1), 88-104.

Kovtun, D. Meyer, A., Murgusova, Z, Smith, D. and Tambunlertchai, S. (2014) 'Boosting job growth in the Western Balkans'. IMF Working paper, WP/14/16, Washington: International Monetary Fund.

Kuzio, T. (2001). 'Transition in Post-Communist States: Triple or Quadruple?'. *Politics* 21(3): 168-177.

Kydland, F. and Prescott, E. (1977), 'Rules Rather Than Discretion: The Inconsistency of Optimal Plans', *Journal of Political Economy*, Vol. 85, No.3, Pages 473–92

Monastiriotes, V., Kallioras, D. and Petrakos, G. (2017). 'The regional impact of European Union association agreements: an event-analysis approach to the case of Central and Eastern Europe'. *Regional Studies* 51 (10). pp.1454-1468.

- Noutcheva, G. (2009). 'Fake, partial and imposed compliance: the limits of the EU's normative power in the Western Balkans'. *Journal of European Public Policy*. Vol.16, No. 7.
- Noutcheva, G. and Aydin-Düzgit, S. (2012). 'Lost in Europeanisation: The Western Balkans and Turkey'. *West European Politics* 35 (1): 59-78.
- Noutcheva, G., Pomorska, K., and Bosse, G. (2013). 'The EU and its neighbours: values versus security in European Foreign Policy'. Manchester: Manchester University Press.
- RCC (2016). *Changing the region, RCC Strategy and Work Programme 2017-2019*, Regional Cooperation Council, Sarajevo.
- Sanfey P., Milatović J. and Kresic A. (2016). 'How the Western Balkans can catch up'. European Banks for Reconstruction and Development. Working Paper No.185. London (January 2016).
- Sanfey, P. and Milatović, J. (2019). 'The Western Balkans regional economic area: From economic cooperation to economic integration'. In *Western Balkan Economies in Transition* (pp. 15-27). Springer, Cham.
- Schimmelfennig, F. and Sedelmeier, U. (Eds.) (2005). *The Europeanization of Central and Eastern Europe*. Ithaca, New York: Cornell University Press.
- Thaler, R.H. and Benartzi, S. (2004). *Save More Tomorrow™: Using Behavioral Economics to Increase employee saving*. *Journal of Political Economy* 112, S164-S187.
- Thomas, M., & Bojicic-Dzelilovic, V. (Eds.). (2014). *Public Policy Making in the Western Balkans: Case Studies of Selected Economic and Social Policy Reforms*. Springer.
- Trauner, F. (2009). 'From membership conditionality to policy conditionality: EU external governance in South Eastern Europe'. *Journal of European Public Policy* 16(5): 774-790.
- Uvalić, M. (2012). 'Transition in Southeast Europe: understanding economic development and institutional change', In *Economies in Transition: The Long-Run View*, edited by Gérard Roland, 364-99. Basingstoke: Palgrave Macmillan.
- Uvalić, M. (2019). 'Economic Integration of the Western Balkans into the European Union: The Role of EU Policies'. In *The Europeanisation of the Western Balkans*, pp. 207-235. Palgrave Macmillan, Cham.



## *Structural Reforms in the Balkans*

Vachudova, M. A. (2014). 'EU leverage and national interests in the Balkans: The puzzles of enlargement ten years on'. *JCMS: Journal of Common Market Studies* 52(1): 122-138.

World Bank (2017a). 'Job creation picks up'. *Western Balkans Regular Economic Report No.12*. World Bank Group, Washington DC.

World Bank (2017b). 'Western Balkans: Regional economic integration issues notes'. World Bank Group, Washington DC.

Appendix

**Table A1.**  
World governance indicators and convergence

Dynamic Panel Data Regression							
Dependent variable: Country's GDP p.c. as a share of average EU-15							
Variables/Reform	Voice and accountability	Political stability	Regulatory quality	Governance effectiveness	Rule of law	Control of corruption	World Governance Index
L.gdp15	1.287*** (0.0539)	1.271*** (0.0541)	1.317*** (0.0559)	1.300*** (0.0462)	1.322*** (0.0516)	1.323*** (0.0428)	1.264*** (0.0552)
L2.gdp15	-0.340*** (0.0539)	-0.334*** (0.0514)	-0.354*** (0.0555)	-0.361*** (0.0469)	-0.370*** (0.0475)	-0.367*** (0.0429)	-0.337*** (0.0531)
Structural reform	1.522*** (0.3810)	1.228*** (0.4600)	0.560* (0.3170)	1.010*** (0.3150)	0.734** (0.3100)	0.671** (0.3200)	1.845*** (0.4130)
EU membership	0.520*** (0.1640)	0.817*** (0.2060)	0.701** (0.2920)	0.929*** (0.1970)	0.739*** (0.2260)	0.863*** (0.2440)	0.565*** (0.1290)
Constant	1.667*** (0.2720)	2.302*** (0.5160)	1.424*** (0.2420)	2.240*** (0.4360)	1.959*** (0.4660)	1.843*** (0.4450)	2.611*** (0.4040)
Observations	208	206	207	207	208	208	208
Number of country	16	16	16	16	16	16	16
ar1p	0.00149	0.00117	0.00163	0.00174	0.00213	0.00255	0.00131
ar1	-3.177	-3.246	-3.15	-3.132	-3.072	-3.017	-3.213
g_avg	13	12.88	12.94	12.94	13	13	13
chi2p	0	0	0	0	0	0	0
chi2	57425	53560	57776	63798	56306	34564	45281
h	3	3	3	3	3	3	3
df_m	4	4	4	4	4	4	4
N_g	16	16	16	16	16	16	16
g_max	13	13	13	13	13	13	13
g_min	13	11	12	12	13	13	13
artests	2	2	2	2	2	2	2
sigma	1.207	1.192	1.224	1.216	1.219	1.22	1.188
sig2	1.457	1.421	1.498	1.478	1.487	1.489	1.412
hansenp	0.48	0.402	0.52	0.352	0.315	0.386	0.485
hansen_df	13	13	13	13	13	13	13
hansen	12.59	13.61	12.1	14.32	14.87	13.83	12.53
sarganp	0	0	0	0	0	0	0
sar_df	13	13	13	13	13	13	13
sargan	79.98	79.99	82.96	79.58	80.69	79.8	80.62
j0	25	25	25	25	25	25	25
j	18	18	18	18	18	18	18
ar2p	0.049	0.0488	0.0497	0.0422	0.0504	0.0553	0.0425
ar2	-1.968	-1.971	-1.963	-2.031	-1.957	-1.916	-2.028

NOTES:  
Estimation : System Generalized Method of Moments  
 One-step estimation  
 Robust standard errors in paranthesis  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Variables : gdp15 - country's gdp per capita as a share of gdp p.c. of EU-15 average; Lgdp15 and L2.gdp15 - first and second lag of gdp15; . (EU-15: Austria; Belgium; Denmark; France; Finland; Germany; Greece; Ireland; Italy; Luxembourg; Netherlands; Portugal; Spain; Sweden; and United Kindgom.)  
 World governance indicators: min (-2.5), max (2.5).  
Countries : Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Czech Republic; Estonia; Hungary; Latvia; Lithuania;  
Years : 1996-2016  
Data : World governance indicators (World Bank); GDP (IMF, WEO).

**Table A2.**  
Transition indicators and convergence

Dynamic Panel Data Regression							
Dependent variable: Country's GDP p.c. as a share of average EU-15							
Variables/Reform	Large scale privatisation	Small scale privatisation	Governance and enterprise restructuring	Price liberalisation	Trade and forex system	Competition policy	Transition index
L.gdp15	1.375*** (0.0404)	1.388*** (0.0357)	1.367*** (0.0348)	1.395*** (0.0409)	1.397*** (0.0392)	1.393*** (0.0393)	1.375*** (0.0366)
L2.gdp15	-0.393*** (0.0409)	-0.411*** (0.0356)	-0.397*** (0.0357)	-0.406*** (0.0409)	-0.410*** (0.0385)	-0.413*** (0.0388)	-0.399*** (0.0378)
Structural reform	0.463*** (0.1390)	0.518*** (0.1600)	0.663*** (0.1700)	0.371* (0.2060)	0.259** (0.1270)	0.361* (0.1960)	0.701*** (0.2300)
EU membership	0.354*** (0.1320)	0.486*** (0.1180)	0.313*** (0.1130)	0.405*** (0.1110)	0.445*** (0.1170)	0.256* (0.1520)	0.337*** (0.1240)
Constant	-0.473 (0.3330)	-0.867** (0.3900)	-0.279 (0.2360)	-0.758 (0.8420)	-0.196 (0.4340)	0.258 (0.2630)	-1.166** (0.5870)
Observations	260	260	260	260	260	260	260
Number of country	16	16	16	16	16	16	16
ar1p	0.00204	0.00205	0.00295	0.00204	0.00212	0.00196	0.00209
ar1	-3.085	-3.083	-2.973	-3.084	-3.073	-3.096	-3.078
g_avg	16.25	16.25	16.25	16.25	16.25	16.25	16.25
chi2p	0	0	0	0	0	0	0
chi2	99167	164008	68937	113662	105784	104071	83615
h	3	3	3	3	3	3	3
df_m	4	4	4	4	4	4	4
N_g	16	16	16	16	16	16	16
g_max	17	17	17	17	17	17	17
g_min	10	10	10	10	10	10	10
artests	2	2	2	2	2	2	2
sigma	1.215	1.226	1.211	1.232	1.232	1.224	1.217
sig2	1.477	1.503	1.465	1.518	1.517	1.498	1.48
hansenp	0.88	0.816	0.837	0.842	0.899	0.935	0.888
hansen_df	17	17	17	17	17	17	17
hansen	10.52	11.74	11.37	11.28	10.11	9.169	10.36
sarganp	0	0	0	0	0	0	0
sar_df	17	17	17	17	17	17	17
sargan	88.86	86.62	86.08	87.62	87.13	86.9	86.47
j0	23	23	23	23	23	23	23
j	22	22	22	22	22	22	22
ar2p	0.0779	0.0869	0.0709	0.0882	0.0875	0.0796	0.0798
ar2	-1.763	-1.712	-1.806	-1.705	-1.709	-1.753	-1.752

NOTES:  
Estimation : System Generalized Method of Moments  
 One-step estimation  
 Robust standard errors in paranthesis  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1  
Variables : gdp15 - country's gdp per capita as a share of gdp p.c. of EU-15 average; L.gdp15 and L2.gdp15 - first and second lag of gdp15. (EU-15: Austria; Belgium; Denmark; France; Finland; Germany; Greece; Ireland; Italy; Luxembourg; Netherlands; Portugal; Spain; Sweden; and United Kindgom.)  
 Transition indicators: min (1), max (4+).  
Countries : Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Czech Republic; Estonia; Hungary; Latvia; Lithuania; Macedonia;  
Years : 1996-2014  
Data : Transition indicators (EBRD); GDP (IMF, WEO).

**Table A3.**  
Global competitiveness index and convergence

Dynamic Panel Data Regression							
Dependent variable: Country's GDP p.c. as a share of average EU-15							
Variables/Reform	Institutions	Infrastructure	Macroeconomic environment	Health and primary	Higher education and	Goods market efficiency	Labour market efficiency
L.gdp15	1.316*** (0.0393)	1.328*** (0.0390)	1.327*** (0.0425)	1.327*** (0.0395)	1.323*** (0.0409)	1.305*** (0.0326)	1.299*** (0.0359)
L2.gdp15	-0.564*** (0.0726)	-0.572*** (0.0752)	-0.571*** (0.0753)	-0.575*** (0.0750)	-0.569*** (0.0741)	-0.553*** (0.0684)	-0.550*** (0.0692)
L3.gdp15	0.224*** (0.0567)	0.232*** (0.0560)	0.231*** (0.0552)	0.230*** (0.0561)	0.226*** (0.0550)	0.218*** (0.0541)	0.210*** (0.0534)
L4.gdp15	-0.000739 (0.0646)	-0.00456 (0.0668)	-0.00465 (0.0674)	-0.0064 (0.0679)	-0.00546 (0.0687)	0.00563 (0.0664)	0.0229 (0.0560)
Structural reforms	0.474*** (0.1300)	-0.0454 (0.4070)	0.0325 (0.1770)	0.436** (0.2220)	0.325 (0.2710)	0.472** (0.1910)	0.901*** (0.1780)
EU membership	1.098*** (0.2820)	1.007*** (0.3840)	0.994*** (0.3250)	1.088*** (0.3400)	1.009*** (0.2990)	1.028*** (0.3160)	0.797*** (0.2520)
Constant	-0.719 (0.4890)	0.925 (1.0330)	0.665 (0.7300)	-1.583 (1.1460)	-0.388 (0.9910)	-0.938 (0.7190)	-2.835*** (0.7640)
Observations	126	126	126	126	126	126	126
Number of country	16	16	16	16	16	16	16
ar1p	0.00118	0.00113	0.00122	0.00116	0.00122	0.00113	0.000966
ar1	-3.243	-3.257	-3.234	-3.248	-3.234	-3.255	-3.3
g_avg	7.875	7.875	7.875	7.875	7.875	7.875	7.875
chi2p	0	0	0	0	0	0	0
chi2	43938	63739	90672	54020	53195	70436	53846
h	3	3	3	3	3	3	3
df_m	6	6	6	6	6	6	6
N_g	16	16	16	16	16	16	16
g_max	8	8	8	8	8	8	8
g_min	7	7	7	7	7	7	7
artests	2	2	2	2	2	2	2
sigma	0.723	0.729	0.729	0.727	0.729	0.719	0.713
sig2	0.522	0.531	0.531	0.528	0.532	0.517	0.508
hansenp	0.259	0.304	0.344	0.263	0.297	0.295	0.306
hansen_df	10	10	10	10	10	10	10
hansen	12.4	11.72	11.17	12.33	11.83	11.85	11.69
sarganp	1.20E-05	2.43E-06	2.65E-06	3.08E-06	3.29E-06	2.90E-06	7.25E-05
sar_df	10	10	10	10	10	10	10
sargan	40.85	44.73	44.52	44.16	44	44.3	36.38
j0	18	18	18	18	18	18	18
j	17	17	17	17	17	17	17
ar2p	0.103	0.0848	0.0773	0.0885	0.102	0.11	0.0654
ar2	1.629	1.724	1.767	1.703	1.636	1.599	1.842

NOTES:

Estimation : System Generalized Method of Moments

One-step estimation

Robust standard errors in paranthesis

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Variables : gdp15 - country's gdp per capita as a share of gdp p.c. of EU-15 average; L.gdp15, L2.gdp15 L3.gdp15 and L4.gdp15 - first, second, third and fourth lag of gdp15. (EU-15: Austria; Belgium; Denmark; France; Finland; Germany; Greece; Ireland; Italy; Luxembourg; Netherlands; Portugal; Spain; Sweden; and United Kindgom.)  
Global competitiveness index: min (1), max (7).

Countries : Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Czech Republic; Estonia; Hungary; Latvia;

Years : 2006-2017

Data : Global Competitiveness Index (WEO); GDP (IMF, WEO).

**Table A3.**  
Global competitiveness index and convergence (continued)

Dynamic Panel Data Regression						
Dependent variable: Country's GDP p.c. as a share of average EU-15						
variables/Reform	Financial market development	Technology readiness	Market size	Business sophistication	Innovation	Global competitiveness index
L.gdp15	1.286*** (0.0435)	1.328*** (0.0379)	1.337*** (0.0389)	1.286*** (0.0399)	1.325*** (0.0392)	1.294*** (0.0355)
L2.gdp15	-0.545*** (0.0761)	-0.571*** (0.0754)	-0.576*** (0.0737)	-0.555*** (0.0708)	-0.573*** (0.0739)	-0.545*** (0.0671)
L3.gdp15	0.208*** (0.0627)	0.231*** (0.0523)	0.232*** (0.0552)	0.219*** (0.0574)	0.237*** (0.0562)	0.213*** (0.0522)
L4.gdp15	0.0283 (0.0647)	-0.00603 (0.0672)	-0.011 (0.0662)	0.00829 (0.0660)	-0.0146 (0.0669)	0.00923 (0.0642)
Structural reforms	0.532*** (0.1500)	0.0261 (0.1780)	-0.143 (0.1190)	1.102** (0.4420)	0.342 (0.3270)	1.129** (0.4900)
EU membership	0.980*** (0.2800)	0.999*** (0.3080)	1.140*** (0.3630)	1.100*** (0.3360)	1.069*** (0.3180)	0.878*** (0.2990)
Constant	-1.040* (0.5450)	0.71 (0.5930)	1.215** (0.4810)	-2.383* (1.2740)	0.00113 (0.7890)	-3.408** (1.7290)
Observations	126	126	126	126	126	126
Number of country	16	16	16	16	16	16
ar1p	0.0011	0.00125	0.00127	0.00111	0.00112	0.00096
ar1	-3.262	-3.228	-3.223	-3.262	-3.259	-3.302
g_avg	7.875	7.875	7.875	7.875	7.875	7.875
chi2p	0	0	0	0	0	0
chi2	186223	75352	94104	39111	55559	63003
h	3	3	3	3	3	3
df_m	6	6	6	6	6	6
N_g	16	16	16	16	16	16
g_max	8	8	8	8	8	8
g_min	7	7	7	7	7	7
artests	2	2	2	2	2	2
sigma	0.709	0.729	0.732	0.712	0.729	0.713
sig2	0.503	0.532	0.535	0.507	0.531	0.509
hansepn	0.361	0.281	0.3	0.358	0.302	0.257
hansen_df	10	10	10	10	10	10
hansen	10.95	12.07	11.78	11	11.76	12.44
sarganp	1.31E-05	2.00E-06	5.35E-06	1.28E-05	2.03E-06	4.72E-06
sar_df	10	10	10	10	10	10
sargan	40.62	45.21	42.82	40.69	45.17	43.13
j0	18	18	18	18	18	18
j	17	17	17	17	17	17
ar2p	0.117	0.0888	0.0843	0.107	0.0984	0.12
ar2	1.566	1.702	1.727	1.61	1.653	1.556

NOTES:

Estimation : System Generalized Method of Moments  
One-step estimation  
Robust standard errors in paranthesis  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Variables : gdp15 - country's gdp per capita as a share of gdp p.c. of EU-15 average; L.gdp15, L2.gdp15 L3.gdp15 and L4.gdp15 - first, second, third and fourth lag of gdp15. (EU-15: Austria; Belgium; Denmark; France; Finland; Germany; Greece; Ireland; Italy; Luxembourg; Netherlands; Portugal; Spain; Sweden; and United Kindgom.)

Global competitiveness index: min (1), max (7).

Countries : Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Czech Republic; Estonia; Hungary; Latvia; Lithuania; Macedonia; Monetenegro; Poland; Romania; Serbia; Slovak Republic; and Slover

Years : 2006-2017

Data : Global Competitiveness Index (WEO); GDP (IMF, WEO).

## Recent LEQS papers

**Saka, Orkun & Bircan, Çağatay.** Lending Cycles and Real Outcomes: Costs of Political Misalignment ' LEQS Paper No. 139, December 2018

**Wolkenstein, Fabio.** Transnational Partisanship and Networked Constituent Power in the EU' LEQS Paper No. 138, October 2018

**Macchiarelli, Corrado** 'What is the EU-UK relation all about? Tracking the path from monetary integration to "ever closeness"' LEQS Paper No. 137, September 2018

**Meyer, Niclas** 'EU break-up? Mapping plausible pathways into alternative futures' LEQS Paper No. 136, August 2018

**Di Cataldo, Marco & Monastiriotis, Vassilis** 'An assessment of EU Cohesion Policy in the UK regions: direct effects and the dividend of targeting' LEQS Paper No. 135, June 2018

**Innes, Abby** 'First-best-world economic theory and the second-best-world of public sector outsourcing: the reinvention of the Soviet Kombinat by other means' LEQS Paper No. 134, May 2018

**Bojar, Abel** 'With a Little Help from My Friends: Ministerial Alignment and Public Spending Composition in Parliamentary Democracies' LEQS Paper No. 133, April 2018

**Voss, Dustin** "The Political Economy of European Populism: Labour Market Dualisation and Protest Voting in Germany and Spain" LEQS Paper No. 132, March 2018

**Campos, Nauro F. & Macchiarelli, Corrado** "Symmetry and Convergence in Monetary Unions" LEQS Paper No. 131, March 2018

**Costa Font, Joan & Perdakis, Laurie** 'Varieties of Health Care Devolution: "Systems or Federacies"?' LEQS Paper No. 130, February 2018

**Calrsson, Ulrika** "The Perennial Thirty Years' War" LEQS Paper No. 129, February 2018

**Isiksel, Turkuler** "Square peg, round hole: Why the EU can't fix identity politics" LEQS Paper No. 128, January 2018

**Hancké, Robert & Vlandas, Tim** "The Politics of Disinflation" LEQS Paper No. 127, December 2017

**White, Jonathan** "Between Rules and Discretion: Thoughts on Ordo-liberalism" LEQS Paper No. 126, November 2017

**Costa Font, Joan & Zigante, Valentina** "Building 'Implicit Partnerships'? Financial Long Term Care Entitlements in Europe" LEQS Paper No. 125, October 2017

**Bohle, Dorothee** "Mortgaging Europe's periphery" LEQS Paper No. 124, September 2017

**Iordanoglou, Chrysafis & Matsaganis, Manos** "Why Grexit cannot save Greece (but staying in the Euro area might)" LEQS Paper No. 123, August 2017

**Saka, Orkun** "Domestic banks as lightning rods? Home bias during the Eurozone crisis" LEQS Paper No. 122, February 2017



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE ■



## LEQS

European Institute  
London School of Economics  
Houghton Street  
WC2A 2AE London  
Email: [euroinst.LEQS@lse.ac.uk](mailto:euroinst.LEQS@lse.ac.uk)



<http://www.lse.ac.uk/european-institute/research/leqs-discussion-paper-series>