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† Deceased 11 September 2018.

INTRODUCTION: SPECIAL ISSUE ON THE COMPARATIVE ECONOMICS OF TRANSITION IN SOUTH EAST EUROPE (PART I)

This issue of the journal presents a selection of articles from a workshop on The Comparative Economics of Transition in South East Europe that took place at the University of Belgrade's Faculty of Economics in September 2019. The workshop was organised by Economic Annals in collaboration with the European Association for Comparative Economic Studies (EACES) and was dedicated to the memory of Professor Božidar Cerović, the former Editor-in-Chief of this journal, who sadly passed away a year earlier. An obituary of Professor Cerović by Professor Milica Uvalić is published in this issue of the journal. Professor Cerović was much appreciated by his colleagues, not only for his warmth of character but also for his academic leadership in the study of the economic transition in South East Europe (SEE). He was also an active participant in the activities of EACES, organising a major conference of the association in Belgrade in September 2013. Professor Cerović has left a large corpus of work on the economics of transition in the region, including on the topics of the labour-managed economy (Cerović, Svejnar & Uvalić, 2015), transition and institutions (Cerović & Nojković, 2009; Cerović, 2010), privatisation (Cerović, 2006; Cerović & Petrini, 2006; Cerović & Dragutinović, 2007), industrial policy (Cerović, Nojković & Uvalić, 2014), intangible capital (Cerović, Mitić & Nojković, 2015), and human resource management (Bogičević Milikić, Janičijević & Cerović, 2012). The diversity of these topics was reflected in the papers presented at the workshop. This issue of Economic Annals (and the subsequent issue) contains a selection of revised versions of those papers that have been through a rigorous peer review process and form a rich collection of articles focusing on transition in SEE in general and on Serbia in particular.

The first article by Saul Estrin from the London School of Economics and Political Science (LSE) sets out a framework for a nuanced understanding of the relative performance of state-owned enterprises compared to private enterprises. He develops a new taxonomy to analyse the comparative performance of state-owned and privately-owned enterprises based on the relationship between governance and type of state engagement (welfare state, developmental state, and predatory state). The resulting models show that state-owned enterprises (SOE) may perform better than privately owned enterprises in developmental states

with strong governance if they benefit from superior state resources. Otherwise the standard result that privately-owned enterprises perform better than state-owned enterprises applies. However, a better governance environment improves SOE performance in all state engagement arrangements.

The next four articles analyse diverse aspects of the economic transition in Serbia. Milica Uvalić, Božidar Cerović,[†] and Jasna Atanasijević explore the transition experience of the Serbian economy over the decade following the 2008 economic crisis. The authors argue that only modest progress has been made, and that Serbia has experienced a delayed transition that has been held back further by the effects of the economic crisis and flawed pre-2008 policy measures. The paper shows that the Serbian economy stagnated in the aftermath of the economic crisis and that this poor performance can be traced to a lack of fundamental institutional changes, government inefficiency, and unresolved political issues. The authors argue that measures to boost the low investment rate and accelerate institutional reform are needed to accelerate economic growth.

Ana Aleksić Mirić, Biljana Bogičević Milikić, and Nebojša Jančićević draw on the contribution of Božidar Cerović to review the organisational restructuring of the Serbian business sector over the period of economic transition since 1990. The authors adopt the term ‘organisational learning’ to describe both the individual and organisational learning processes undertaken during the Serbian economy’s long period of transition. They identify three periods of this transition: an early transition period in the 1990s; a middle transition period prior to the economic crisis, characterised by an opening of the economy and a large inflow of foreign investment; and a post-crisis period of late-stage transition characterised by a rapid development of the digital economy, reflecting a maturing of the organisational learning process.

Gordana Matković and Katarina Stanić examine reforms to the Serbian pension system in the period of economic transition. They argue that the Serbian pension system has been developed based on Bismarkian social policy, reflecting the structure of prior earnings. Until recently, Serbia resisted reform proposals pushed by the World Bank to privatise the pension system along the lines adopted in neighbouring Croatia and North Macedonia. However, the Serbian pension system has recently undergone a “silent break with Bismarck” through a series of reforms that have steadily introduced a Beveridgian public pension system with reduced replacement rates, embodying a more redistributive approach. Income

[†] Deceased 11 September 2018.

maintenance will require individuals to take out private pension supplements. These reforms have not been subject to public debate but are an administrative solution responding to high public finance deficits. The authors argue that this silent break with Bismarck will likely entail substantial transition costs.

The last two articles explore various dimensions of the institutional development of economic growth in Serbia and South East Europe more generally. First, Marija Džunić, Nataša Golubović, and Srđan Marinković analyse the determinants of institutional trust in transition economies, taking Serbia as a case study. Since the publication of Fukuyama's classic study of trust, the role of effective institutions and public trust in institutions is increasingly understood as playing a critical role in supporting economic development (Fukuyama, 1995). As the authors of this article point out, trust facilitates engagement in collective action and strengthens the incentive to finance public goods, while a low level of trust may affect investment decisions as businesses become less willing to take risks and introduce innovations. The authors make use of the EBRD's Life in Transition survey to analyse trust in institutions in Serbia. They find a widespread distrust in institutions, determined largely by weak institutional performance. It should be pointed out that this finding reflects a global trend that is also observed in advanced economies, largely reflecting increased levels of inequality (Gould and Hijzen, 2016). While trust could be increased through improved performance, the authors conclude that chronic weaknesses in institutional performance suggest that generating trust in Serbian institutions will continue to be a challenge for the foreseeable future. The final article by Marija Radulović investigates the impact of institutional quality on economic growth through a comparative empirical analysis of EU and non-EU countries in South East Europe. She uses a panel autoregressive distributed lag approach to analyse the relationship between institutional quality and economic growth. The analysis reveals a positive long-run relationship between the institutional variables and economic growth in both EU and non-EU countries. The latter group of countries also exhibit short-run effects regarding regulatory quality and voice and accountability, suggesting that these factors are of particular relevance in the region. However, the adjustments to the long run outcomes are faster in the non-EU SEE countries, suggesting that this group of countries would respond relatively rapidly to an improved policy framework to support institutional reform.

In sum, the articles in this issue reflect the diversity of the approaches and topics of the papers that were presented at the September 2019 workshop. Additional papers will be included in a subsequent edition of the journal. *Economic Annals* is pleased to be able to publish these papers in commemoration of the distinguished

contribution of Božidar Cerovic to the development of comparative economic studies in South East Europe.

REFERENCES

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Bogičević Milikić, B., Janičijević, N., & Cerović, B. (2012). Two decades of post-socialism in Serbia: Lessons learned and emerging issues in human resource management. *Journal for East European Management Studies*, 17(4), 445–463.

Cerović, B. (Ed.) (2006). *Privatisation in Serbia: Evidence and Analyses*. Belgrade: CIDEF.

Cerović, B. (2010). Impact of initial conditions on transition progress: The case of Montenegro. *South-Eastern Europe Journal of Economics*, 2, 153–169.

Cerović, B., & Dragutinović, R. D. (2007). Privatisation effects: Some evidence from Serbia. *Transition Studies Review*, 14(3): 469–487.

Cerović, B., Mitić, S., & Nojković, A. (2015). Intangible capital in a transition economy improvements and constraints: an analysis of Serbian firms. *South-Eastern Europe Journal of Economics*, 2, 109–134.

Cerović, B., Nojković, A., & Uvalić, M. (2014). Growth and industrial policy under transition. *Economic Annals*, 59(201), 7–34.

Cerović, B., & Nojković, A. (2009). Transition and growth: What was taught and what happened. *Economic Annals*, LIV(183), 7–31.

Cerović, B., & Petrini, A. (2006). Privatisation in Serbia: Evidence and analysis. *Transition Studies Review*, 14(2), 399–404.

Cerović, B., Svejnar, J., & M. Uvalić (2015). Workers' participation in a former labour-managed economy: The case of Serbian transition. *Economic Annals*, LX(205), 7–29.

Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York: The Free Press.

Gould, E. D. & Hijzen, A. (2016). Growing apart, losing trust? The impact of inequality on social capital. *IMF Working Paper No. 16/176*. Washington: The International Monetary Fund.

William Bartlett
Editor-in-Chief
Economic Annals

*Saul Estrin**

TOWARDS A FRAMEWORK TO UNDERSTAND THE RELATIVE PERFORMANCE OF STATE-OWNED FIRMS

ABSTRACT: *This paper considers the factors influencing the comparative performance of state-owned and privately-owned enterprises (SOE/POE). The economics literature has argued that firm performance is influenced by governance arrangements, leading to expectations of inferior performance from SOEs. Meanwhile, a political economy literature classifies countries according to the model of state engagement, which also has implications for SOE performance. We combine these two frameworks to provide a taxonomy. The first framework relating to governance concerns the relationship between owners and managers, the relationship between large and small owners, and the functioning of the managerial labour market. The second framework con-*

siders three types of model of state engagement: the Welfare State, the Developmental State, and the Predatory State. Each of the six resulting taxonomies yields distinct outcomes in terms of SOE versus POE performance. In all models, SOEs perform better in a better governance environment than in a worse governance environment, and this ranking is the same in Welfare States and Predatory States. However, in Developmental States with strong governance, SOEs may outperform POEs if they can benefit from superior state resources.

KEY WORDS: *state-owned firms, firm performance, governance, institutions, model of state engagement*

JEL CLASSIFICATION: L2, O1, P5

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1. INTRODUCTION

There is already a voluminous theoretical and empirical literature on the effect of state ownership on company performance (e.g., Vickers & Yarrow, 1991; Megginson & Netter, 2001; Megginson, 2017; Estrin & Gregoric, 2020). In general, the theory proposes that state-owned enterprises (SOEs) will perform worse in terms of economic criteria like profitability, return on assets, and productivity than comparable firms under private ownership (privately owned firms, POEs) (Vickers & Yarrow, 1988). In part, this is because the objectives of state enterprises may be broader to encompass the targets of their owner (the state), but it is also argued that the market disciplines that limit the exploitation of managerial discretion and rent-seeking are less effective when applied to SOEs compared with POEs (Estrin & Perotin, 1991). The view that SOEs are inherently less efficient was buttressed by the inefficiencies of the former socialist systems of Central and Eastern Europe, where the debilitating effects of state ownership were blamed (along with over-centralisation of resource allocation) for the poor productivity and long-term stagnation of these economies (Kornai, 1990). These perceived problems helped to justify a worldwide process of privatisation of SOEs, which began in the UK in the 1980s under Margaret Thatcher but became much more widespread, initially during the transition from socialism to capitalism after 1989 in Central and Eastern Europe, and then more broadly in emerging economies (Djankov & Murrell, 2002; Estrin et al., 2009).

However, in recent years there has been a trend towards increasing state ownership, especially – but not only – in emerging markets (see Bruton et al., 2015; Musacchio & Lazzarini, 2014; Aharoni, 2018); in January 2012 even *The Economist* had a front cover entitled “The Rise of State Capitalism”. One reason explaining the rising prevalence of and research interest in SOEs is that the theoretical arguments about the inefficiency of SOEs are neither as straightforward nor as overwhelming as policymakers maintained in the 1980s and 1990s. The agency issues at the heart of poor SOE performance may also affect POEs if capital market disciplines are poor (Vickers & Yarrow, 1988). POE managers usually own relatively small proportions of stock, so ownership and control are separate in both types of firm. The effectiveness of the governance system therefore rests on the performance of the external market system and the quality of institutions in each type of firm. The state as owner may be poor at resolving agency problems because, for example, of corruption (Shleifer &

Vishny, 1998). However, POEs may have parallel issues: individual shareholders often hold too small a stake to be able to or to have an incentive to bear the cost of monitoring management, leaving considerable scope for opportunistic behaviour by management that can worsen business performance (Fama & Jensen, 1983). Thus, even at the theoretical level, the relative efficiency of SOEs versus POEs is contingent on governance arrangements (Estrin et al., 2016).

In addition, the evidence does not always establish that POEs have a clear-cut advantage (but see Megginson, 2017). If SOEs are less efficient than POEs there should be strong evidence that privatisation leads to improved firm performance. In fact, the evidence is mixed (Estrin et al., 2009; Estrin & Pelletier, 2018). The literature suggests that the relative performance of SOEs and POEs is contingent on the quality of institutions: privatisation will only improve firm performance when governance arrangements in the private sector are superior to those in the state sector (Vickers & Yarrow, 1991; Bardhan, 2016). More recent work indicates that the relative performance of SOEs versus POEs also depends on the state's objectives (Cuervo-Cazurra et al., 2014; Musacchio et al., 2015). If governments pursue social and development goals and channel resources to support long-term SOE performance (Bruton et al., 2015), SOEs may be able to drive industrialisation and engagement in the global economy – so-called 'state capitalism' (Musacchio & Lazzarini, 2014; Mariotti & Marzano, 2019). This view is consistent with the growing evidence that state ownership can help development: a case in point is the rapid rise of the Chinese economy and other emerging markets like Vietnam.

In this paper we delve deeper into these issues, exploring whether these recent developments lead to a more nuanced view of the relative performance of SOEs and POEs, and try to identify if there are circumstances in which the latter type of firm might generate superior outcomes. We consider separately the impact on SOE/POE performance of agency factors and of what we term 'state orientation' – the attitude of the state towards economic development. First, we look at various elements of the principal–agent problem as it affects SOEs as against POEs by focusing on governance institutions. We propose three sets of relevant institutions, concerning the relationship between owners and managers (Fama & Jensen, 1983), the relationship between large and small owners (Young et al., 2008), and the functioning of the managerial labour market (Bruton et al.,

2015). In the third section we discuss ways to classify state involvement in the economy, with special reference to the goals of the state as owner of SOEs. We define three groups of system, the Welfare State, the Developmental State, and the Predatory State. In the fourth section we combine these agency factors and state systems to produce six taxonomies, each of which yields distinct outcomes in terms of SOE versus POE performance. We draw conclusions in the final section.

2. INSTITUTIONS AND THE AGENCY PROBLEM: QUALITY OF GOVERNANCE

It is usually argued that SOEs will always perform worse than POEs. There are two broad and inter-related strands to this argument. The first relates to the potentially different objectives of private and state-owned firms. Private firms are assumed to focus exclusively on profit, which motivates close attention to efficiency and costs and the demand side of the market. By contrast, the objectives of the state as owner depend on the motivation behind public ownership in the first place. Profit may motivate SOEs to finance further investment or broader government activities, especially in ‘hybrid’ state-owned firms in which private firms, sometime foreign, own minority stakes (Bruton et al., 2016). But the state as owner may also expect the SOE to satisfy other, often social or political objectives. For example, the government may use SOEs to support or create employment, especially in key political regions, or to hold down the price of goods that have a significant effect on voters’ budgets. Such demands inherently blur the incentive to minimise costs. SOE managers may exploit the ambiguity arising from conflicting objectives: when the owner’s objectives are contradictory the resulting ambiguity makes it harder to monitor managerial performance, providing leeway for managers to pursue personal gain rather than organisational efficiency (Estrin & Perotin, 1991). When company objectives lack clarity, inefficiency and siphoning business resources for the private benefit of the management are harder to identify, and thus more difficult to prevent (Shleifer & Vishny, 1994).

The literature argues that the asymmetry of information held by managers and owners regarding firm performance is at the heart of this problem. Thus, outside owners, be they private or state, can never have full access to information regarding the true business performance, which instead is concentrated in the hands of its managers. When outcomes are poor, the owners cannot establish

conclusively, based on the information they have, whether this is the consequence of an unfortunate external environment, unforeseen circumstances, or managers exploiting firm profits for private benefit. This is a generic problem in modern corporations that occurs because ownership and control are separated (Fama & Jensen, 1983). However, corporate governance literature asserts that private ownership places more effective limits on the consequence of these information asymmetries – private aggrandisement by managers – via constraints imposed by competitive processes on product, labour, and especially capital markets.

Product market competition reduces the rent available for expropriation and weeds out inefficient organisations through bankruptcy: firms in which managers pocket profits rather than investing them are driven out of business (Schleifer & Vishny, 1998). The principal labour market effect is through the recruitment of managers: if POEs and SOEs recruit from the same pool, the poor performance of a manager in an SOE will damage their future recruitment prospects in the private sector, which acts to constrain their behaviour. When the managerial labour market is unified the cost of malfeasance on future earnings is serious for public sector managers. If instead the market is divided into public and private sector segments (Estrin & Perotin, 1991), poor performance may become entrenched in the public sector and the impact on future earnings will be more limited. However, it is usually argued that the key constraint in Anglo-Saxon economies is the corporate control of stock markets¹ (Megginson, 2005). In a stock market system, traders in the firm's equity monitor firm performance and sell the stock of firms perceived to be under-performing, so they are continuously and closely evaluating the quality of managerial decision-making and the extent of managerial discretion. This process is information-intensive and competitive. The equity trader's judgement of a firm's performance is summarised in its share price. If the managerial team is thought to be incompetent, inefficient, or privately benefiting from the company, the share price will go down and the managers will be pressured to improve their performance. A persistently poor showing by a quoted company may also generate external pressure by encouraging a take-over bid. Moreover, in the managerial market, individual

¹ Parallel capital market constraints operate in bank-based systems in continental Europe (Franks and Meyer 1997)

performance and pay are largely assessed by the firm's share price, increasing the incentive for good managerial performance.

It is often argued (Estrin et al., 2009) that it is hard for the state to perfectly mimic these market-based constraints. State-owned firms are not subject to the same capital market disciplines; rather they are monitored directly by the state, often within a ministry or through board membership. The state often does not have the resources or the motivation to monitor businesses with the same energy as the private capital market, and has fewer tools for disciplining firms. Hence, in state-owned firms neither the competitively driven informational structure nor the market-based governance mechanisms that operate in private firms play much of a role in assessing and guiding firm performance. The softness of budget constraints (Kornai, 1990) that goes with politically determined resource allocation has been seen as a further source of incentive problems, since managers do not have to bear the consequences of their actions. Note, however, that in recent years this deficiency has been somewhat ameliorated as SOEs have begun to sell some equity to private owners (Bruton et al., 2015). Traditionally, SOEs, at least in developed economies, were found in monopolistic sectors because market failures were present; hence product market discipline was weak. At the same time, the managerial labour market was highly segmented because SOE managers were traditionally civil servants who did not compete in the wider managerial market. However, in recent years market discipline has become increasingly applied to SOEs as well as POEs; for example, competition has been introduced in the product market by franchising operating licenses and integrating the managerial labour market (Bardhan, 2016).

This brief description shows that the mechanisms underlying the advantages of POEs versus SOEs are context-specific and sensitive to institutional arrangements. For example, an effective market for corporate control relies on the depth and sophistication of the capital market. Capital markets are underdeveloped in many emerging economies because they are dependent on other critical institutional characteristics, such as the rule of law and the protection of private property rights (Khanna & Yafeh, 2007; Hoskisson et al., 2013). Thus, in emerging markets the principal mechanism underlying the proposed superior performance of POEs may not be operational and the relative performance of SOEs and POEs may instead depend on the details of governance

arrangements. Incentives and governance may still be weaker in SOEs, but as a countervailing factor. The theory suggests that ownership concentration will enhance firm performance (by addressing the free rider problem in shareholder monitoring when holdings are unconcentrated), and state ownership is highly concentrated, while private ownership often is not. Furthermore, as Estrin et al. (2017) argue, the relative performance (in terms of internationalisation) of SOEs and POEs is contingent upon the institutional arrangements of the countries being compared. They find in a large sample of emerging economies that SOEs can perform as well as POEs in countries where formal institutions are strong, but POEs perform significantly better in contexts where there are serious institutional deficiencies.

In these contexts, the performance of SOEs relative to POEs will depend on how each is directed and controlled. As we have seen, governance institutions are key because they shape both the capabilities and interests of business managers and the owners' ability to influence the conduct of their firms. The severity of SOE governance problems relative to POEs varies depending on the extent of state ownership (fully state-owned, majority state-owned, minority state-owned) (Estrin et al., 2009), the ways in which ownership is exercised (direct or indirect state control) (Megginson 2005), the micro-level institutions that influence the performance criteria for resource allocation (Estrin & Pelletier, 2018), and the selection of SOE managers, their incentives, their values, and their perception of how to do business (Bruton et al., 2015).

To get more traction on these issues, we build on the three sets of institutions that are crucial in determining the relative effectiveness of POE and SOE governance: formal institutions, informal institutions, and the managerial labour market. The first two address the conflict of interest between managers and owners (principal-agent issues) and between large and small owners (principal-principal issues) that influence the incentives of managers and large owners in POEs and SOEs, and the ability of (large) shareholders to control and direct the corporations they own. The third set of institutions concerns the criteria and values that determine the selection of board members and CEOs and affect the incentives and competencies of corporate managers. Taken together, we can distinguish between strong governance institutions – arrangements that drive the actors' behaviour towards the maximization of firm value – and weak governance institutions –

arrangements that permit various forms of expropriation of corporate funds (by managers or large owners).

Formal institutions set the context for the resolution of agency issues in corporations, notably the content and enforcement of legal rules that shape management's accountability to shareholders and (minority) shareholders' ability to influence firms (La Porta et al., 2000). Legal arrangements concerning shareholder rights and obligations differ across countries; for example, the effectiveness of the market in both corporate control and managerial incentive schemes is contingent on shareholder protection rules (Armour et al., 2009). Shareholder protection is arguably stronger in common law than in civil law jurisdictions. Countries also differ in their interpretation of the duties of corporate directors and managers and their perception of accountability towards shareholders and stakeholders (Filatotchev et al., 2013). Thus, the association between the protection of shareholder rights and the development of capital markets underlies the mechanism whereby capital markets discipline managers through shareholder trading and takeovers.

Informal institutions are the norms that shape the identity and interests of private actors in society (e.g., North 1994; Berglof and Classens 1994), such as the extent to which nationals obey formal laws and regulations, and their inclination to take bribes. The level of enforcement of legal rules also depends on cultural and normative factors. A lack of enforcement leads, among other things, to inefficiently functioning courts, poorly qualified lawyers and judges, and vulnerability of the judiciary to bribes. In business governance, managers can establish good business behaviour by signalling commitment to good practice through support for institutions that collect and convey information about these customs and by creating credible punishments for transgressions. In time, intermediaries that support good governance, such as trade associations, self-regulatory organisations, employers' associations, stock exchange associations, and rating agencies, might emerge from these processes and behaviours. These informal institutions not only increase the effectiveness of formal institutions but also act as a substitute when formal institutions are weak (Estrin & Prevezer, 2011).

The third set of institutions shapes the functioning of the managerial labour market. For example, corporate hiring criteria might vary depending on a country's norms and values, such as meritocracy, power distance, and egalitarian tendencies. In meritocratic cultures the selection of individuals for top positions will be based on their performance rather than social connections and political power. Similarly, in countries with a low power distance a larger pool of individuals will have the opportunity to reach high-level management positions, leading to higher-quality executive teams. The perceptions of how to run a business will also vary depending on whether the CEOs of SOEs have been selected from individuals with only public sector experience or from those with work experience in the private sector (Bruton et al., 2015). In countries with strong egalitarian tendencies, owners' use of effective compensation packages to compensate managerial effort might be limited (Filatotchev et al., 2013); for example, it has been argued that in China the influence and culture of stakeholders and a strong focus on equality have curbed the use of material incentives in SOEs (Buck et al., 2008). This might in turn reduce firms' ability to attract highly qualified individuals to top positions, particularly highly performing individuals from abroad.

3. CATEGORISING STATE ENGAGEMENT

This paper proposes that the relative performance of SOEs versus POEs is also affected by how the state functions, and that this should be considered independently of the institutional environment. We focus on three models of state engagement in the economy: the Welfare State, the Predatory State, and the Developmental State.

Neoclassical economics views the state as an independent and social-welfare-maximising agent in its own right, where its primary function is the provision of a legal basis for the market economy through a system of property rights and effective contract enforcement (Sappington & Stiglitz, 1987). In this framework, the justification for state intervention is market failure. In the case of state-owned firms, the relevant market failure is usually defined as a situation where private production cannot ensure a Pareto-efficient allocation of resources, such as in the case of natural monopolies, public goods, and widespread externalities (Bardhan, 2016). In most advanced market economies these provide the basis for state involvement. We denote it the Welfare State model, in which the state intervenes

in the economy primarily to serve social welfare, and SOEs exist to internalise externalities and limit the negative welfare effects of monopoly power in sectors where entry barriers are high.

Our second model of state involvement in SOEs, the Predatory State, draws on the exploitation theory of the state, according to which the state's role is to increase the income and wealth of specific groups in the economy, from the President's personal entourage through vested interests that control key sources of power (e.g., the military) or natural resources, to particular ruling families or tribes (Shleifer & Vishny, 1998). In a Predatory State the primary role of the state in the economy is to extract income from other constituencies in the interest of one or more of these dominant groups (Vahabi, 2016; Acemoglu & Robinson, 2012). One of the key mechanisms for rent extraction is state ownership of highly profitable firms, especially those located in sectors like natural resources or utilities where the possibilities for such appropriation are great (Venables, 2016). Therefore, in the Predatory State model, state involvement in SOEs is driven primarily by private interests or rent seeking by state officials and connected private actors (Tihanyi et al., 2019). These private actors influence the political decisions of state officials, regulatory policies, and the direction of SOE firms, either directly (through illicit and non-transparent payments to politicians) or indirectly (through their influence on political votes) (Hellman et al., 2003).

The third model of state involvement, the Developmental State, draws on the economic experience of countries like Singapore, Taiwan, South Korea, Hong Kong, and Japan (Wade, 2003; Onis, 1991). In these economies the function of the state goes well beyond securing the basic rules of exchange and mitigating inefficiencies and externalities, as in the Welfare State. Through strategic industrial policy, developmental governments actively guide the allocation of resources and cultivate domestic industries in the pursuit of economic growth and international competitiveness (Amsden, 1989). An important element of this model is the promotion of SOEs to spearhead industrial strategies, including internationalisation, and to assist in the creation of national champions in key development sectors (Cuervo-Cazurra, 2018). The mechanisms used include supporting selected industries by providing an environment that encourages risk-taking, including foreign direct investment in the search for new technologies and innovative capabilities and channelling funds to these industries, in exchange for

high performance expectations that are often set with reference to competitors from developed Western economies (Cuervo-Cazurra et al., 2014).

The dominant model of state engagement depends primarily on a country's history and culture (North, 1994; Williamson, 2000; Acemoglu and Robinson, 2012). For example, the emergence of the Predatory State model might be associated with the discovery and exploitation of potentially appropriable assets in a country (Venables, 2016). Property, oil, and other national resources constitute the most appropriable assets: they do not require specific investment and are relatively immobile. By contrast, human-specific assets are highly specific and can be highly mobile; hence they are usually difficult to plunder. In between these two are firm-specific assets and financial assets. Firm-specific physical assets are difficult to move abroad, i.e., they are easier to expropriate (but see Witt & Levin, 2007); but they are also difficult to appropriate since the continuation of a particular investment usually requires specific capabilities. Financial capital is easier to appropriate but is also easily movable.

Geopolitical factors may also shape a country's model of state engagement. Continuous security threats and the potential for positive interactions with more advanced countries are both associated with the Developmental State. The relative power of the state compared to that of the largest private actors may also be important: for example, in some Latin American countries, powerful private groups have limited the role of the government and have provided a basis for the emergence of a Predatory State. By contrast, state control of the banking sector and financial resources in the immediate post-World War II period, combined with a relatively fragmented private sector and an egalitarian distribution of income, are important in explaining the emergence of Developmental States in some South Asian countries (Onis, 1991).

4. A FRAMEWORK TO ANALYSE THE RELATIVE PERFORMANCE OF SOES AND POES

Table 1 presents our analysis of how institutions and state engagement models might be combined to explain the relative performance of SOEs and POEs.

Table 1: A classification of private and state firms combining state model and governance institutions

	Welfare State	Developmental State	Predatory State
<p>Stronger governance</p> 	<p>State ownership limited to industries subject to externalities</p> <p>SOEs performing well but possibly less efficient than POEs</p>	<p>State ownership spreading to several strategic sectors</p> <p>Low agency problems in POEs</p> <p>The relative performance of SOEs compared to POEs depends on the size of SOE advantage from better utilisation of and access to resources, versus the disadvantages due to inherently more demanding SOE governance</p>	<p>State ownership spreading across resource-rich sectors</p> <p>Limited state support for growth, expropriation rather than efficient use of resources in SOEs</p> <p>Low agency costs in POEs</p> <p>SOEs significantly underperform compared to POEs</p>
 <p>Weaker governance</p>	<p>State ownership limited to industries with externalities and strategic sectors where high uncertainty in transactions limits private initiative</p> <p>The performance of SOEs compared to POEs depends on the balance between private institutional failure and state institutional failure</p>	<p>State ownership spreading to several strategic sectors</p> <p>SOEs less efficient in utilising resources compared to SOEs in high institutional environment, but might outperform POEs due to SOEs' superior access to resources, and high agency costs hampering the efficiency and growth of POEs</p>	<p>State ownership spreading across resource-rich sectors</p> <p>Expropriation rather than efficient use of resources in SOEs, vast opportunities for such expropriation</p> <p>High agency costs in POEs</p> <p>Crony capitalism</p> <p>Both SOEs and POEs likely to perform poorly</p>

We start in the upper left quadrant of Table 1, in which the Welfare State is combined with strong governance. In this configuration there may be SOEs, but their activities are limited to sectors with major market failures; for example, natural monopolies like utilities. The state ensures tight governance arrangements, perhaps via partial private ownership, board representation of the state as owner, and close monitoring and scrutiny. Managers are incentivised to ensure good SOE performance, including through the integration of public and private sector managerial markets and tight monitoring. Even if SOEs are given the financial resources and other support necessary to ensure their welfare-enhancing role, in line with the Welfare State model, this is subject to transparency and public scrutiny, and SOEs have no additional advantages in terms of access to strategic or government resources. Indeed, many advanced economy governments distinguish between SOE operations and the government's political/social objectives (which are explicitly subsidised) in order to give SOEs more strategic discretion and greater accountability (Estrin et al., 2009). In this situation, in principle the performance of the SOE may equal that of its privately-owned counterpart; there is empirical evidence of this in Canadian electricity generation (Caves & Christiansen, 1980; Boardman & Vining, 1989).

However, in practice, such an outcome will probably be uncommon. This is because in Welfare States the goals of SOEs may extend beyond economic performance to include social or political goals, such as preserving employment and granting public access to certain services. Consequently, SOEs may be more isolated from the capital market than POEs, less able to rely on purely financial incentives to motivate managers, and less attractive to highly qualified commercial management. Moreover, even in Welfare States the control of SOEs and the design of incentives may depend on the policies of the ruling political party and may therefore be subject to diverse and changing interests, hampering strategy formation and implementation (Sappington & Stiglitz, 1987). In good governance environments the potential advantages of POEs compared to SOEs will be reinforced because the POEs themselves will be well governed, their executives will be motivated with high-level incentives, and they will be exposed to the pressure of strong (external) owners and capital markets. Therefore, while in this configuration equivalence with the performance of POEs is theoretically possible, in practice SOEs in Welfare States may still underperform.

However, the disadvantages of SOEs compared to POEs may be less pronounced when a Welfare State model is combined with weak institutions in terms of firm-level governance and managerial labour market institutions. This is because in this context the relative performance of SOEs and POEs depends on the balance between private institutional failure and state institutional failure, and weak governance may disproportionately impact POEs. Thus, while both POEs and SOEs will perform relatively worse when institutions are weaker, SOEs may be less badly affected. For POEs, weak governance increases contracting risks and limits private actors' access to finance and risk diversification (Berglof & Claessens, 1994). Higher risk, high contracting costs, and other inefficiencies in the capital, labour, and product markets will undermine the performance of POEs compared to SOEs. When these costs are substantial, SOEs might actually have greater opportunities for high performance and growth than POEs, especially since SOEs may have a greater willingness to assume risk because the state as owner can diversify its risk more than most private owners (Vickers & Yarrow, 1991). These predictions are illustrated in the lower left hand corner of Table 1.

The second column of Table 1 explores the implications of alternative governance arrangements in the Developmental State. In this model the authorities provide significant resources through a strategic industrial policy and other mechanisms, and actively cultivate selected companies, often SOEs, in the pursuit of higher productivity and international competitiveness. SOEs may enjoy preferential access to resources and thereby have advantages relative to comparable POEs. However, corporate governance institutions might affect the comparative advantage of SOEs in relation to POEs in various ways. On the one hand, in strong governance environments (i.e., top quadrant in column 2, Table 1) the state might face legal limits when providing resources to SOEs though the competitive pressures of the capital, managerial, and labour markets, and the diffusion of good governance practices may still entrench efficient resource utilisation by SOEs. Moreover, in the case of strong governance, SOEs in Developmental States may outperform SOEs in Welfare States because of their superior access to resources and state support. They may also perform better than SOEs in Developmental States with weak governance rules, due to agency problems and lower efficiency of resource utilisation in the latter.

However, the relative performance of SOEs and POEs in Developmental States is less straightforward to predict. Let us consider first the case of strong governance institutions. On the one hand, SOEs have a comparative advantage in relation to POEs due to the support of the state; SOEs are likely to use state resources efficiently because institutional arrangements are robust. However, strong governance also lowers the agency issues in POEs; the marginal impact of institutional quality on agency costs is probably stronger for POEs than for SOEs. This is because, as noted above, even when governance institutions are strong, SOEs are likely to have goals other than profit maximization, are less likely to reward managers with incentives, and, being majority-owned by the state, are to some extent isolated from capital market pressures. The balance of the advantages of SOEs and POEs in strong governance environments thus hinges on whether the SOE advantages of better utilisation of and higher access to resources outweighs the disadvantages of their lower effectiveness in implementing good corporate governance and pursuing shareholder-value maximizing policies.

When the corporate governance environment is weak in Developmental States, SOEs' utilisation of state-provided resources is likely to be worse because the alignment of the managers' and the state owner's interests will be poorer. Hence, SOEs will perform worse than SOEs in Developmental States with strong governance institutions.

However, the comparison of the performance of SOEs and POEs depends on the impact of weak institutions on both types of firm. Agency issues in POEs will be higher in countries with weak legal enforcement, low private litigation, and a poorly performing managerial labour market. Moreover, these agency problems mean that POEs' access to financial resources might be restricted in comparison with SOEs that the Developmental State provides with resources. Moreover, with lower investor protection, POEs might be inclined to influence state policies to ensure their survival, regardless of economic performance and competitiveness. Thus, the performance of both SOEs and POEs in this configuration will be worse than in the previous configuration. Once again, the balance of advantages largely depends on the significance of state ownership's inherent governance issues, as opposed to the additional resources the state might provide the companies and how effectively these are used.

Finally, in column 3 of Table 1 we consider the implications of the Predatory State for the relative performance of SOEs and POEs. A Predatory State is oriented towards securing private gains for selected actors within the public sector or for those connected to the state; hence it will at best provide limited resources to support the growth of SOEs. However, when combined with strong governance institutions, such predatory opportunities might be limited by externally generated rules and regulations; for example, via WTO membership or free trade agreements. Competitive pressure from product and labour markets might also help to drive SOEs to pursue profit-oriented policies. Yet, due to the predatory motives of the state as the main owner, these SOEs are likely to perform worse than, for example, the SOEs under the Welfare State or the Developmental State models with strong governance. We also expect that SOEs will perform worse than POEs in Predatory States because SOE activities will likely be chosen to provide rent to the ruling elites. Endemic corruption in Predatory States will affect POEs and SOEs alike, but nevertheless in some cases POEs may be operating in a more competitive market environment. These performance differences between POEs and SOEs will probably be reinforced when the Predatory State is combined with strong governance institutions that disproportionately affect the behaviour and performance of POEs. Then POEs will seek profit for their owners, while the political elites will tunnel out surpluses from SOEs.

When governance institutions are weak in the Predatory State, POE and SOE owners (families or oligarchs on the one hand; the state and its cronies on the other) will both be strongly motivated to pursue private objectives (e.g., rent-seeking or expropriation of minority shareholders) that go against firm value maximization and undermine firm performance. SOEs will perform the worst in this configuration compared to other configurations. Moreover, they will also underperform relative to POEs, despite the higher agency problems faced by the POEs when the governance environment is weak. This is because of the selection effect whereby firms will be placed in the state sector to facilitate and maximise rent extraction. However, in this dispiriting environment, both POEs and SOEs will perform worse than in any other configuration in Table 1 and there may not be much difference between them.

5. CONCLUSIONS

In the past, the notion that state ownership of firms will always generate a worse economic performance than private ownership has been widely accepted in the economics literature. However, this paper suggests that this argument is insufficiently nuanced. We propose that the relative performance of SOEs and POEs is contingent on two broad factors: the institutional arrangements underlying the governance of firms and the political arrangements of the host country. The former we categorise as simply 'strong' or 'weak', while in the latter countries are classified into three models of state engagement: the Welfare State, the Developmental State, and the Predatory State.

Welfare States are usually advanced economies where the performance of SOEs depends primarily on the strength and effectiveness of governance arrangements, leading to the conclusion that SOEs perform worse than POEs. We illustrate this in the first column of Table 1. This approach has provided the intellectual basis for the policy advice that privatisation and strengthening underlying governance institutions will improve the performance of SOEs. The institutions underlying governance include laws and regulations concerning governance, the culture of the public sector, and a managerial labour market that is not segmented into public and private sectors. The results can be generalised across contexts: in all three models, SOEs will perform better in a good governance environment than in a bad governance environment. This supports policy advice that says that governance arrangements must be improved in order to achieve good SOE performance.

When we expand our focus to include developing and transition economies, we must also consider the model of state engagement when considering SOE performance. Some developing and transition economies follow the Welfare State model; for example, most transition countries that were early aspirants to join the European Union (Poland, Hungary, the Czech Republic, Slovakia) accepted the logic of the Welfare State model, and the rules of EU accession aided the effective enforcement of these market-based principles. These countries implemented widespread privatisation and have improved the performance of their SOEs and POEs (Estrin et al., 2009), the key factor driving SOE performance being the quality of the institutions of governance. However, for many emerging economies the model of state engagement has been developmental or predatory. SOEs and

POEs face inherent agency issues in both state models, and performance outcomes depend on the quality of the governance institutions. In these contexts the SOEs still have an inherent disadvantage relative to the POEs because the state always finds it hard to replicate the disciplining mechanisms of the capital and labour markets. However, in Developmental States the relative inefficiency of SOEs may be offset by the fact that the state can concentrate its resources, including governance and monitoring, to guide and assist SOEs. Moreover, in some situations the deficiencies of private sector institutions are more serious than the failure of the state, leading to POE failures that more serious than SOE failures.

In this contingent analysis of SOE performance, while state-owned firms usually perform worse than privately owned firms, this is not necessarily the case. State ownership will lead SOEs to perform worse than POEs in Welfare States and Predatory States, but state ownership will not always be deleterious to firm performance. In Developmental States with good governance institutions, SOEs can outperform POEs. This analysis may explain the recent rise of state capitalism in certain institutional contexts (Musacchio & Lazzarini, 2014).

Furthermore, we argue that the outcome in Developmental States with weak governance institutions, as in some transition economies, is ambiguous. On the one hand, standard agency issues may lead SOEs to underperform their private competitors. On the other hand, if institutions are weak and governance ineffective, agency problems will also beset private firms, which may suffer from managerial aggrandisement and dominant shareholders expropriating minority shareholders, to the detriment of business performance. The balance between these forces is affected by the model of state engagement. In a Predatory State, SOEs will likely be highly inefficient and a vehicle for rent-seeking, even compared to poorly governed private firms. But in Developmental States, SOEs may instead be the vehicle for strategic development policies, and may therefore be better governed and benefit from additional state resources and favourable regulatory treatment. However, the combination of a Predatory State and weak governance institutions is particularly damaging to firm performance in both the private and state-owned sectors.

REFERENCES

- Acemoglu D., & Robinson, J. (2012). *Why Nations Fail*. New York: Crown Publishing.
- Aharoni, Y. (2018). The evolution of state-owned multinational enterprise theory. In Cuervo-Cazurra, A. (Ed.), *State-Owned Multinationals: Governments in Global Business* (pp. 9-44). New York: Palgrave.
- Amsden, A. H., (1989). *Asia's Next Giant: South Korea and Late Industrialization*. New York, Oxford University Press.
- Armour, J., Hansmann, H., & Kraakman, R. (2009). Agency problems, legal strategies, and enforcement. *ECGI Law Working Paper*, No. 2009/ 135.
- Bardhan, P. (2016). State and development: The need for a reappraisal of the current literature. *Journal of Economic Literature*, 54(3), 862–892.
- Berglof, E., & Claessens, S. (2004). *Enforcement and corporate governance*. World Bank Policy Research Working Paper 2004/3409
- Boardman, A., & A. Vining (1989). Ownership and performance in competitive environments: A comparison of the performance of private, mixed, and state-owned enterprises. *Journal of Law and Economics* 32 (1), 1–33.
- Bruton, G. D., Peng, M. W., Ahlstrom, D., Stan, C., & Xu, K. (2015). State-owned enterprises around the world as hybrid organizations. *Academy of Management Perspectives*, 29(1), 92–114.
- Buck, T., Liu, X., & Skovoroda, R. (2008). Top executive pay and firm performance in China. *Journal of International Business Studies*, 39(5), 833–850.
- Caves, D. W. & Christensen, L. R. (1980). The relative efficiency of public and private firms in a competitive environment: The case of Canadian railroads. *Journal of Political Economy*, 88(5), 958–976.
- Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., & Ramaswamy, K. (2014). Governments as owners: State-owned multinational companies. *Journal of International Business Studies*, 45, 919–942
- Cuervo-Cazurra, A. (2018). Thanks but no thanks: State-owned multinationals from emerging markets and host-country policies, *Journal of International Business Policy*, 1(3), 128–156.
- Estrin S. & Gregoric, A. (2020). State capitalism. In M. Wright, G. Wood, A. Cuervo-Cazurra, P. Sun, I. Okhmatovskiy, & A. Grossman (eds.), *Oxford Handbook on State Capitalism and the Firm*. Oxford: Oxford University Press.
- Estrin, S., Hanousek, J., Kočenda, E., & Svejnar, J. (2009). The effects of privatization and ownership in transition economies. *Journal of Economic Literature*, 47(3), 699–728.

- Estrin, S. & Prevezer, M. (2011). The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared. *Asia Pacific Journal of Management* 48, 41–67.
- Estrin, S., Meyer, K. E., Nielsen, B. B., & Nielsen, S. (2016). Home country institutions and the internationalization of state-owned enterprises: A cross-country analysis. *Journal of World Business*, 51(2), 294–307.
- Estrin, S. & Pelletier, A. (2018). Privatization in developing countries: What are the lessons of recent experience? *World Bank Economic Review*, 2018, 33, 65–102.
- Estrin, S. & Perotin, V. (1991). Does ownership always matter? *International Journal of Industrial Organization*, 9, 1, 55–72.
- Fama, E. F. & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.
- Filatotchev, I., Jackson, G., & Nakajima, C. (2013). Corporate governance and national institutions: A review and emerging research agenda. *Asia Pacific Journal of Management*, 30(4), 965–986.
- Franks, J. & Meyer, C., (1997). Corporate ownership and control in the UK, Germany and France. *Journal of Applied Corporate Finance*, 9(4) 30–45.
- Hellman, J. S., Jones, G., & Kaufmann, D. (2003). Seize the state, seize the day: state capture and influence in transition economies. *Journal of Comparative Economics*, 31(4), 751–773.
- Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging multinationals from mid-range economies: The influence of institutions and factor markets. *Journal of Management Studies*, 50(7), 1295–1321.
- Khanna, T. & Yafeh, Y. (2007). Business groups in emerging markets: Paragons or parasites. *Journal of Economic Literature*, 65, 331–372.
- Kornai, J. (1990). *The Road to a Free Economy. Shifting from a Socialist System: The Example of Hungary*. New York: W. W. Norton and Budapest: HVG Kiadó.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1–2), 3–27.
- Mariotti, S. & Marzano, R. (2019). Varieties of capitalism and the internationalization of state-owned enterprises. *Journal of International Business Studies*, 50(5), 669–691.
- Musacchio, A. & Lazzarini, S. (2014). *Reinventing State Capitalism: Leviathan in Business, Brazil and Beyond*. 1st ed. Cambridge, Mass.: Harvard University Press.
- Musacchio, A., & Lazzarini, S. G & Aguilera, R. V. (2015). New varieties of state capitalism: Strategic and governance implications. *Academy of Management Perspectives*, 29(1), 115–131.
- Meggison, W. L. (2017). Privatization, state capitalism and state ownership of business in the 21st Century. *Foundations and Trends in Finance*, 11(1–2), 3–153.

Meggison W. (2005). *The Financial Economics of Privatization*. Oxford University Press, New York.

Meggison, W. & Netter, J. (2001). From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature* 39 (2), 321–389.

North, D. C. (1994). Economic performance through time. *American Economic Review*, 84, 359–368.

Onis, Z. (1991). The logic of the developmental state. *Comparative Politics*, 24(1), 109–126.

Sappington, D. E., & Stiglitz, J. E. (1987). Privatization, information and incentives. *Journal of Policy Analysis and Management*, 6(4), 567–585.

Schleifer A. & Vishny, V. (1998). *The Grabbing Hand*. Cambridge: Harvard University Press.

Tihanyi, L., Aguilera, R., Heugens, P., Van Essen, M., Sauerwald, S., Duran, P., & Turyurea, R., (2019). State ownership and political connections. *Journal of Management*, 45(6), 2293–2321

Vahabi, M. (2016). A positive theory of the predatory state. *Public Choice*, 168,153–175.

Venables, A. (2016). Using natural resources for development: Why has it proven so difficult? *Journal of Economic Perspectives*, 30(1), 161–183.

Vickers, J., & G. Yarrow (1988). *Privatization: An Economic Analysis*. Cambridge, MA: MIT Press.

Vickers, J. & Yarrow, G. (1991). Economic perspectives on privatization. *Journal of Economic Perspectives*, 5(2), 111–132.

Wade, R. (2003). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. New Haven: Princeton University Press.

Williamson, O. (2000). The new institutional economics. *Journal of Economic Literature*, 38, 595–613.

Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies*, 38(4), 579–594.

Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal–principal perspective. *Journal of Management Studies*, 45(1), 196–220.

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THE SERBIAN ECONOMY TEN YEARS AFTER THE GLOBAL ECONOMIC CRISIS***

ABSTRACT: *The global financial crisis hit the Serbian economy severely in late 2008. The subsequent decade has been characterized by negative or very modest economic growth and Serbia is now just slightly above the development level of ten years ago. This paper analyses the most important economic milestones during this decade and investigates why only modest progress has been made, despite various measures implemented by the Serbian government. It examines the background to Serbia's delayed transition and analyses the*

effects of the global economic crisis on the Serbian economy. It outlines the policy responses and their results, focusing on public finance, foreign trade, reindustrialisation, FDI, the labour market, and sources of growth. The paper sets out the key challenges to accelerating Serbia's economic growth and identifies the main elements of a new long-term development strategy.

KEY WORDS: *Serbia, Western Balkans, Transition, Global economic crisis*

JEL CLASSIFICATION: O11, O20, P20, P27

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1. INTRODUCTION

The global financial and economic crisis has had very strong effects on the Serbian economy, starting from the last quarter of 2008. More than ten years later Serbia is just slightly above the development level of 2008, since the whole decade has been characterized by negative or very modest growth. This paper addresses the question of why Serbia's growth record during the past decade has been disappointing, and worse than in the other Western Balkan countries, despite various government measures devised to combat the effects of the crisis. In trying to answer this question the paper takes a long-term view in order to highlight the roots of key structural weaknesses in the Serbian economy that are found in specific economic and political problems inherited from the pre-crisis period. Although government measures implemented after 2009 have led to notable improvements in some of the most important economic indicators, up until the end of 2018 these positive results had not contributed to faster GDP growth. The key challenge for Serbian policymakers remains how to devise more efficient policies to speed up economic development. These are the main issues that are addressed in the paper, with a view to proposing measures to facilitate faster economic growth in the future.

The paper is structured as follows. In section 2 the most important features of the transition to a market economy in Serbia (during 1992–2006 part of the Federal Republic (FR) of Yugoslavia, with Montenegro) are revisited in order to provide the historical context. Section 3 discusses the effects of the global economic crisis on the Serbian economy and the government's response to the crisis. Section 4 highlights the main results of recent government policies and discusses some main achievements and remaining problems. Section 5 presents the most important current challenges for Serbia's future economic development based on the paper's analysis, and section 6 concludes.

2. BACKGROUND: SERBIA'S DELAYED TRANSITION

Serbia's transition to a market economy was greatly delayed, to a large extent due to the political and economic instability that prevailed throughout the 1990s. All the successor states of the Socialist Federal Republic (SFR) of Yugoslavia were negatively affected by political instability in the early 1990s, primarily the 1991 break-up of SFR Yugoslavia, which resulted in the loss of a common market and

the advantages of a monetary union, and strong disruptions in internal trade. These negative consequences of the break-up of the Yugoslav federation were amplified by the military conflicts that accompanied it, substantially delaying transition-related economic reforms. This is why in the literature on the Western Balkans the 1990s have often been called the “lost decade” (Svejnar & Uvalić, 2016). However, Serbia’s transition has been additionally hampered by particularly unfavourable circumstances (Uvalić, 1993, 2010, 2013). In order to understand the specific problems that delayed Serbia’s transition in the 1990s, three groups of factors must be addressed: the government’s political priorities, the severe international sanctions, and the extreme economic instability.

(1) *Political priorities.* The political regime in Serbia in the early 1990s and the government’s agenda effectively interrupted the economic reforms that the Yugoslav federal government had initiated in 1988–1989. Despite economic stabilisation (disinflation) and successful initial privatisation based on the insider model, which introduced privately owned capital in around 33% of firms from mid-1990 until the end of that year (Cerović, 2000), Serbian politicians strongly opposed the federal government’s transition programme. The main political priorities of that time overshadowed most transition-related economic reforms: the Serbian leadership was focused on mobilising and homogenising the people and territories of former Yugoslavia where the Serbian population represented a relative majority, even at the risk of provoking armed conflict. There were some changes in the economy’s ownership structure, but in an unexpected direction: around 6% of capital became privately owned, mostly by *de novo* firms; some 9% was in firms with mixed ownership; 47% remained social property; and, most surprisingly, 38% was transferred into state ownership, which had been abandoned in SFR Yugoslavia in the 1950s (Cerović, 2000). Although in the second half of the 1990s there was some space for substantial improvements, a new wave of ill-judged politics deepened the conflict with Kosovo and with a large part of the international community.

(2) *International sanctions.* The country’s political objectives and its involvement in the wars in Croatia and in Bosnia and Herzegovina led to the introduction of European Union (EU) and UN sanctions against FR Yugoslavia in Spring 1992, imposed, as internationally broadly recognised, due to Serbia’s aggressive politics. These sanctions were reinforced several times and officially removed only in

1996, some months after the signing of the Dayton Peace Accords in December 1995 that ended the war in Bosnia and Herzegovina. However, due to the undemocratic nature of the political regime – essentially the permanence of Slobodan Milošević in power – what remained was the “outer wall of sanctions”, which prevented the country to fully normalise political and economic relations with the rest of the world (Uvalić, 2010). International sanctions were again imposed against FR Yugoslavia in 1997 due to the Kosovo crisis and were reinforced in 1998. Punitive measures against FR Yugoslavia were taken to the extreme by a NATO bombing campaign that lasted for more than three months in 1999, when real GDP fell by 19%, pushing GDP down to around 30% of its 1990 level. FR Yugoslavia was fully freed from international sanctions only after political changes in October 2000. Therefore, if we exclude a short period in 1996–1997, FR Yugoslavia was practically subject to international sanctions throughout the 1990s. The international embargo disrupted the country’s trade and economic relations, causing the country’s extreme isolation, which under conditions of military conflict facilitated the flourishing of illegal trade, criminal activity, and war profiteering. The international sanctions against FR Yugoslavia indirectly benefitted the political and economic elites at the expense of the population at large, contributing to increased social polarisation.

(3) *Extreme economic instability.* The specific political circumstances in FR Yugoslavia in the early 1990s had disastrous economic effects. The disintegration of the Yugoslav monetary union in 1991 had a particularly strong inflationary impact on the Yugoslav economy, since after Slovenia and Croatia introduced new currencies the Yugoslav market was flooded by quickly depreciating dinars that the northern republics wanted to get rid of (Uvalić, 1993). This initial impact was accompanied by the National Bank of Yugoslavia’s highly expansionary monetary policy in 1992–1993 which was necessary to finance the war. Such policies led to a world record in hyperinflation and rapid currency depreciation. Although hyperinflation was a characteristic feature of all the countries of former Yugoslavia in the early 1990s, in FR Yugoslavia inflation was much higher and lasted much longer than in the other countries (Uvalić, 2012). Monetary instability reached its peak at the end of 1993/early 1994, when the monthly inflation rate was 330 million per cent, while the 1993 annual rate was 116.5 trillion per cent (Uvalić, 2010). Hyperinflation lasted for 22 months (from early 1992 to January 1994), when it was stopped by Central Bank Governor

Avramović's stabilisation programme, which introduced radical monetary reform based on a currency board.

In addition to galloping inflation, during 1990–1993 the FR Yugoslav economy experienced a 60% drop in GDP (of the former Yugoslav republics, only Bosnia and Herzegovina registered a stronger fall; see Uvalić 2012). The initial GDP reduction was caused by the multiple effects of the 1991 break-up of the Yugoslav Federation (monetary disintegration, the loss of a large market, disruptions in internal trade), and not by a halt in federal transfers (Uvalić, 1993).¹ After 1992 the production of many goods also suffered and was frequently interrupted because of the international embargo that blocked imports of many indispensable inputs. Shortages were exacerbated by the very rapid depreciation of the dinar, which led to almost full currency substitution: worthless dinars were being exchanged for whatever goods were still available in shops or changed into scarce foreign currency. During the early 1990s there was almost full employment due to a law prohibiting worker layoffs, although effectively they were often jobless. Since not even regular wages were paid, many workers earned their living on the black/grey market and through smuggling (Cerović, 2000).

The 1990s is a period in Serbia's history that has often been forgotten or intentionally marginalised, which is understandable in view of its profound political, economic, social, and psychological consequences. This period brought notable economic decline, a substantial drop in living standards, loss of citizens' foreign currency savings through pyramid schemes organised by state-sponsored banks, loss of human lives due to military conflict, massive emigration of young people and of the best qualified professionals, general ruin of institutional capacity, and the country's exclusion from membership in major international organisations. The roots of Serbia's economic underdevelopment are to be found in the political and economic instability of the 1990s.

¹ Serbia proper (without its two autonomous regions, Kosovo and Vojvodina) was among the net contributors to the Federal fund for the development of less developed republics and regions, together with Croatia, Slovenia, and the region of Vojvodina, so these parts of the country could only have gained from the interruption of federal transfers. Within Serbia, only Kosovo was a main beneficiary of the Federal fund, but the impact of the end of federal transfers is likely to have been negligible given their small size (annual contributions represented less than 2% of the republics' GDP) (see Uvalić 1993).

More radical political changes occurred after the September 2000 federal presidential elections, when the defeat of Milošević by Vojislav Koštunica enabled the formation of a more democratic government in early October 2000. Some months later, Serbia's elections led to the appointment of a new Serbian government led by Prime Minister Zoran Đinđić. These political changes facilitated a radical turn in the government's policies, accelerating the processes of democratisation and transition-related economic reforms, although the new policies were heavily constrained by a totally ruined economy and high external debt, making the country extremely dependent on financial support from international organisations (Uvalić, 2010).

The new direction in economic policies brought some important achievements during the 2001–2008 period. Macroeconomic stabilisation policies enabled a substantial reduction in average inflation, from over 90% in 2001 to a one-digit figure in 2002, along with maintenance of a relatively stable exchange rate, while the average GDP growth rate in 2001–2008 was over 5%, ranging between 4.4% and 9% (see Figure 1). The government re-launched important economic reforms, with a focus on privatisation, foreign trade and financial liberalisation, and measures to attract Foreign Direct Investment (FDI). Trade liberalisation and the renewal of political and economic relations with countries worldwide facilitated a strong revival of foreign trade, which increased particularly fast with the European Union (EU). A new privatisation law was adopted in mid-2001, based prevalently on the sales method in order to attract strategic foreign investors and privatise the still dominant social and state sectors of the economy. A large part of the banking sector was also privatised from 2003 onwards, mainly through sales to EU member states' banks. Foreign debt was restructured and significant relief was negotiated with the Paris and London club of creditors.

These systemic reforms led to a gradual integration of Serbia with the EU economy through increasing trade, FDI, and financial and banking integration. Financial integration was, however, much faster than real sector integration. The slow pace of privatisation according to the new 2001 law and the later cancellation of some 30% of privatisations (Cerović, 2017) had greatly delayed the restructuring of large segments of the Serbian economy. In addition, many important microeconomic reforms were postponed, including effective competition policy, a more transparent business environment, efficient corporate

governance mechanisms, and restructuring of the most important state-owned firms (Uvalić, 2010). It was hoped that the standard package of transition-related economic reforms, focusing on macroeconomic stabilisation, liberalisation, and privatisation, designed similarly as in other transition countries according to the mainstream economic doctrine, would bring a radical break with the past and quickly deliver the benefits of a market economy.

The shortcomings of Serbia's economic transition strategy were not fully evident until the global financial and economic crisis hit the economy in the last quarter of 2008 (see Uvalić, 2010; Bartlett & Prica, 2012). Economic recovery during the 2001–2008 period was sustained by a strong credit boom and substantial inflows of foreign capital – FDI, foreign loans, donor assistance, workers' remittances – which diminished abruptly in 2008–2009. The global crisis brought to the surface many structural weaknesses in the Serbian economy that had been accumulating since the early 2000s, including rising external imbalances derived from increasing trade and current account deficits; continuous deindustrialisation due to a lack of modernisation of key manufacturing sectors and privatisations that had attracted foreign investors primarily to the non-tradable service sector (banking, telecommunications, wholesale and retail trade, real estate); and 'jobless growth', until 2006 characterised by increasing unemployment and stagnation or even a decline in employment rates (Uvalić 2010). The growth model implemented in Serbia in 2001–2008 was based on increasing consumption and imports, rather than on increasing exports and speedy integration with the global economy.

Another major shortcoming of Serbia's transition strategy in the early 2000s was the postponement of broader institutional reforms. Policymakers grossly underestimated the institutional weaknesses inherited from a decade of political and economic instability – the highly non-transparent business environment, weak rule of law, ineffective judiciary, diffused corruption, and inefficient public administration. Without the modernisation of key government and non-government institutions, economic liberalisation and the re-launch of privatisation proved insufficient to restructure many segments of the Serbian economy.

Moreover, even during this period of relatively successful economic recovery, Serbia was not entirely free from political instability. The first shock came in 2003 when the Serbian prime minister Zoran Đinđić was assassinated, presumably by the secret police forces, an event that had destabilizing effects on Serbia's political system, causing a slowdown in economic growth. Soon after, Serbia went through further statehood changes. Montenegro's strive aspiration for independence led to the transformation of FR Yugoslavia into the State Union of Serbia and Montenegro in 2003, but the popular referendum organised in Montenegro in May 2006, when 55% of its population voted for independence, led to a definitive split between the two republics. Serbia's southern province of Kosovo has been a further source of continuous political instability. Although the UN Security Council Resolution 1244 of 1999 established that Kosovo was to remain part of Serbia, since then it has effectively been governed by international forces (UNMIK, EULEX). After various failed attempts to find a solution mediated by the international community, Kosovo unilaterally proclaimed political independence in February 2008, but more than ten years later (as of mid-August 2019) Kosovo has still not been recognised by 48% of UN members (including five EU member states). The ambiguous status of Kosovo represents one of the main obstacles to Serbia's full integration with the EU, since no mutually acceptable solution has been found to date. The Brussels-mediated talks between Belgrade and Priština did lead to an agreement in 2013, but its implementation has been abandoned. These problems have also delayed Serbia's EU integration process. After 2006, Montenegro pursued its own political objectives and started EU accession negotiations in 2010, opening all chapters of the *acquis* and closing most of them by mid-2019, whereas Serbia's pace to EU integration has been much slower. In 2014 Serbia also started EU accession negotiations and by mid-2019 had opened 17 Chapters of the *acquis* (two of which have also been closed), but the issue of Kosovo (Chapter 35) risks hampering further progress in concluding accession negotiations (Bonomi & Uvalić, 2019).

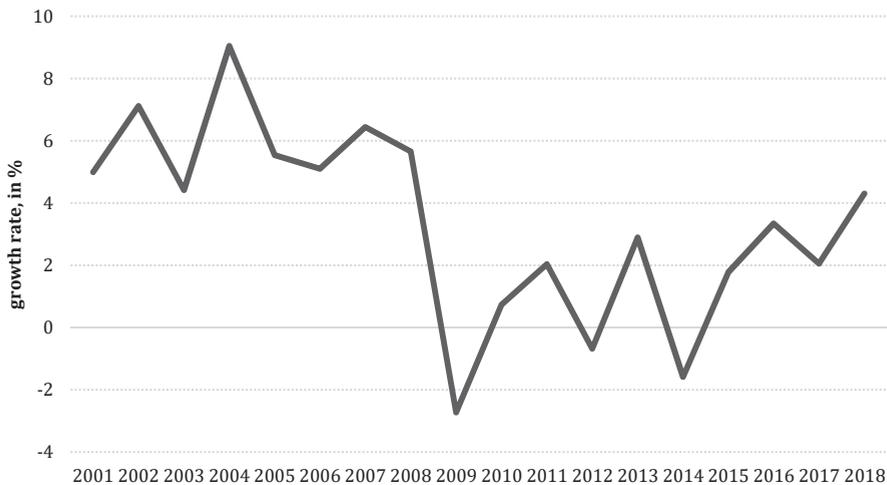
In the recent economics literature and influential reports of international organisations on the Western Balkans, these political problems have frequently been overshadowed by Serbia's economic achievements, although they have inevitably diverted policymakers' attention from economic to political questions, slowing down economic transition. Moreover, due to the persistence of political risk, the region has attracted less FDI than can be explained by the standard

variables of a gravity model (Estrin & Uvalić, 2014). The political and institutional problems inherited from the 1990s have fundamentally influenced Serbia's long-term economic development and they partly explain why Serbia has lagged behind other transition countries regarding some economic indicators, such as recovery of pre-transition GDP. Just before the severe effects of the global crisis in late 2008, Serbia had reached only 72% of its 1989 real GDP, the lowest of all 17 Central and Southeast European countries.

3. EFFECTS OF THE GLOBAL ECONOMIC CRISIS IN SERBIA AND POLICY RESPONSES

After 2008 Serbia experienced a whole decade of no or very slow GDP growth and was the only country in the region that has had a triple-dip recession (in 2009, 2012, and 2014), which has to a large extent nullified the pre-2008 economic recovery. As can be seen from Figure 1, Serbia's pre-crisis annual GDP growth rates were substantially higher than those recorded after 2008.

Figure 1: Serbian pre- and post-crisis GDP growth rates (in %)

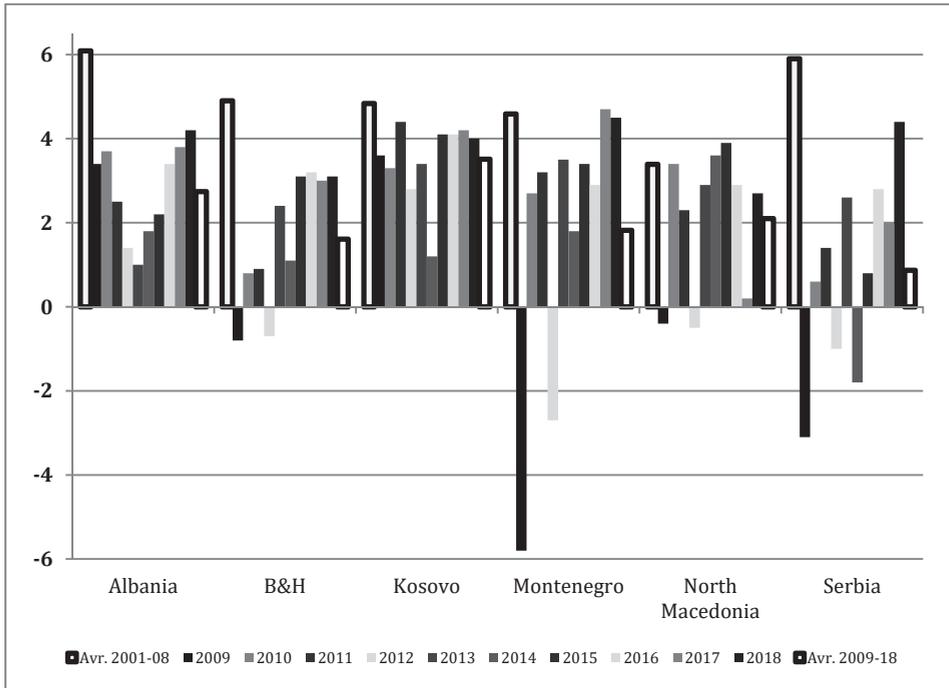


Source: Authors' elaboration based on national statistics (Zavod za statistiku Republike Srbije).

Serbia's GDP growth rates during the post-crisis years have been lower than in the other Western Balkan countries (see Figure 2). A comparison of average real GDP growth rates during the pre-crisis (2001–2008) and post-crisis (2009–2018)

periods shows that Serbia has achieved the lowest average real GDP growth rate of all the Western Balkan countries over the past ten years, corresponding to only around one-sixth of the average GDP growth rate registered in 2001–2008.

Figure 2: Real GDP growth in the Western Balkans: 2009-2018 annual growth rates, pre-crisis (2001–2008) & post-crisis (2009–2018) averages (% change)



Source: Authors' elaboration based on IMF statistics.

The Serbian government implemented various measures in response to the economic crisis, which came in two phases (Atanasijević, 2018; Bajec, 2018). After the strong effects of the global economic crisis in late 2008/early 2009, a first stimulus programme was implemented in 2009–2011, consisting of active support for both the financial and the real sector. Measures included banking guarantees for enterprise loans and savings deposits, promotion of export-oriented firms, attracting FDI, and expansionary fiscal policies. Subsidies were given to large state-owned companies operating mainly in infrastructure and utilities that were unable to cover their costs and fulfil their liabilities (including credits) and had not undertaken any restructuring and/or could not increase the

price of their services (or products) as the crisis unfolded. These measures prevented a stronger GDP fall in 2009, but also led to a substantial deterioration in public finances. Serbia requested support from the IMF and concluded a stand-by arrangement (SBA) in 2009, and also benefitted from the ‘Vienna initiative’ launched by the IMF and EBRD to prevent major capital withdrawals by commercial banks active in the region (Bartlett & Prica, 2012).

Although there was a major change in the government after the 2012 elections, which brought a coalition of parties that were in power during the 1990s (Socialist Party of Serbia and the Serbian Renewal Party, an offshoot of the Serbian Radical Party), macroeconomic policies remained similar to those implemented by the previous government. By 2014, expansionary fiscal policies had led to a 6.6% increase in the fiscal deficit and an increase in public debt of 72% of GDP. External debt increased to 82% of Serbia’s GDP (Bajec, 2018).

The second phase of government policy measures started in 2014. Threatened by economic destabilisation due to the deteriorating fiscal position, the government enthusiastically adopted a more liberal approach in some areas. The labour law was radically changed in order to introduce more flexible labour legislation, including changes in minimum wage contracts as to allow businesses to pay workers a wage of less than €200 per month. Serbia also signed a new three-year SBA with the IMF. The main goals of the IMF-agreed stabilisation programme were fiscal consolidation, strengthening the financial sector (primarily measures to reduce non-performing loans and stimulate ‘dinarisation’ of the economy), and structural reforms designed to increase competitiveness, employment, and growth (see Bajec, 2018; Bartlett, 2019).

The austerity programme implemented thereafter was fairly simple. Fiscal consolidation was to be achieved through cutting wages in the public sector (by 10%); reducing pensions (depending on the pension level – up to 25% for the highest pensions); and reducing the number of public sector employees (including a ban on new employment in the public sector). Since Serbia still had a number of firms that had not been successfully privatised (part of the public sector), cuts in public sector employment were easy to implement through new legislation declaring these firms bankrupt. Additionally, new employment was frozen in all public institutions, while many employees left their jobs due to

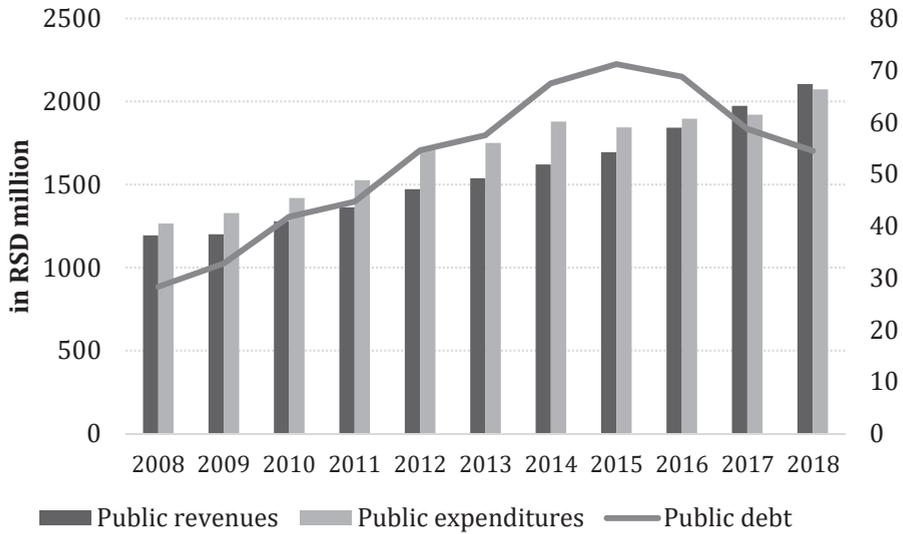
retirement or because of reduced salaries. Although this brought good results regarding the number of employees it was at the cost of efficiency, since the most competent and experienced workers left their jobs, usually without the right replacement. Thus, along with somewhat more effective control of taxpayers, a remarkable fiscal improvement was achieved (discussed further below). However, the programme's structural reforms have not been effectively implemented. The fiscal space created through fiscal consolidation has not been used to tackle key structural problems, which could have resulted in stronger economic growth (Bajec, 2018).

4. THE RESULT OF POST-CRISIS POLICIES IN SERBIA: TOWARDS A MORE SUSTAINABLE ECONOMIC RECOVERY?

Over the past decade economic growth in Serbia has been remarkably slow; yet some positive results have been achieved, particularly during the 2015–2018 period, sustained by a more favourable global environment. General improvements have been attained in some aggregate indicators, primarily in six areas: public finance, foreign trade, production structure, FDI, labour market, and main sources of growth. However, substantial problems remain within each of the mentioned areas, raising doubts as to whether the positive trends can be maintained.

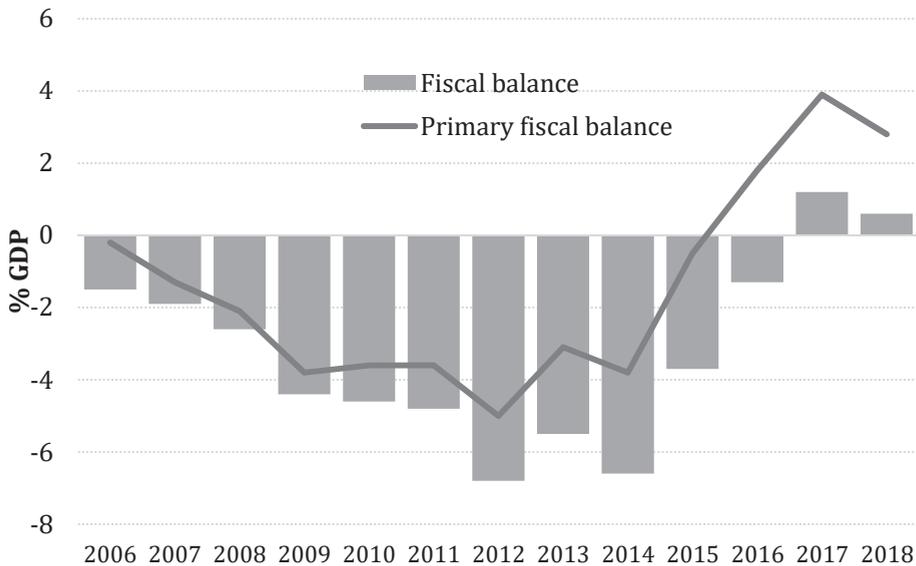
(1) *Public finance*. Restrictive fiscal policies focusing mainly on expenditure cuts have enabled fiscal consolidation, turning a high public deficit into a primary surplus in late 2015, which has been maintained for three years (see Figures 3 and 4). This allowed a reversal of the trend of increasing public debt after 2015 (in line with the IMF-agreed SBA), which was reduced to less than 55% of Serbia's GDP by 2018.

Figure 3: Serbia’s public revenues and expenditure, 2008–2018



Source: Authors’ elaboration based on data of the Ministry of Finance of the Republic of Serbia.

Figure 4: Serbia’s fiscal accounts, 2015–2018



Source: Authors’ elaboration based on data of the Ministry of Finance of the Republic of Serbia.

Despite these excellent results, the Serbian government has been heavily criticised for having a budgetary surplus for so long, especially given that public investment has been particularly low. During 2011–2015 public investment was 2.3% of GDP on average, rising only slightly to 3.1% in 2016 (Bajec, 2018). In recent years Serbia's public investment rates have been among the lowest in the whole transition region (see Serbian Fiscal Council 2017). Despite announced government plans to increase public investment, in 2017 it declined again to 2.8% of GDP. Only in 2018 was there a more substantial increase in public investment, to 3.9% of GDP.²

One of the main consequences of low public investment is that Serbia's infrastructure is generally of poor quality. The deadlines for completing Corridor 10 and the Belgrade–South Adriatic highway (E763) have been continuously postponed; large parts of the railway tracks have not been modernised and the speed of trains is extremely low; while local infrastructure regarding water supply, canalisation, and wastewater is of very poor quality. Large international loans have been secured for infrastructure projects in Serbia (from the World Bank, European Investment Bank, EBRD) that have not been implemented, mainly due to bureaucratic problems related to disagreements between the various ministries over the division of resources and concrete responsibilities.

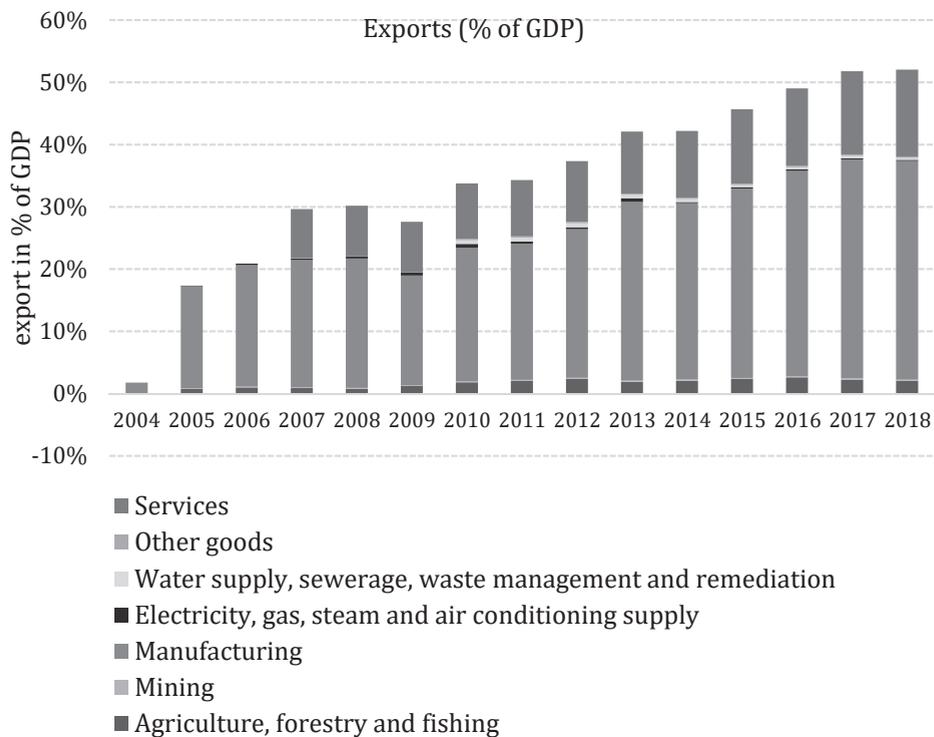
(2) *Foreign trade*. During the 2015–2018 period Serbian exports grew faster than imports, facilitating a substantial reduction in the trade deficit. Export growth has also been stronger than GDP growth, suggesting there may be signs of a switch to an export-led growth model. Exports of services have registered particularly strong growth, indicating the potential of a new segment of the economy in the ICT sector (see Figures 5, 6).

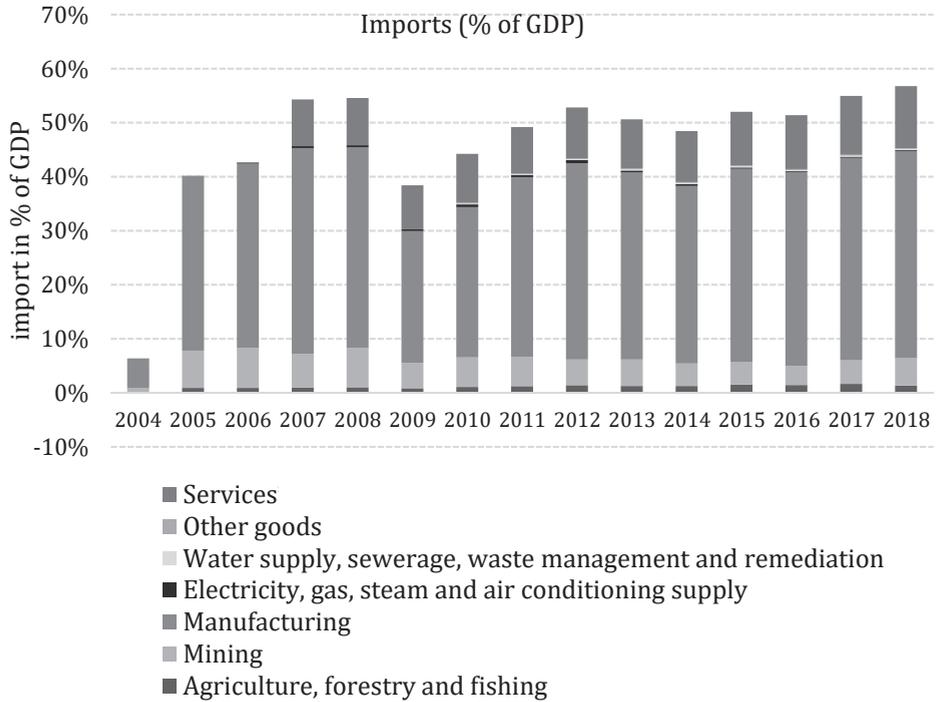
Strong export growth in Serbia is the result of a combination of three groups of supply-side factors. Due to the domestic market's low purchasing power after the implementation of austerity measures, local firms looked for new markets abroad (Cerović & Mitić, 2018). In addition, substantial FDI has arrived in the low- and mid-tech sectors – attracted primarily by low labour costs (since 2013 average wages in Serbia have been lower than in China) and high government

² Based on annual reports of the Parliamentary Budget Commission compiled with data from the Statistical Office of the Republic of Serbia.

employment subsidies – which have mostly been producing products for export (spare parts or similar) (Cerović, 2017). The recently set up free zones in Serbia, established as export-processing zones within duty-free areas, have attracted a relatively large amount of new FDI, mainly in the motorcar and components industries, which are often aimed at export markets (see Bartlett et al., 2019). Export growth has also taken place thanks to local entrepreneurship with a strong IT component, (see Figure 6), often by innovative SMEs (Atanasijević & Uvalić, 2017). The exchange rate has not had a significant effect on export growth due to the still high degree of euroisation of the Serbian economy and minor fluctuations of the real effective exchange rate after 2011 (see Figure 7).

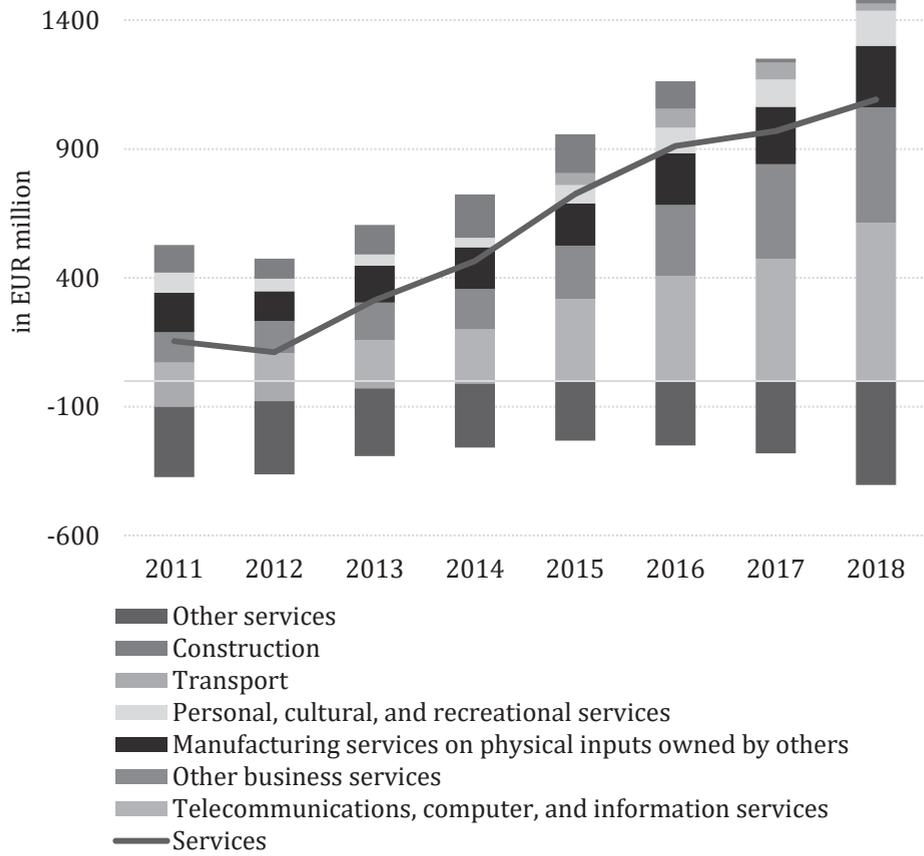
Figure 5: Serbia’s trade structure and dynamics, 2004–2018





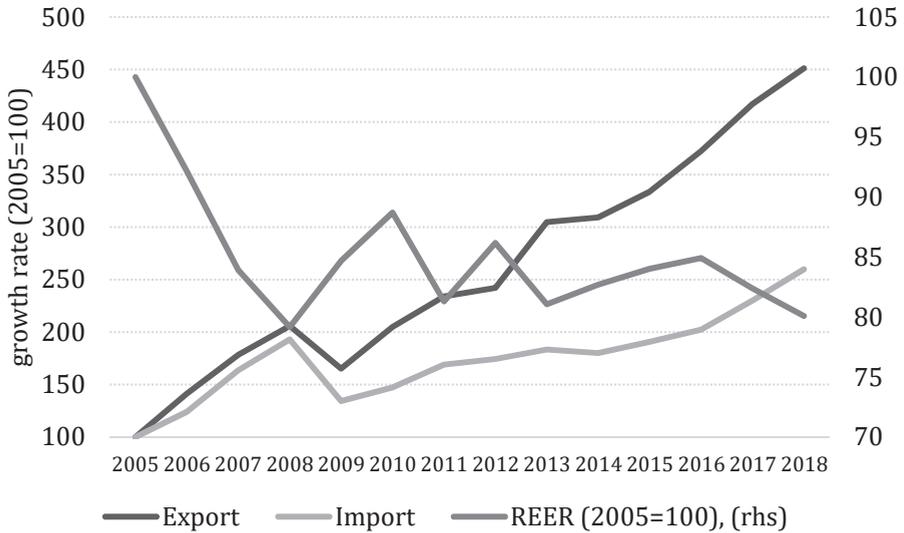
Source: Authors' elaboration based on national statistics (Zavod za statistiku Republike Srbije).

Figure 6: Serbia’s net exports of services, 2011–2018



Source: Authors’ elaboration based on national statistics (National Bank of Serbia).

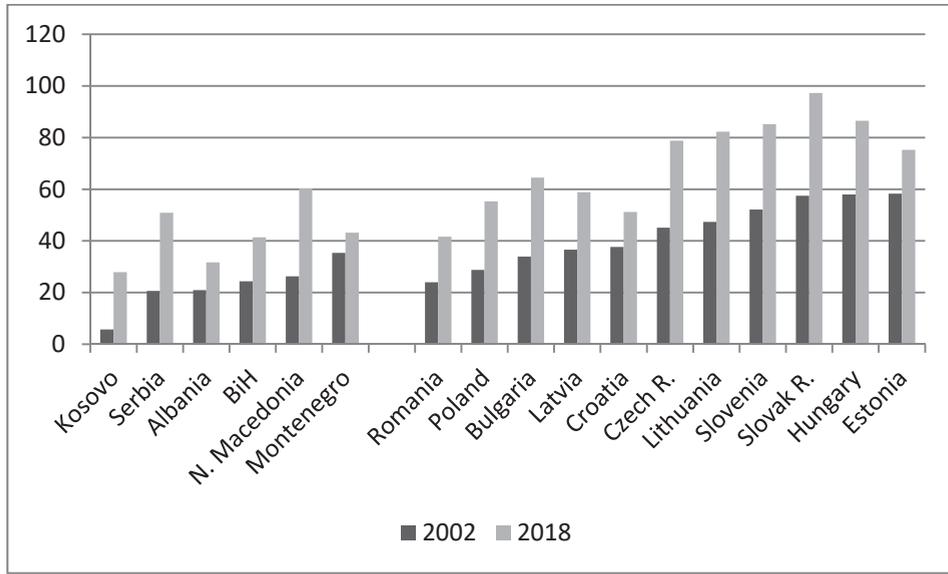
Figure 7: Serbia’s exports, imports, and the Real Effective Exchange Rate (REER) growth rates, 2005–2018 (2005 = 100)



Source: Authors’ elaboration based on national statistics (Zavod za statistiku Republike Srbije and National Bank of Serbia).

Thanks to improved export performance, Serbia has registered a remarkable increase in its export of goods and services/GDP ratio, from around 20% in 2002 to around 51% in 2018. Nevertheless, Serbia still has a lower export/GDP ratio than 10 of the 11 EU new member states (all except Romania, see Figure 8).

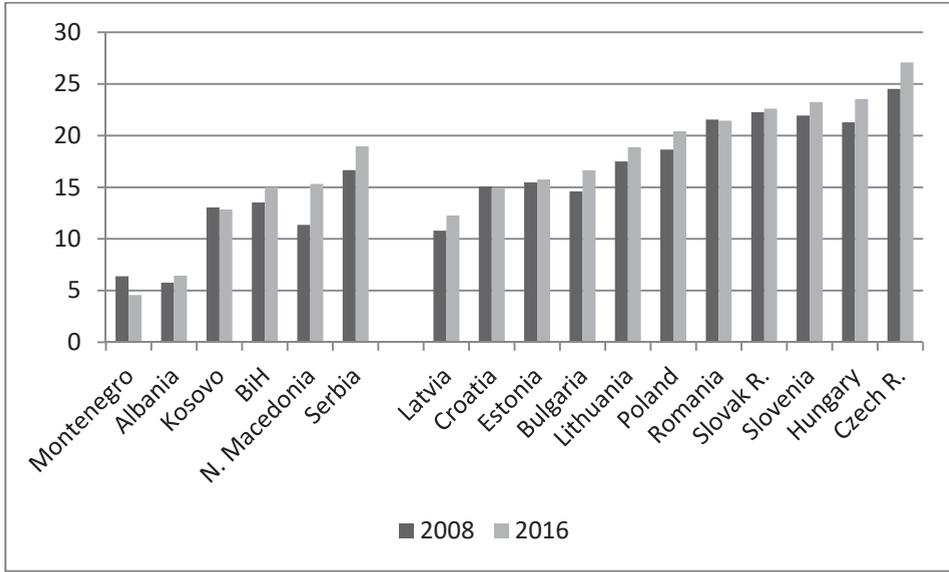
Figure 8: Exports of goods and services/GDP ratio in Western Balkans and EU new member states, 2002 & 2018



Source: Authors' elaboration based on World Bank's World Development indicators.

(3) *Reindustrialisation.* Serbia has experienced a further increase in manufacturing value added over the last ten years and is the most industrialised country in the Western Balkans, with manufacturing contributing almost 20% of GDP (comparable to levels in some of the EU new member states, see Figure 9). After more than two decades of continuous deindustrialisation, the positive trend towards some reindustrialisation ought to sustain faster economic recovery, since manufacturing products are the dominant part of Serbia's exports.

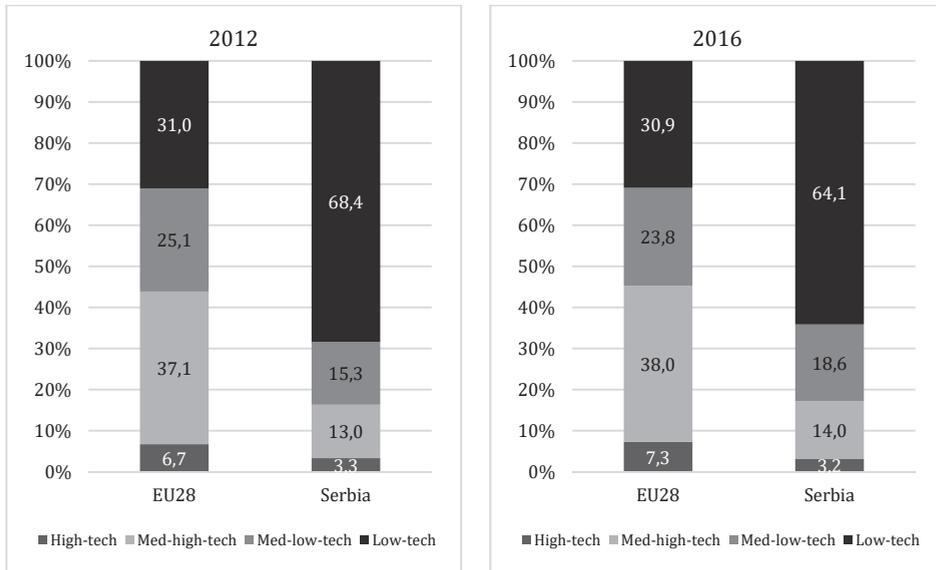
Figure 9: Manufacturing value added (% of GDP) in Western Balkans and EU NMS, 2008 & 2016



Source: Authors' elaboration based on World Bank's World Development Indicators.

However, manufacturing growth has often taken place in low-tech sectors, suggesting limited technological upgrading of the Serbian economy. During 2012–2016 the structure of Serbia's manufacturing value added by technology level improved slightly, but still lags substantially behind the average technology level in the EU. In 2016 as much as 64% of manufacturing value added in Serbia was in low-tech sectors (twice as much as in the EU28), while only 3.2% was in high-tech sectors (less than half of the share in the EU28) (see Figure 10).

Figure 10: Serbian manufacturing value added by technology level, 2012 and 2016



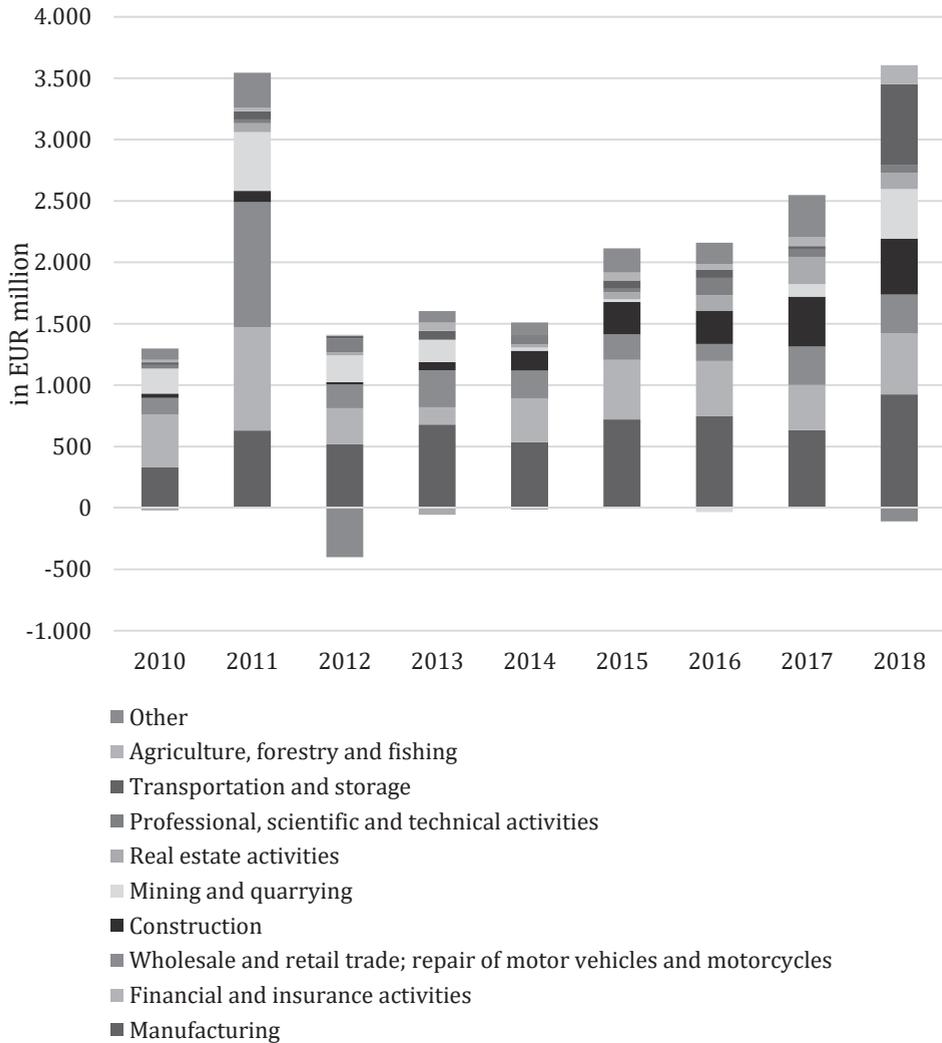
Source: Authors' elaboration based on national statistics (Zavod za statistiku Republike Srbije).

(4) *Level and structure of FDI.* In recent years the Serbian government has devised various measures to attract FDI, including large subsidies to firms (ranging between €3,000 and €12,000) for every new job created and the establishment of free zones (see Bartlett et al., 2019). Unlike most other countries in the region, Serbia did not experience a huge drop in FDI inflows after the 2008 global financial crisis, so by the end of 2016 Serbia's stock of inward FDI was US\$ 30.3 billion. FDI penetration (measured as inward FDI stock as a percentage of GDP) was 80.4% – the third-highest level among the 16 Central and Eastern European economies and far above the 54.6% average for the region (Kekić, 2018).

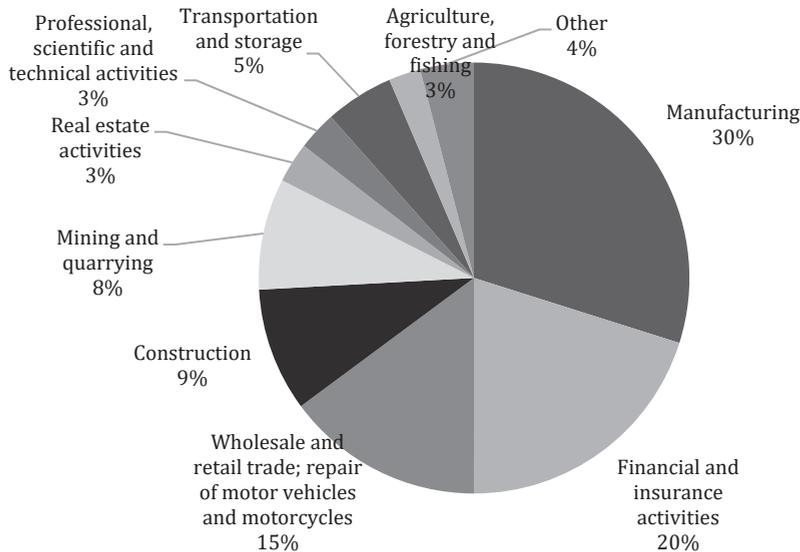
Compared to the pre-2009 period, the structure of FDI has been more balanced across sectors, with a relatively larger share of FDI going into manufacturing (see Figure 11). During the 2004–2007 period more than 78% of total inward FDI in Serbia went into various service sectors – financial intermediation (33.9%), transport and telecommunications (20.1%), wholesale and retail trade and repairs (12.8%), real estate and renting (11%), hotels and restaurants (0.6%) – and only 18.6% into manufacturing (Uvalić 2010, p.187, based on SIEPA data). By contrast, during 2010–2018 the manufacturing sector attracted 30% of total FDI on average

for the whole period (see Figure 12) – much more than before the global crisis, which probably helped the restructuring of some vital manufacturing sectors.

Figure 11: Annual sectoral structure of FDI in Serbia, 2010–2018



Source: Authors' elaboration based on national statistics (National Bank of Serbia).

Figure 12: Sectoral structure of FDI in Serbia, average for 2010–2018 period

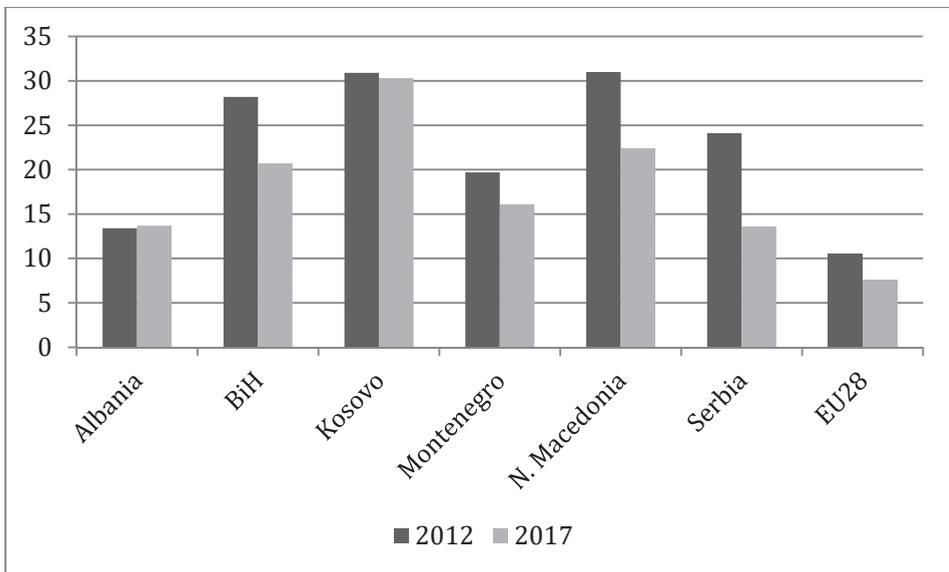
Source: Authors' elaboration based on national statistics (National Bank of Serbia).

Foreign-owned companies in Serbia show higher profitability and productivity than domestic companies and have also boosted exports (as stressed earlier), but they are also heavy importers. The import intensity of production (measured by the import/export ratio) in foreign firms operating in free zones in Serbia is extremely high (96.8% in 2017), implying few linkages to the local economy (Bartlett et al., 2019). As in other countries in the region, the spillover effects of FDI on the economy appear to have been modest at best (Estrin & Uvalić, 2016; Kekić, 2018). Government employment subsidies have attracted large investments, primarily in labour-intensive sectors (particularly those employing low-skilled labour), not taking into account investment quality or national strategic priorities (Cerović, 2017). These government measures have therefore not facilitated technological upgrading of the Serbian economy. Given that foreign companies operating in free zones in Serbia have relatively few local suppliers, technology transfer and technological upgrading of local firms through knowledge spillovers has been limited (Bartlett et al., 2019).

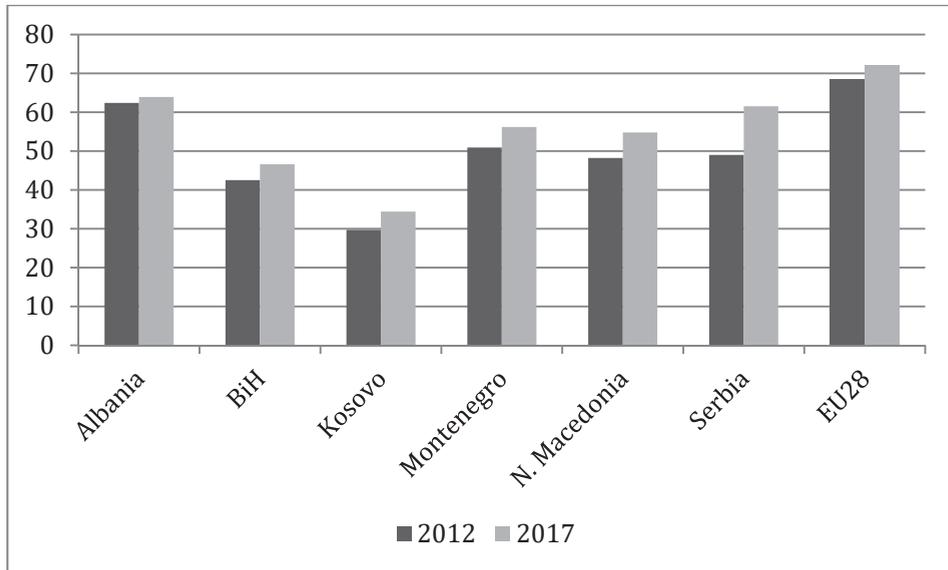
(5) *Labour market.* New regulations that have introduced greater flexibility regarding hiring and firing of workers, along with changes in the methodology of

reporting statistics, have contributed to improvements in the most important labour indicators (see Figure 13 and 14). In only six years the unemployment rate has been reduced by 10 percentage points, from over 24% in 2012 to 14% in 2017. The employment rate in Serbia has also substantially increased over the 2012–2017 period, from 49% to over 61%. Serbia is still lagging behind the EU average regarding key labour market indicators, but it has registered better overall results than the other Western Balkan countries. In 2017 Serbia had the lowest unemployment rate and second highest employment rate (after Albania) among the Western Balkan countries.

Figure 13: Unemployment rate in Serbia, Western Balkans, and EU, 2012 and 2017



Source: Authors' elaboration based on Eurostat data, 2019.

Figure 14: Employment rate in Serbia, Western Balkans, and EU, 2012 and 2017

Source: Authors' elaboration based on Eurostat data, 2019.

These results are encouraging, but more detailed statistics reveal the persistence of deeply rooted long-term problems in the Serbian labour market, including diffused youth unemployment and a very high structural unemployment rate. High youth unemployment has led to a massive brain drain, especially of the best-qualified graduates and those with specific skills. 'Brain waste' is another serious problem due to the persistence of large skill gaps, both horizontal and vertical (see Bartlett & Uvalić, 2019). The grey economy continues to contribute an important share of GDP – 31% according to recent estimates – with many negative side effects.

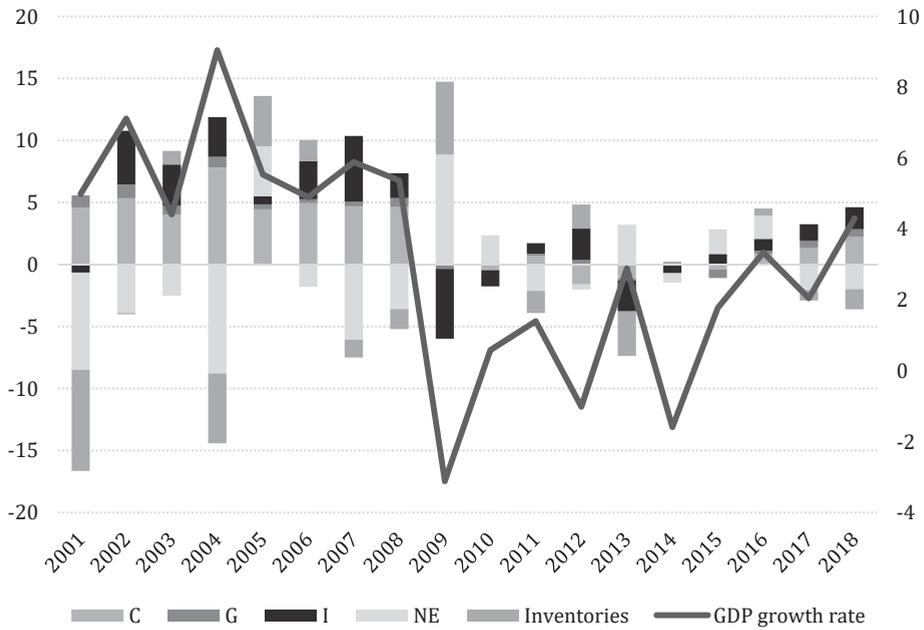
Although the government has been particularly proud of improvements in key labour market indicators, considering the modest changes in the technology level of industry and the structure of FDI driven by state subsidies and low labour costs, the newly created jobs have often been of poor quality, frequently offering precarious work. During the observed period, particularly after the introduction of austerity measures, low-quality employment – temporary, informal, and short-term – has risen: 20.7% of employees (580,000) were informally employed without any type of contract, a figure that is even higher (770,000) if we take into

account workers that have no pension insurance. In addition, around 13% (350,000) worked part-time (Labour Force Survey – ARS 2017), while over 21% worked at very low intensity (compared to 10.5% in the in EU) (Žarković-Rakić, 2017).

Serbia has also experienced rising income inequality. According to the Eurostat Silk survey, Serbia has the highest Gini coefficient among all surveyed European countries (38.2). Income inequality in Serbia increased particularly during the period of government austerity measures, since in 2009–2010 the Gini coefficient was much lower, between 31 and 33 (Krstić, 2016). Under such deteriorating conditions it is not surprising that people have looked for any type of income, accepting low quality jobs that pay less or are part-time and insecure. Wealthier segments of the population need new services, which are increasingly being offered on the informal market. If we also recall that new labour regulations in Serbia have introduced a very flexible relationship between enterprises and employees, it is easy to understand why so many informal, part-time, and other low-quality jobs have emerged during the post-crisis period (Cerović, 2017).

(6) *Changes in the sources of growth.* In recent years there have also been changes in the sources of growth, on both the demand and supply side (Atanasijević, 2018). On the demand side we can observe a switch from predominantly consumption-driven growth fed by a fast increase in imports that featured before the global economic crisis, to much stronger export-led growth (see Figure 15).

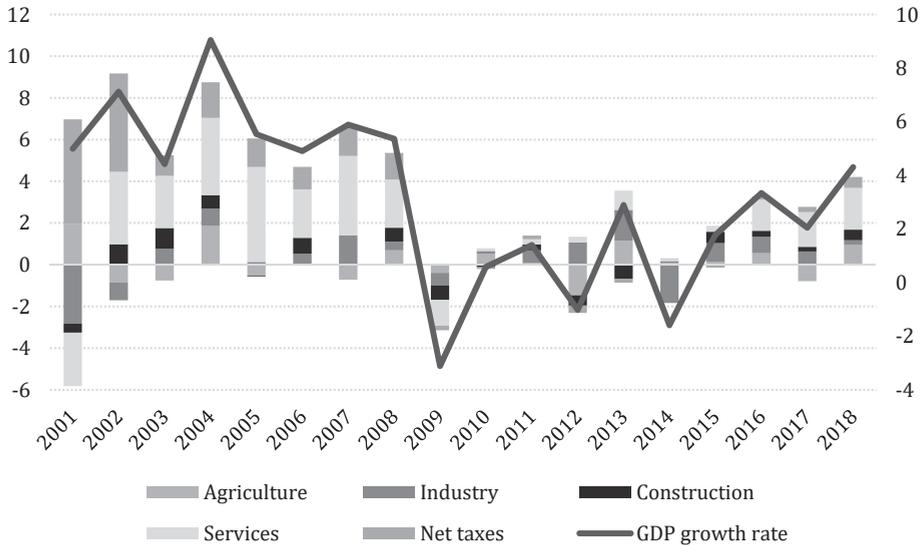
Figure 15: Changes in the sources of growth in Serbia (demand side)



Source: Authors' elaboration based on national statistics (Zavod za statistiku Republike Srbije).

On the supply side Serbia has also experienced a shift from a production structure dominated by services, typical during the 2002–2008 period, to a more balanced growth pattern, more evenly distributed across sectors (see Figure 16).

Figure 16: Changes in the sources of growth in Serbia (supply side)



Source: Authors' elaboration based on national statistics (Zavod za statistiku Republike Srbije).

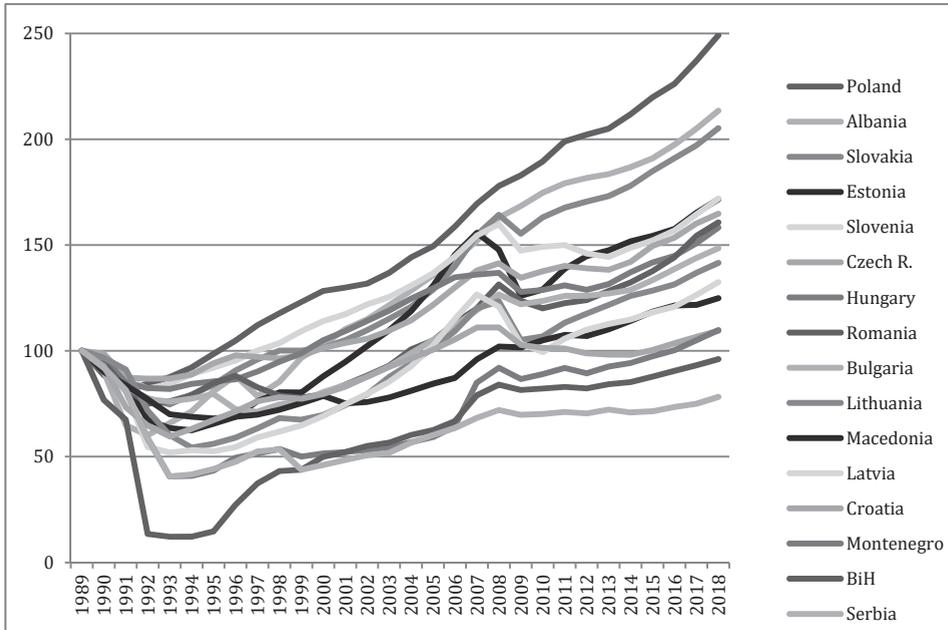
These are encouraging signs of a switch in Serbia's growth model, but it is far too early to determine whether they can be sustained in the medium-to-long run.

5. KEY CHALLENGE: ACCELERATING SERBIA'S ECONOMIC GROWTH

The ongoing analysis suggests that the main structural problems of Serbia's economy that emerged in late 2008 – rising external imbalances, continuous deindustrialisation, slow labour market adjustments – have been somewhat attenuated in recent years. However, the improvements in some key indicators have not contributed, for now, to a notable increase in Serbia's level of economic development. Due to the strong effects of Yugoslavia's disintegration in 1991 and the very slow economic growth during both the 1990s and the post-2009 period, Serbia has still not reached the level of production it had in 1989. In a long-term perspective, Serbia is the country that has least recovered its pre-transition

production level of all 17 Central and Southeast European countries, reaching only 78% of its 1989 real GDP by 2018 (see Figure 17).³

Figure 17: Real GDP growth - Annual growth rates (Indices, 1989=100)

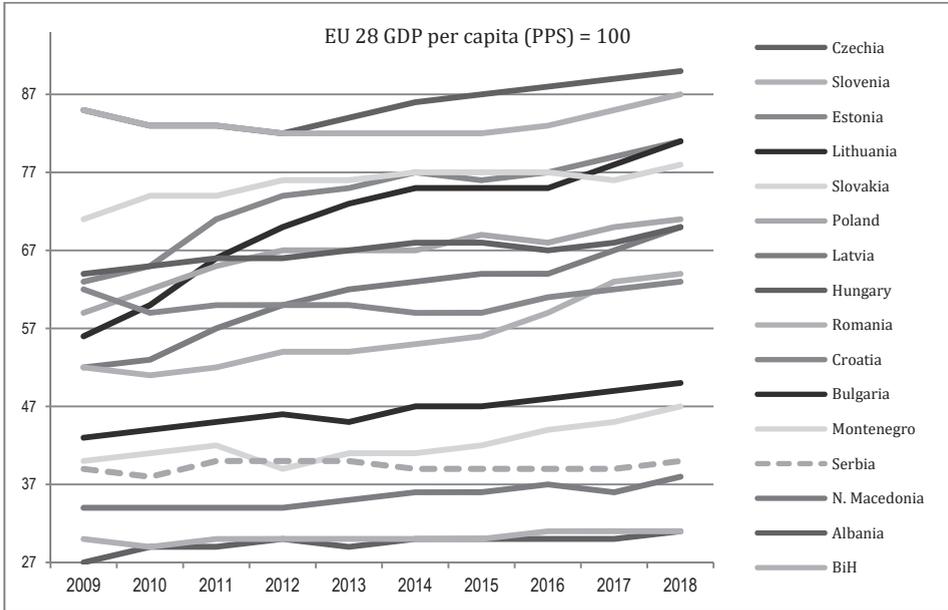


Source: Authors' elaboration based on EBRD, IMF and national statistics.

During the post-2009 period the Western Balkans have been growing at a slower rate, on average, than the EU new member states. The average real GDP growth rate during 2009–2017 in the Western Balkans was 1.1%, or about half the average rate in the EU11 of 2.0% (Kekić, 2018). In 2018 Serbia had a GDP per capita (in Purchasing Power Standards) that was 40% of the EU28 average, slightly ahead of the other Western Balkan countries (except Montenegro) (see Figure 18).

³ These figures are approximate, since for some countries, particularly Bosnia and Herzegovina, only growth rate estimates for the early 1990s are available, but they are the best statistics we have. Statistics for the 1990s were taken from the EBRD database, which for years has been publishing this indicator in its Transition Reports (level of real GDP in a given year, 1989 = 100), showing how much a country has recovered its pre-transition (1989) level of GDP. More recent real GDP growth rates are from the IMF, based on national statistics.

Figure 18: GDP per capita (PPS) in the Western Balkans and the EU NMS (in % of EU28 average)



Source: Authors' elaboration based on Eurostat statistics.

These comparative indicators suggest that the key challenge for Serbia today is to achieve much faster economic growth in order to be able to make up for the lost decades and converge towards the living standards of more-developed countries. Many economic reforms in Serbia have not been seriously addressed, including radical tax reform, more efficient labour market policies, restructuring of state-owned enterprises, and effective competition policy. In what follows, instead of giving an exhaustive list of reforms that need to be carried forward, we stress only the most important areas for accelerating Serbia's long-term economic growth.

(1) The first step is to devise a *national development strategy* in line with Serbia's comparative advantages (Uvalić, 2010). The lack of consensus on development-related longer-term objectives in Serbia has led to major inconsistencies in economic policies over the past decades. The government's stop-go policies have moved from hyper-liberalist measures to policies introducing excessive regulation, without a clear vision of what the country's long-term objectives are and what are the best policy instruments to achieve them. A more focused pro-

growth development strategy that targets key sectoral priorities, technological upgrading, and diversification of the industrial base would help attain the country's national objectives.

In line with such a policy focus, Serbia needs to transform itself from a “predatory state” (Shleifer & Vishny, 1998) to a “developmental state”, in which the state's pursuit of economic growth and international competitiveness is guided primarily by national interests (see Estrin, 2019). One reason for the limited results in many areas of reform is the poor quality of reform design, but the most fundamental reason is poor implementation due to a lack of strong political will to eliminate deeply rooted vested interests. The preservation of the status quo has reinforced a system in which economic activities perform within a long-established and developed network of close links between firms and the state structures, motivated by rent seeking rather than by competition in a fair market playing field.

(2) *Increasing the investment rate.* According to traditional growth theories and many theories of economic development, the key condition for faster economic growth is to secure a minimal amount of investment. Increasing the investment/GDP ratio in Serbia is a necessary condition for accelerating economic growth. Serbia's investment/GDP ratio during 2010–2015 has been 18% on average, reduced from 25% of GDP in 2005 to 19% in 2016, which is among the lowest in the region and well below the 25% of GDP that is considered to be the threshold for sustained high growth, and below the 30% recorded by emerging markets at similar levels of development (Kekić, 2018).

Relying primarily on foreign investors to increase Serbia's investment rate has been a risky policy that has only partly delivered the expected results. Bearing in mind the volatility of FDI after 2008, which has still not returned to its peak pre-crisis level, and reduced privatisation opportunities in Serbia, major reliance on domestic savings and investments is fundamental. A further increase in public investment to at least 6% of GDP could be secured from the state budget by cutting other expenditure (e.g., subsidies to loss-making public enterprises), in combination with increased investments by good standing local firms, provided they are offered adequate incentives to enter into public-private partnerships (especially at the local government level). An increase in public investment would

support private sector growth, as opposed to recent government measures that have shifted the costs of adjustment to low-paid public sector workers and pensioners (Bartlett 2019). These measures should be supplemented by more efficient use of international resources provided by the Western Balkan Investment Framework, which requires better management of public investment in order to speed up the implementation of planned projects (another reform that has begun but has not been fully implemented). As mentioned earlier, Serbia badly needs more investment in infrastructure (roads, highways, railways, energy), which could have a strong multiplier effect on its GDP growth and economic development.

A further step to increase the investment rate in Serbia would be to develop the financial sector. Since access to finance in Serbia has become more difficult since the global crisis, the relatively underdeveloped financial system represents a major constraint on private investment by the new class of entrepreneurs, especially SMEs. A more elaborate set of development finance instruments and institutions is needed, together with targeted policies to develop the still almost inexistent capital market.

(3) These objectives would need to be sustained by *a different type of industrial policy*. Transition economies such as Serbia that have gone through a severe process of deindustrialisation can achieve stronger export-led growth only if they implement a more focused pro-growth industrial policy. The role of exchange rate policy in this endeavour is limited, since Serbia is still a highly euroised economy and the pass-through of exchange rate changes to prices is still significant (see more in Atanasijević & Božović, 2016). Therefore, industrial policy ought to consist of a coordinated set of measures not only to improve the overall business environment but also to stimulate structural changes in the economy, technological upgrading, local supply chains, private sector growth, and absorption of the still-unemployed labour force. Such an industrial policy would need to encompass not only horizontal measures to improve the general conditions of firms' competitiveness, but also measures to support concrete industrial sectors and positive structural changes, as a crucial component of the new approach to development (Cerović et al., 2014). Instead of continuing to subsidise loss-making state-owned enterprises, scarce budgetary resources should be directed towards promoting national priorities – potentially fast-

growing sectors that are prominent in terms of competitive advantage and the potential to drive a rise in productivity.

The smart specialisation strategies recently promoted by the EU could be useful for choosing priority sectors based on comparative advantage, competitiveness, and export potential. Some sectors that have been identified in Serbia in recent studies as having growth and export potential are the agri-food industry, mid-tech manufacturing (metal processing, machine construction, rubber/plastics), ICT (high-knowledge content services), and creative industries (Government of the Republic of Serbia, 2020; Udovički, 2018; OECD, 2019). An economy like Serbia's that still strongly depends on agriculture and various light industries should also leverage these potentials, rather than focusing on classic high-tech sectors alone (Kroll et al., 2017). In order to implement a more articulated, encompassing, and efficient industrial policy, geared towards long-term national priorities, the Serbian government needs to apply additional measures, particularly regarding FDI, investment in human capital, and SMEs.

(a) *FDI policies* in Serbia cannot be limited to attracting foreign investors irrespective of their sector of activity. Improving the business environment and measures to increase FDI has proved to be insufficient to restructure and industrially upgrade large segments of the real sector of the Serbian economy. Government policies need to influence the quality of FDI and its sectoral distribution in order to channel potential investment into priority and higher-value-added sectors, instead of primarily sectors employing low-qualified labour (Cerović, 2017). Recent findings suggest that sector targeting doubles FDI flows into the chosen sectors and results in higher unit-value exports (Moran, 2014; Estrin & Uvalić, 2016). It is also important to stimulate the creation of local supply chains through stronger networks encompassing foreign and domestic firms (OECD, 2019), in order to facilitate technology and skill transfers to the local economy and improvements in overall labour productivity. Foreign firms operating in free zones in Serbia have relatively few local suppliers due to their low technological level and high prices (Bartlett et al., 2019). Stronger linkages between foreign and domestic enterprises in Serbia would greatly facilitate the integration of domestic firms into global supply chains.

(b) *Increasing investment in human capital* (R&D, education, innovation) has become a key instrument for increasing competitiveness, productivity, and economic growth. Economic theory (particularly endogenous growth models) strongly supports the benefits of ‘smart growth’, which is the basis of the long-term EU strategies, the *Lisbon Strategy* and the *Europe 2020 Strategy* (“A strategy for smart, sustainable and inclusive growth”)

‘Smart growth’ is important for increasing competitiveness not only of the EU but also of those countries that need to catch up and develop faster, such as Serbia. Smart growth could facilitate a ‘jump’ in economic development, moving the Serbian economy closer to the technological frontier. Contrary to neoclassical growth theories, recent evidence suggests that there is no tendency for low/middle-income countries to converge towards the development level of high-income countries.

Regarding R&D and innovation, Serbia should make efforts to further increase R&D expenditure. Although R&D spending has increased in recent years (to 0.9% of Serbia’s GDP), this increase came almost entirely from the private sector, while public expenditure has remained roughly stable at 0.4% of GDP (European Commission 2019, p. 49).⁴ Smart specialisation strategies could help integrate Serbia with the EU research area, leveraging existing R&D capacity and excellence to contribute to innovation, technological progress, and further export growth. Programme targeting commercialisation of public and private R&D are also needed to build on the achievements of the initiated reforms of public R&D and innovation, in order to promote more advanced phases of the innovation ecosystem and support technologically advanced segments of the economy that have high growth and export potential.

In the field of education, further reform of the higher education sector and graduate labour market is needed in order for the higher education system to better contribute to building human capital and the competitiveness and growth of Serbia’s economy (Bartlett & Uvalić, 2019). It is necessary to introduce merit-based funding of public universities based on performance indicators that are no longer based solely on the number of students (to avoid excessive enrolment in

⁴ This is clearly far below the EU objective of 3% R&D expenditure, but is higher than in the other Western Balkan countries for which this indicator is currently available.

some fields), and to offer more scholarships for priority study fields. Another serious challenge in Serbia is to implement policies to combat corruption in the entry process and awarding of degrees. In order to reduce skill mismatch, more training and obligatory work experience during studies should be provided, along with institutionalising cooperation between universities and employers (Bartlett & Uvalić, 2019).

(c) Major support for SMEs has been a long-standing recommendation, yet SMEs in Serbia still face various barriers to growth and expansion. SMEs need to be offered better access to finance, technical assistance, market information, and other forms of support (European Investment Bank, 2016; Atanasijević & Uvalić, 2017; Cerović & Mitić, 2018). Programmes must be devised to support particularly those SMEs providing higher value-added products that have been developing in the post-crisis period and have significantly contributed to export growth (agri-food industry, machinery, ICT) (see World Bank, 2019; Udovički, 2018). Given that foreign firms operating in Serbia usually keep their R&D functions in their home countries, SMEs also need support in the commercialisation of their products, intellectual property rights, and foreign trade-related procedures. More adequate instruments offered to SMEs in Serbia could stimulate the expansion of the private sector and increase productivity and improvements in the technological structure of the economy.

(4) Further reform of key government and non-government institutions is another fundamental area for accelerating Serbia's future economic development. The ruined institutions inherited from the 1990s – the non-transparent business environment, ineffective judiciary, lack of rule of law, inefficient public administration – have deteriorated further with the dissolution of the federal state.⁵ The importance of these broader institutional reforms has been largely underestimated ever since the early 2000s, yet they continue to represent a major obstacle to faster overall change in Serbia's economy and society.

⁵ When Serbia was part of the Federal Republic of Yugoslavia the state administration at the federal level was better skilled and possessed more policymaking capacity. With the disintegration of the federal state many competent employees left their positions, while the Serbian state relied on the remaining republic and local-level administration.

The slow implementation of judiciary reforms and the related weak rule of law in Serbia is of particular concern, as amply documented in many studies. The importance of an efficient judiciary and the rule of law was confirmed in a recent survey of members of the American Chamber of Commerce in Serbia: for 74% of respondents this was the priority for improving the business climate in Serbia. Eighty-two per cent considered the biggest obstacle to be the length of court proceedings, while lack of adequate knowledge and shortage of judges specialising in more complicated business and financial litigation was also stressed (see AmCham, 2019).

Further reform of the public administration is needed to increase the government's efficiency and capacity to plan and implement policies, as well as to manage the provision of public services using modern managerial tools. Serbia has elaborated numerous strategies that have often remained on paper due to weak public administration: poor implementation capacity and lack of policy coordination combined with bureaucratic inertia and traditional formalism to protect vested interests and postpone bolder substantive changes. Additional efforts have been made since late 2014, leading to improvements regarding policy coordination, impact analysis (results-based management and programme budgeting), and digitalisation of certain public services and administrative procedures (related to obtaining citizens' documents, various permits, payment of taxes, etc.). However, the results are not very evident in terms of overall improvement in the efficiency of public services, management capacity, and fulfilment of specific policy objectives. What still seems to be missing in Serbia is a cultural transformation, the wider adoption of the ethics and values of a market economy that would encourage entrepreneurship, risk-taking, and life-long learning.

6. CONCLUDING REMARKS

This paper assesses Serbia's economic problems after the profound impact of the global economic crisis in a longer-term perspective, since economic stagnation during the past ten years is intrinsically linked to flaws in pre-2008 economic policies. It revisits the legacy of the 1990s responsible for the pressing political problems, the strong economic decline, and the weakening of institutions, as well as the post-2001 political changes that facilitated a radical break with the past, an acceleration of the transition to market economy, and multiparty democracy.

Despite progress in many areas of reform and specific policies implemented by different governments after 2009, Serbia's economy has stagnated during the past ten years, putting at risk catching up with more developed countries. In addition to slow growth, Serbia continues to be burdened by a lack of fundamental institutional changes, government inefficiency, and unresolved political issues. The paper recommends accelerating Serbia's economic development through a long-term development strategy based on comparative advantages, a much higher investment/GDP ratio, a more articulated industrial policy (including different FDI policies; investments in R&D, education, and innovation; major support of SMEs), and further reforms of major government and non-government institutions, especially the judiciary. Unless these fundamental issues are better addressed, Serbia will not be able to accelerate its growth rate and converge to the income levels of the more developed parts of Europe.

REFERENCES

- Atanasijević, J. (2018). Serbia's experience in economic development [Conference presentation]. Belgrade: University of Belgrade.
- Atanasijević, J., & Uvalić, M. (2017). Performance of *de novo* firms in Serbia after the recent crisis [Conference presentation]. St Petersburg: Conference of Associations for Comparative Economic Studies.
- Atanasijević J., & Božović, M. (2016). Exchange rate as a determinant of corporate loan defaults in a euroized economy: evidence from micro-level data. *Eastern European Economics*, 54(3), 228–250.
- American Chamber of Commerce in Serbia. (2019). *The Sixth Lap Time: Unlocking the Reforms*. Belgrade: American Chamber of Commerce in Serbia.
- Bajec, J. (2018). A coherent growth policy for Serbia. In M. Brandle and M. Weichert (Eds.), *A New Economic Agenda for Southeast Europe* (pp. 81-90). Zagreb: Friedrich Ebert Stiftung.
- Bartlett, W., & Prica, I. (2012). The variable impact of the global economic crisis in South East Europe. *Economic Annals*, 56(191), 7–34.
- Bartlett, W. (2019). Economic reforms in Serbia and prospects for economic recovery and growth. In R. Osbild and W. Bartlett (eds), *Western Balkan Economies in Transition. Recent Economic and Social Developments*. Berlin: Springer, pp. 147–164.

Bartlett, W., Krasniqi, B., & Ahmetbašić, J. (2019). Attracting FDI to the Western Balkans: Special economic zones and smart specialisation strategies. *Croatian Economic Survey*, 21(2), 5-35.

Bartlett W., & Uvalić. M. (2019). Higher education and the graduate labour market in the Western Balkans. In R. Osbild and W. Bartlett (Eds.), *Western Balkan Economies in Transition: Recent Economic and Social Developments*. Berlin: Springer, pp. 47–59.

Bonomi, M., & Uvalić, M. (2019). Serbia and the European Union. *Oxford Research Encyclopaedia of Politics*. Oxford University Press. <https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-1052>.

Cerović, B. (2000). Economy of FR Yugoslavia: Transition or pre-transition economy? *Working Paper Series No. 97*. Ljubljana: University of Ljubljana, Faculty of Economics.

Cerović, B. (2017, June 9). Pletenje kablova je posao za najnerazvijenije afričke zemlje [Cable knitting is a job for the least developed African countries]. *Istinomer*. <https://www.istinomer.rs/analize/pletenje-kablova-je-posao-za-najnerazvijenije-africke-zemlje/>

Cerović, B., & Mitić, S. (2018, 29-30 June). *Export barriers as perceived by Serbian firms – some lessons for export supporting policies [Conference presentation]*. LSEE-CEFTA Academic Network Workshop. Belgrade: Faculty of Economics.

Cerović, B., Nojković, A., & Uvalić, M. (2014). Growth and industrial policy under transition. *Economic Annals*, 59(201), 7–34

Estrin, S. (2019, September 20). *The emergence and impact of state capitalism [Conference presentation]*. Economic Annals/EACES Workshop on Comparative Economics in memoriam of Professor Božidar Cerović. Belgrade: Faculty of Economics.

Estrin, S., & Uvalić, M. (2014). FDI into transition economies. Are the Balkans different? *Economics of Transition*, 22 (2), 281–312.

Estrin, S., & Uvalić, M. (2016). Foreign direct investment in the Western Balkans: What role has it played during transition? *Comparative Economic Studies*, 58, 455-483.

European Commission (2019). Serbia 2019 report. *Commission Staff Working Document SWD(2019) 219 final*. Brussels: European Commission.

European Investment Bank (2016). *Serbia: Assessment of Financing Needs of SMEs in the Western Balkans Countries*. Luxembourg: European Investment Bank.

Government of the Republic of Serbia (2020). *Smart Specialisation Strategy of the Republic of Serbia for the Period 2020 to 2027*. Belgrade: Government of the Republic of Serbia. <https://pametnaspecijalizacija.mpn.gov.rs/wp-content/uploads/2020/09/Smart-Specialization-Strategy-of-the-RS-for-the-period-2020-to-2027.pdf>

Kekić, L. (2018). *Serbia's Economic Underperformance*. London: Economist Intelligence Unit.

Kroll, H., Schnabl, E., & Horvat, Dj. (2017). *Mapping of economic, innovative and scientific potential in Serbia*. Brussels: European Commission's Joint Research Centre.

Krstić, G. (2016). Why income inequality is so high in Serbia: Empirical evidence and a measurement of the key factors. *Economic Annals*, 61(210), 23–46.

Moran, H. T. (2014). Foreign investment and supply chains in emerging markets: recurring problems and demonstrate solutions. *Working Paper 14–12*. Washington DC: Peterson Institute for International Economics,.

OECD (2019). *Unleashing the Transformation Potential for Growth in the Western Balkans*. Paris: Organisation for Economic Cooperation and Development.

Shleifer, A., & Vishny R. W. (1998). *The Grabbing Hand: Government Pathologies and Their Cures*. Cambridge, MA: Harvard University Press.

Svejnar, J., & Uvalić, M. (2016). *Are the Western Balkans catching up after a lost decade?* 14th Biannual Conference of EACES, University of Regensburg, Germany.

Udovički, K. (2018). Serbia's Economic Structure: Challenges and Opportunities for Accelerating Growth. Belgrade: CEVES. <https://ceves.org.rs/wp-content/uploads/2019/02/Serbias-Economic-Structure-Challenges-and-Opportunities-for-Accelerating-Growth.pdf>

Uvalić, M. (1993). The disintegration of Yugoslavia: Its costs and benefits. *Communist Economies & Economic Transformation*, 5(3), 273–293.

Uvalić, M. (2010). *Serbia's Transition. Towards a Better Future*. Basingstoke: Palgrave Macmillan. [Serbian 2012 enlarged edition: *Tranzicija u Srbiji. Ka boljoj budućnosti*, Beograd: Zavod za udžbenike].

Uvalić, M. (2012). Transition in Southeast Europe: understanding economic development and institutional change. In G. Roland (Ed.), *Economies in Transition: The Long Run View*. Basingstoke: Palgrave Macmillan, pp. 364–399.

Uvalić, M. (2013). Why has Serbia not been a frontrunner? In P. Hare and G. Turley (Eds.), *Handbook of the Economics and Political Economy of Transitions*. London: Routledge, pp. 365–375.

World Bank (2019). Serbia's New Growth Agenda. *Serbia Country Economic Memorandum*. <http://pubdocs.worldbank.org/en/782101580729358303/Serbia-CEM-Synthesis-web.pdf>

Žarković Rakić, J. (2017, April 27). Kako se Srbiji dogodila visoka nejednakost u raspodeli dohotka? [How did the high inequality of income distribution come about in Serbia?] Belgrade: *Monitoring socijalne situacije u Srbiji (Mons)* <http://mons.rs/kako-se-srbiji-dogodila-visoka-nejednakost-u-raspodeli-dohotka>

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ORGANISATIONAL LEARNING IN SERBIA DURING THE TRANSITION: THE LEGACY OF BOŽIDAR CEROVIĆ AND HIS CONTRIBUTION TO TRANSITION RESEARCH

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ABSTRACT: *In this paper we address the issue of organisational learning in Serbia during the transition, based extensively on the research work of Božidar Cerović that was published in his conference papers, academic journals, books, and edited volumes from the 1990s onwards, as well as in our joint research. We delineate three generations of organisational learning in the post-1989 transformation, which correspond to the transition periods comprehensively analysed in Cerović's work. We discuss each of these generations of*

organisational learning as characterised by the specific learning context, shaded by macro-level determinants and distinctive learning antecedents, nature, practices, and outcomes, and provide a theoretical framework using institutional organisation theory to highlight the specific issue of organisational learning in Serbia during the transition of South-Eastern Europe.

KEY WORDS: *learning, knowledge, transition, Serbia*

JEL CLASSIFICATION: P31, P21, M10

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1. INTRODUCTION

The economic model of ‘self-management’ in the Socialist Federal Republic of Yugoslavia (henceforth Yugoslavia), which was instituted in the 1950s after conflict with the USSR and lasted until the 1990s (Praščević, 2019), was considered a ‘special case’ (Child & Czegledy, 1996), even though several Eastern European countries followed a similar pattern of economic and social development from the late 1960s. Unlike other centrally planned economies, the decentralised self-management socialist model pursued by Yugoslavia was based on (1) socially owned property, (2) partial independence of companies, and (3) certain market economy characteristics that expanded over time (Cerović, 2012).

This journey lasted till 1989, when Yugoslavia, together with the rest of South-Eastern Europe (SEE), underwent radical economic, social, political, and legal reforms, known as the ‘transition’, which transformed basic institutions and restructured political systems, economic ownership and transactions, and financial institutions. Yugoslavia was at the forefront of the wave of transition in former communist countries (Cerović, 2009a; Bogićević Milikić, Janićijević & Cerović, 2012) when a whole set of regulations, measures, and appropriate and well-designed transition policies were enacted in 1989–1990 (Cerović, 2014). However, internal conflict, the dissolution of the country, and the consequently closed economy during the 1990s resulted in neither a clear and consistent economic path nor consistent strategic economic goals to lead the country to an established and desired outcome (Cerović, 2012). In the 2000s Serbia’s political regime was transformed and the country restarted the process of transitioning to a market economy (Bogićević Milikić et al., 2012). The political changes in October 2000 led, among other things, to significant changes in Serbia’s transition process. In 2001 the new political regime concluded that Serbia was seriously lagging behind other transition countries and decided to focus on privatisation as the backbone of transition, using the experience of other former socialist countries to choose a model that would provide an influx of significant funds to the exhausted Serbian economy. Thus, the new programme of reforms initiated in mid-2001 broke with former policy. Then, towards the end of the first decade of the 21st century, the global economic crisis impacted Serbia’s economy and growth path (Cerović, 2009b; Uvalić, 2010).

Business restructuring was an integral part of these changes. From the organisational point of view, this restructuring should have meant the

abandonment of old practices and behaviour patterns, and the overall implementation and acceptance of new ones. To achieve this it was necessary for managers and employees to support the learning process and then strategically integrate it into the organisation. Meyer (2007) argues that the specific national context of radical environmental change crucially influences processes of organisational learning, while Child and Czegledy (1996) claim that managerial learning per se should have been a key element in the reconstruction process. Now, with the experience of three decades of transition, it is recognised that neither the academic community nor managerial practice paid sufficient attention to organisational learning at the individual, group/team, organisational, inter-organisational, or economy-wide levels during that period. Neither the economic policymakers nor the managers involved in business transformation, nor most of the academic community, treated learning as a priority in the transition process. However, learning and knowledge as multi-level, complex, and interconnected phenomena (Klein & Kozlowski, 2000; Kozlowski & Klein, 2000) are at the very forefront of the changes taking place today.

In this paper we use the term 'organisational learning' to encompass the broad transformative learning processes that affected individuals, groups, organisations, and the wider context during the transition of the Serbian economy. The use of the term 'organisational learning' to embrace both individual and organisational learning processes is a suitable generalisation to address the relationship between the macroeconomic and institutional transition processes analysed in Božidar Cerović's work, and the organisational multilevel phenomenon of learning proposed in this paper.

Our aim is to address the link between organisational learning and the transformational processes that began in the late 1990s with a set of ambitious pro-market reforms, almost thirty years after the onset of the transition process in the former socialist SEE countries when Yugoslavia began its transition from decentralized self-management socialism. This paper draws heavily on Cerović's research on the Serbian transition, published from the 1990s onward in conference papers, academic journals, books, and edited volumes (Cerović, 2006, 2009b, 2012). Božidar Cerović's work on transition economies has shaped the research agenda for the Serbian transformation in particular; being privileged to work with him during the last two decades, we also refer to the findings of joint research that

describes in more depth the organisational transformation processes that followed the Serbian economic transition.¹ Thus, this paper memorialises Professor Božidar Cerović and contributes to existing research on management and organisational transformation in Eastern Europe, which lacks research focusing on South-Eastern Europe.² We aim to provide answers to the following questions: Did the transition process in Serbia generate any organisational learning? If so, which learning practices took place during the transition process in Serbia, and is the pace of transition reform and the nature and type of learning linked? What were the main ‘transition’ antecedents of learning in Serbia and how did they influence organisational learning? What are the implications for more effective learning? We develop a number of propositions regarding the relationship between transition and organisational learning and suggest implications for further research and practice.

2. THEORETICAL FRAMEWORK

2.1. Learning in organisations

Learning is a phenomenon mainly studied at the individual level; the first experiments and research about learning focused on how people learn as individuals (Maier, Prange & Rosensteil, 2001). For a long time, the focus in the academic community and among practitioners was individual learning rather than group, organisational, or inter-organisational learning. The development of learning theory brought new findings and differentiated learning as a multilevel construct. Organisational learning is not and cannot be regarded as the simple sum of learning at the individual or group level. The relation between individual and organisational learning is a complex construct in which: a) employees as individuals or group members are important determinants of the total learning in an organisation, while the interactions and exchange of information and knowledge between organisational members in the organisational context influence both the level of knowledge and learning at the individual level (Argyris & Schön, 1996; Nonaka, 1994); and b) individual learning becomes collective when there are organisational mechanisms for summing it up and when that sum of individual learning is transferred to all who can benefit from that transfer of knowledge in any way (Hamel, 1991). Organisational learning “enables

¹ See: Cerović and Aleksić (2005), Janićijević (2006), Cerović, Aleksić and Nojković (2007a, 2007b), Bogičević Milikić et al. (2010a, 2010b) and Bogičević Milikić et al. (2012).

² See for example: Child and Czegledy (1996), Lyles and Salk (1996) and Dierkes et al., (2003).

organisations to transform individual knowledge into organisational knowledge” (Basten & Haamann, 2018).

In the literature, organisational learning is defined in different ways. One research stream closely relates organisational learning to organisational knowledge and views organisational learning as the process of developing a knowledge base (Shrivastava, 1983) or improving an organisation’s knowledge base, continually updating what we know and how to apply it in an organisation (Burton & Øbel, 2004) through the acquisition of new knowledge by actors who are able and willing to apply that knowledge in decision-making or to influence others in the organisation (Miller, 1996), in such a way that it becomes embedded know-how resulting from absorptive capacity, the receptivity of the firm to new knowledge, and the firm’s ability to develop knowledge utilisation skills (Lyles, 2001). Another stream is more directly oriented towards the learning–performance relationship, defining organisational learning as the acquisition and use of existing knowledge and/or the creation of new knowledge to improve economic performance (Boerner, Macher, & Teece, 2001). However, the most dominant approach links organisational learning directly to changes in organisational behaviour in a wider sense, viewing it as the process by which knowledge about the action–outcome relationship between the organisation and the environment is developed (Daft & Weick, 1984), the encoding of inferences from history into routines that guide behaviour (Leavitt & March, 1988), the process of improving actions through better knowledge and understanding (Fiol & Lyles, 1985), and the capacity of an organisation to gain insight from its own experience and the experience of others, and to modify the way it functions according to such insights (Shaw & Perkins, 1991).

Types of learning. The most influential typology of knowledge is the one suggested by Polanyi (2009) and further applied and developed by numerous authors, which recognises two types of knowledge, explicit and tacit. Explicit knowledge is transparent knowledge or ‘know-what’, described by formal language, print, or electronic media, and often based on established work processes and can easily be transferred through communication. Tacit knowledge is practical, action-oriented knowledge or ‘know-how’, based on practice embedded within a specific context and acquired by personal experience, seldom expressed openly and often resembling intuition, which can only be transferred through application and

acquired through practice (Smith, 2001). Explicit and implicit knowledge can be applied at the individual level (implicit and explicit knowledge of the individual), the level of the organisational unit (group/team), or the level of the organisation as a whole (implicit and explicit organisational knowledge).

Another learning typology that can be successfully applied at a cross-organisational level is Argyris & Schön's (1996) typology that defines single-loop, double-loop, and deuterio-learning, which is often used to understand the learning process as a multi-level phenomenon. Single-loop learning (Cyert & March, 1963; March & Olsen, 1976) assumes behavioural changes within an organisation but not cognitive changes; i.e., people change their behaviour in everyday organisational life but they do not change the way they look at the organisation and its role in the business world or the basic assumptions they have about its functioning. Double-loop learning, on the other hand, assumes both cognitive and behavioural changes in an organisation and produces not only behavioural change but "change in the values of theory-in-use, as well as in its strategies and assumptions" (Argyris & Schön, 1996). Deuterio-learning is about how to learn in a single or double loop: organisation members discover and analyse previous experiences and recognise what helped and what made it more difficult to learn, think-up learning strategies, and evaluate possibilities for applying new learning strategies (Argyris & Schön, 1996).

Learning practices. According to March (1991), learning can take place through either exploitation or exploration. Exploitation is the process of taking advantage of what exists, allocating resources to improve existing products and processes through refinement, production, choice, efficiency, selection, implementation, and execution (p.71). It focuses on strengthening the organisation's internal resources to develop competitive advantage (Barney, 1991) through the routinisation, control, and application of mechanical design (Lavie & Rosenkopf, 2006; Raisch, 2008), while managers direct their efforts to developing those internal capacities which aggregate value (Mom, Van den Bosch, & Volberda, 2007). On the other hand, according to March (1991), exploration represents the process of trying new ways of doing things, such as searching, variation, risk-taking, experimentation, flexibility, and discovery (p.71), and assumes relationships with the environment in which the organisation looks to absorb new

knowledge (Lavie & Rosenkopf, 2006) and attain synergies in inter-organisational networks (Lavie, Kang, & Rosenkopf, 2011).

Argote & Ophir (2002) argue that intra-organisational learning involves the processes through which organisational units change as a result of experience, either on their own (learning by doing³) or from other units (learning by listening⁴ or by observing⁵).

2.2. Changes in the institutional environment and organisational learning

Institutional organisation theory offers an adequate analysis of the organisational learning process during Serbia's transition from a socialist to a market model of economy and society. Research covering other transitional economies also recognises the importance of institutions and the institutional environment because abandoning the socialist and embracing the capitalist economic and societal model constitutes a change in the institutional environment.⁶ The central argument of institutional organisation theory is that the structuring and functioning of an organisation are determined by institutions, and not by the criteria of technical or economic rationality and efficiency (Greenwood, Oliver, Sahlin, & Suddaby, 2008; Meyer & Rowan, 1977; Di Maggio & Powell, 1983; Scot, 2008, 1987). In every sector, institutions prescribe the pattern of organising and functioning and impose it on all organisations within the sector. The alteration of laws, standards, norms, and other regulations that govern the functioning of

³ It is explained in the legendary pin-making example through the relationship between specialisation and experience (Smith, 1776/1937), in Weberian bureaucracy that has the ability to learn from experience (Weber, 1922/1978), and in Nonaka's organisational knowledge creation theory (Nonaka, 1991, 1994) through the mechanisms of tacit knowledge interplay.

⁴ Learning by listening assumes learning from others, relying on different learning mechanisms such as social networks (McEvily & Zaheer, 1999; Rulke, Zaheer, & Anderson, 2000), moving members to other organisational units/groups (Almeida & Kogut, 1999), and rotation of individuals through organisational units/groups (Gruenfeld, Martorana, & Fan, 2000), trust structures (McEvily, Perrone, & Zaheer, 2003), or benchmarking (Basten & Haamann, 2018).

⁵ Learning by observing also assumes learning from others via, for example, transactive memory systems that facilitate knowledge retention and transfer (Wegner, 1987; Liang, Moreland, & Argote, 1995; Borgatti & Cross, 2003); task design that enables the accumulation of knowledge by watching another performing a task (Nadler, Thompson, & Boven, 2003) and proximity relations (Borgatti & Cross, 2003); redefining organisational boundaries (Argote, McEvily, & Reagans, 2003); configuration of units (Argote and Ophir (2002) cite numerous sources); etc.

⁶ See: Dixon, Meyer and Day (2014) and Meyer and Peng (2005).

organisations inevitably causes changes in the organisations themselves, and they must adapt to these changes that are supported by the authorities (executive government, professional associations, etc.). The expected transformation of socially or state-owned enterprises after their privatisation is nothing more than the replacement of one institutionally defined pattern of organisation and functioning by another. One model of organising and operating an economy and business has lost its legitimacy because it has proven inefficient in the long run, and it has been replaced by another ideal pattern. Businesses are now expected to apply a new ideal pattern and thus transform themselves.

If changes originating in the legal–institutional environment bring a certain degree of novelty and discontinuity to the structure or functioning of an organisation they may initiate a learning process. The process of accepting and implementing a new institutional pattern is the process of organisational learning because the new pattern first has to be understood and learned and then implemented. Therefore, the process of organisational learning is conditioned and initiated by the need to implement a new institutional pattern. On the other hand, it is impossible to make sustainable changes to the institutional pattern, which underlies transition, unless there is managerial learning. For the process of managerial learning to occur during transition, businesses must adopt and implement a new institutional template. However, this does not always occur.

A review of the literature suggests that organisations under pressure to apply an institutional structure and functioning can react in four ways. They can obey the requirements of the institutional environment and completely accept and implement the institutionalised rules of structuring and functioning. This is the expected organisational reaction and accords with the postulates of institutional theory (Scott 2008). It has been described as acceptance (Oliver, 1991; Hinings & Greenwood, 1988), compliance (Ashworth, Boyne, & Delbridge, 2007), and imitation (Pedersen & Dobbin 2006). However, there are other reactions to institutional pressure. Organisations can adapt the institutional pattern to their own needs, resources, values, and interests and implement this adjusted pattern. While Oliver (1991) calls this type of organisational reaction a compromise, Pedersen and Dobbin (2006) call it hybridization and Ashworth et al. (2007) call it convergence. The third possible reaction of organisations is a symbolic implementation of the institutional pattern, where organisations pretend to

implement it while not doing so in reality. This fiction is achieved through symbols such as ritual, language phrases, or material symbols (Dandridge, Mitroff, & Joyce, 1980). This process is described as decoupling (Meyer & Rowan, 1977), avoidance (Oliver, 1991), or transmutation (Pedersen & Dobbin, 2006). The fourth type of organisational reaction assumes that organisations openly or covertly, and more or less aggressively, refuse to implement the institutional pattern. The consequence of this refusal is organisational inertia (Hinings & Greenwood, 1988). Casile & Davis-Blake (2002) also describe this scenario, while Pedersen and Dobbin (2006) call it immunisation. Oliver (1991) even distinguishes two types of refusal, one that attempts to impact institutions and one that does not. Thus, we may assume that organisational learning is positively correlated with the degree of novelty in the imposed pattern of organisational structure and functioning, and the degree to which organisations accept that pattern.

3. TRANSITION IN SERBIA AND ORGANISATIONAL LEARNING

In the beginning the transition process from a centrally planned to a market economy comprised the following: (1) macroeconomic stabilisation (often including controlling and lowering the inflation rate, imposing financial discipline in monetary and fiscal policy, providing sustainability of balance of payments, etc.), (2) price and trade liberalisation, (3) restructuring and privatising businesses, and (4) legal and institutional reforms. The EBRD tracked the macroeconomic performance and structural changes in 26 transition economies, systematically publishing, refining, and changing transition progress indicators. It concluded that wide variation in the level of reform and performance among the transition countries resulted in indicators that did not tell a single, common story but 26 distinct stories. Meyer & Peng (2005) argue that “CEE provides an interesting laboratory for developing and testing theories, because the transition processes provide a series of unique societal quasi-experiments”, and “even among emerging economies, CEE is special owing to the radical switch from central planning to market competition and the high degree of industrialisation.”

Cerović (2012) identifies three distinct periods in the Serbian transition process: (1) 1989–2000, characterised by an early idea of transition, internal conflict in the country, and a closed economy (2) 2000–2009, characterised by revived transition

expectations, an opened economy, and significant influence of FDI,⁷ and (3) 2010 onwards, following changes imposed by the global economic crisis.⁸ We discuss each of these periods in their specific learning context and influenced by macro-level determinants and distinctive learning antecedents, practices, and outcomes, and provide a theoretical explanation of the specific issue of organisational learning in Serbia during the transition of South-Eastern Europe.

3.1. Transition in Serbia and organisational learning in the period 1989–2000

The processes of economic transition began in 1989, at the very end of former Yugoslavia as a state and the Yugoslav economy as a single economic system, based on an early idea of transition. Cerović states that at this stage the “hard core” of the transition consisted of three reform tracks: (1) price and trade liberalisation, which requires previous macroeconomic stabilisation (curbing budget deficits and maintaining low inflation rates); (2) privatisation of economic entities; and (3) development of social services and social security to mitigate the negative consequences of the transition process for the poorest and most vulnerable sections of the population (Cerović, 2012).

Macroeconomic determinants and the learning context. In his research Cerović pays special attention to the privatisation process, as the main pillar of the transition in Yugoslavia. Privatisation started in 1989 and had roots in the former Yugoslavia, which adopted a privatisation project that attracted a number of companies that started to transform their ownership (Cerović, 2000). By the end of 1990 only 23% of socially owned enterprises had entered the privatisation process. In mid-1991 Serbia enacted a law on the transformation of social property into other forms of ownership and promoted an employee shareholding scheme as the main type of privatisation. However, by the end of the year only a few firms had introduced (but not completed) some mode of privatisation. Cerović (2000) suggests that at that point in time another partially unexpected process of ‘ownership transformation’ had emerged through the creation and/or re-establishment of state ownership in 40% of ‘socially owned’ capital. Only 30% became mixed-ownership structures, with the rest remaining under the (formally) socialist regime, although with considerable restraints on the firms’ former self-governance. In mid-1994 the Serbian Assembly adopted the

⁷ See also Cerović & Aleksić (2005) and Cerović, Aleksić & Nojković (2007a, 2007b).

⁸ See also Cerović (2009b, 2012) and Bogičević Milikić et al. (2012).

Revaluation Law, which ordered all firms that had undergone privatisation to re-value share payments to employees – a ‘re-socialisation’ of privatised equity. The next phase of privatisation was part of the new Law on Ownership Transformation (1997), which introduced privatisation as a voluntary process, although all firms were obliged to identify and price ‘social capital’ by mid-1998. The basic programme was the ESOP, mainly through free share distribution (400 DEM per year of employment, providing the total amount did not exceed 60% of total capital value). The beneficiaries were all employees, pensioners, and farmers (who paid pension, health, and social contributions). State (public) firms and 70 large businesses were excluded from this general approach and became subject to ‘special’ government programmes. By the end of 1999 only around 2,000 of the 8,500 firms had valued their assets, 1,500 of which had completed the valuation procedure. The real privatisation process started in only about 300 cases (predominantly in SMEs) with approximately 1 billion DEM of capital value, attracting about 100,000 potential shareholders.

Cerović evaluated the first Yugoslav privatisation program enacted in 1990 very positively (Cerović, 2012). As recently systematised by Praščević, following the work of Cerović, this programme realised several important goals: “privatization and the basis for initiating development within the policy of liberalization and deregulation based on additional capital, changed management style, capital turnover and new criteria arising from the process of privatization of social property” (Praščević, 2019). The programme had additional important qualities: it was embedded in a well-designed broader transition programme of macroeconomic stabilisation and “relied on liberalization and deregulation” (Cerović, 2012), it was very popular because it was “easy to understand for employees as during the self-management phase of development, the employees acquired a sense that the companies belong to them” (Cerović, 2012) and they could understand the direct link between individual performance and commitment to organisational progress.

Learning antecedents, nature, and process. Regarding the learning processes that took place during this period, Milisavljević (1994) investigated and reported on managerial attitudes and work-related values in the former Yugoslavia. This research included a large-scale survey of managers, who were asked a series of work-related questions and to compare “the present state” with “their expectations

in a better future”, which was signified by the year 2000. This research revealed that in these early stages of economic, political, and institutional change in Serbia, managers regarded knowledge as the most significant factor for career success. Individual managerial experience gained through practice (i.e., learning by doing) was regarded as of secondary importance. The majority believed that whether the manager contributed to company performance was crucial for career promotion. The research results also indicate that existing managerial knowledge and skills are applicable in different business sectors, and successful managers in one field would generally be just as successful in another as they have the necessary managerial skills and knowledge. When the managers compared the state at the beginning of the 1990s with their expectations of a better future in the year 2000, the research reports that they considered experience as accumulated knowledge to be the element that would lose its value most in the upcoming years.

Another studies (Janićijević, 2006; Janićijević & Bogićević, 2004) which focused on the effects of privatisation during the 1990s and at the beginning of 2000s on managerial attitudes and work-related values reflected this period too. The research reported that privatisation of Serbian companies failed to result in the (considerable) expected changes in managers’ value systems. Managers of partially or fully privatised companies during the 1990s did not differ from managers of socially owned and state-owned companies in their understanding of values, but they did differ substantially from managers of private companies. Furthermore, the values of managers in private companies were closer to the values of managers in developed market-oriented economies. The study concluded that changing managerial values is a slow and long-lasting process, and the research findings could be explained by the fact that it was too soon after some privatisation efforts for more substantial changes to have taken place. The authors also suggested that the convergence of Serbian national culture with the cultures of developed countries in the course of the transition towards a modern market economy might be brought about more effectively and faster by setting up and empowering the new private sector, rather than by privatising existing socially owned companies.

3.2. Transition in Serbia and organisational learning in the period 2000–2009

Macroeconomic determinants and the learning context. The period from 2000 to 2009 is characterised by revived transition expectations, an opened economy, and

a significant influence of foreign direct investment (FDI), which brought new types of learning mechanisms and practices through international mergers and acquisitions, joint ventures, and strategic alliances (Cerović & Aleksić, 2005). A new privatisation programme was initiated in 2001. Cerović & Dragutinović Mitrović (2007) evaluated this programme and found that contrary to the broadly accepted view that new private firms were the driving force in the transition economies, in Serbia the newly privatised sector seems to be more active. Overall, this was a decade of active transition and field research flourished in academia.⁹

After the political changes of October 2000, it was expected that more foreign companies would enter the market and FDI would increase. Above all, due to positive macroeconomic trends, it was expected that there would be an increase in both greenfield and brownfield FDI and in strategic partnerships between domestic and foreign companies. However, the transition in Serbia was weighed down by the negative heritage and a configuration of macroeconomic parameters that did not support a rapid transition. The country needed deep social and economic reforms to achieve the macroeconomic stabilisation that would lead to lower inflation rates, public debt reduction, and lower unemployment rates, such as relieving the unemployment in state-owned enterprises, ending privatisation, liberalising prices, and reforming institutions. On the other hand, several macroeconomic assumptions led some to assume the transition would be fast; according to the National Strategy for FDI Promotion and Development (2006, p.8), Serbia had the key advantages of high-quality human resources, an appropriate level of general education and knowledge of English language among key age groups, inexpensive skilled employees and managers, a favourable geographic position, and easy access to both Eastern and Western markets. A new law on FDI enacted in 2002 to encourage FDI was more liberal and stimulative than any previous regulations in Yugoslavia, Serbia, or Montenegro. The main advantages of the new institutional context were a simplified procedure to legalise FDI contracts, an extension of the areas in which foreigners could have a majority investment, guaranteed legal rights and security for foreign investors, and an

⁹ See Cerović, Aleksić & Nojković (2007a, 2007b), Janičijević & Bogičević Milikić (2007), Bogičević Milikić, Janičijević & Petković (2008), Bogičević Milikić & Janičijević (2008), Bogičević Milikić, Janičijević & Nojković (2010a, 2010b), Bogičević Milikić, Janičijević, Cerović, & Nojković (2010) and Aleksić Mirić (2013)

emphasis on economic policy measures (for example, free imports, custom and tax incentives, and the abolishment of double taxing).

Cerović investigated the effects of FDI on transition progress. He found that there was an observable increase of FDI over time and revealed certain investment patterns: FDI flows into Serbia in 2000–2005 showed that certain countries invested large amounts, usually in a single big investment, while other countries' share in overall FDI was relatively stable (Cerović & Aleksić, 2005; Cerović, Aleksić, A., & Nojković, 2007a). Cerović and his colleagues (Cerović & Aleksić, 2005; Cerović, Aleksić, A., & Nojković, 2007b) analysed whether national culture influenced these investment paths and posited that the propensity to invest in a country is influenced by the degree to which investors and investing cultures resemble the national culture of the country being invested in. Their results suggest that (1) the level of cultural proximity can determine continuity in business transactions between two countries: the higher the level of cultural fit, the more synchronous direct investment flows between the two countries will be; (2) countries with a high level of cultural fit will tend to maintain a persistent level of investment in each other in terms of regularity and by assuring that these investment flows remain active over time; and (3) more culturally distant countries are less likely to become important investment partners in the long run. These findings add to our knowledge of the influence that cultural proximity has on FDI flows by explaining that the lower the level of cultural fit, the greater the sequential flow of direct investment between two countries will be.

Learning antecedents, nature, and process. From the standpoint of organisational learning, FDI was expected to bring not only tangible capital investments but also intangible assets such as learning and acquiring new skills and managerial practices. Child & Czegledy (1996) noted that this trend was recognised throughout Eastern Europe, citing EBRD (1995, p.118) which stated that “learning by those in charge of local organisations is essential to the successful transformation of Eastern Europe, which requires changes both in the form of economic organisation (especially the re-capitalization and reorganisation of companies) and in the managerial competencies to support the new forms of organisation; FDI are seen as an important vehicle for transformation in Eastern Europe not only because they help to replace obsolete capital but also because

they expose human capital to previously unfamiliar forms of institutional and production arrangements that are compatible with market development”.

Learning in organisations can be (1) mutual, between two actors with equal knowledge, or (2) between actors with unequal levels of knowledge (teacher–student relationship). Mutual learning between two equal actors occurs in situations where each actor has something new to learn from the relationship and where everyone involved understands a business transaction as a way to improve business. The teacher–student relationship assumes that one actor holds the knowledge while the other receives knowledge (Hamel, 1991). Research on organisational learning and FDI in transition economies so far has largely viewed companies from transition economies as the learners and the foreign partners as the teachers (Lyles, 1998; Lyles & Salk, 1996; Woodside & Somogyi, 1994; Meyer & Peng, 2005)). Our analysis of Serbia confirms this structure (Aleksić Mirić, 2012a, 2012b, 2013): in international joint ventures (IJV) and alliances created in Serbia from 2001 onwards the Serbian partners were for the most part the learners and the foreign partners the teachers. Lyles’ extensive research (Lyles & Salk, 1996; Lane, Salk, & Lyles, 2001; Lyles, 2001) supports the finding that the ability to learn from partners is a tacit resource that underlies a firm’s competitive advantage. Our research shows that IJVs and alliances should be designed so as to encourage learning and that various properties of organisational design significantly influence learning capabilities. For example, partners participating in IJVs or alliances voluntarily has been shown to be an important factor in the willingness to cooperate and dedicate energy and time to learning and knowledge sharing. Experience from the Serbian transition demonstrates that when firms co-operate voluntarily (alliances, mergers, or joint ventures) the learning effects are far more positive than when the decision to cooperate is made at a higher level (e.g., by the government) (Aleksić Mirić, 2012a, 2012b, 2013).

Child and Czegledy (1996) also concluded that Eastern European managers should acquire expertise from foreign countries and companies that would enable them to participate effectively in foreign trade and in the international networks of multinational enterprises that acquired or formed alliances with their local enterprises. However, they pointed out that “the issue is which managerial knowledge retains its validity across national, cultural and institutional

boundaries, and can therefore be imported into Eastern Europe without significant modification” (Child & Czegledy, 1996).

Bogićević Milikić et al. (2008) addressed this issue in the Serbian transition context by exploring HRM practices in 38 randomly selected Serbian companies. They focused on the elements of the Serbian HRM model, the difference between the Serbian and the North American HRM models, and the prospect of the Serbian HRM model converging with or diverging from the North American HRM model in the future. They found that some Serbian HRM practices – for instance, the weak role of trade unions – do converge with the North American HRM model, in spite of the highly incompatible Serbian cultural context and strong trade union tradition, implying that in some HRM areas, institutional factors and the transition process may effectively facilitate the convergence of HRM practices. On the other hand, the study showed that the role and scope of HRM functioning and HR strategy, performance appraisal and performance-related pay, staffing practices, employee development, and employee communication largely diverge from those in the US.

In another study on the transformation of HRM practices, Bogićević Milikić et al. (2010b) explored the impact of globalisation. Their research confirms a general tendency towards convergence of HRM practices, but in some areas of HRM convergence is still absent, very slow, or also shows some divergent trends. Globalisation, which implies more frequent and more intensive competition and cooperation between domestic and foreign companies, is the major driving force behind the convergence of Serbian HR practices with the Western model. The main driving forces behind the divergence of Serbian HR practice and the Western HR model are the authoritarian Serbian national culture and institutional factors such as lack of competence and the knowledge of HRM in Serbian companies.

It was expected that the Serbian transition path during the first decade of the 21st century would be followed by extensive ‘unlearning’ or forgetting the past ways of doing business. Organisation theory recognises organisational forgetting as part of further learning and improvement. For instance, authors well informed about transitional transformation in Europe, such as Lyles, argue that forgetting can be purposeful in organisations (see Easterby-Smith & Lyles, 2011), while Meyer and

Peng (2005) argue that in a transition context, learning “not only entails absorbing new ways of doing business but also requires some ‘unlearning’ of existing routines not conducive under the new circumstances”. Some explanations of double-loop learning suggest that it can only occur if an organisation first unlearns old and previously learned habits and then accepts new knowledge (Hamel, 1991). Since the process of organisational learning is more behavioural than cognitive, organisations willing to learn need to change their way of doing business by changing elements of their organisation’s design; for instance, the information and reward systems, job design, job descriptions, and authority schemes. Nystrom and Starbuck (1984) suggested that “before organisations will try new ideas, they must unlearn old ones by discovering their inadequacies and then discarding them” (p.83). This is supported by Martin-de-Holan and Phillips (2003), who stress that to achieve a sustainable competitive advantage the forgetting process is just as important as the organisational learning process. However, Child and Czegledy (1996) pointed out the importance of continuity in learning, saying, “Presumptions that Eastern Europe has failed, and that its managers, therefore, have little to offer and should be regarded simply as ‘learners’, are likely to mislead on this matter. Tacit knowledge deriving from close familiarity with the Eastern European context could be of the utmost value for Western partners who lack this familiarity - and sureness of touch, yet it could easily be unrecognized or dismissed as inappropriate by those who assume that their competence is necessarily superior (cf. Nonaka & Takeuchi, 1995). Studies have indicated that organisational transformation is usually more effective if change is combined with elements of continuity (Pettigrew, 1985; Child & Smith, 1987). This approach preserves valuable knowledge, especially that of a tacit kind, and in so doing maintains the identity of its members with the organisation and hence their commitment to it”. (Child & Czegledy, 1996).

Overall, Cerović did not find the results of the second decade of Serbian post-socialist development to be positive (Cerović & Nojković, 2009a, 2009b). Referencing this period, Cerović states “when almost all the Central European economies in transition (taking into account also the northern part of Southeast Europe) reached and/or passed their economic level in the pre-transition period, Serbia, now an independent state, again and again is at a crossroads, falling dramatically behind in economic terms and again rethinking the path of its further development” (Cerović & Nojković, 2008).

3.3. Transition in Serbia and organisational learning in the period after 2010

Macroeconomic determinants and the learning context. In the period after 2010, following the global economic crisis (Cerović, 2009b, 2012; Bogičević Milikić et al., 2012), the EBRD refined the concept of transition formulated in 1997 when all EBRD's countries of operations were emerging from communism and faced a similar set of challenges on their way to capitalism. The 2016 concept, for example, emphasises the desirable qualities of market economies, such as being competitive, well governed, green, inclusive, resilient, and integrated. This is the period characterised by a developing Internet economy, digitalisation, the blossoming of start-ups both worldwide and in Serbia, and a stronger focus on innovation, exploration, and experimentation in individual organisations.

Prašćević (2019) evaluates the increasing complexity of the economic transition process, which has made it impossible to only study and consider the topics that constitute the 'transition hard core' of privatisation and liberalisation. It is also necessary to take the following issues into account: transition economies' choice of growth model, institution building, the connection between political and economic reforms, the socio-economic consequences of economic transition for social security, poverty, and education, and business performance. Cerović (2013) recognized this and reported on the changing focus on the transition process in macro-economic literature.¹⁰ This research supports Cerović's premises regarding the influence and importance of intangible capital on competitiveness, productivity, and overall economic performance in the third phase of the Serbian transition. Cerović (2013) finds that the importance of intangible capital as a competitiveness factor is only gradually being accepted in Serbian companies, where investment in intangible capital is still rudimentary. In line with this critique, Cerović et al. (2014) noted the falling levels of FDI following the economic crisis required a new focus on domestic industrial policy that would develop competitiveness, an approach applicable to all transition economies. Cerović noted that Serbia needs (1) a strong industrial policy that focuses on an export-oriented growth model, production incentives, and the creation of an economic environment with high technological and development capacity that

¹⁰ See: Van Ark, Hao, Corrado, & Hulten, 2009; Roth & Thum, 2010; Kuznar, 2012; Haskel, Corrado, Jona-Lasinio, & Iommi, 2013; Hidayati, Fanani, Prasetyo, & Mardijuwono, 2012; Prašnikar, 2010; Prašnikar, Redek, & Memaj, 2012; Dutz, Kannebley, Scarpelli, & Sharma, 2012.

attracts FDI, (2) to strengthen business and professional associations, chambers of commerce, and organised inter-organisational activities, which should be followed by (3) development of higher education, especially in economics and business, human resource management, training, and other forms of support in fields that are essential for both present and future entrepreneurs.

4. DISCUSSION: INTEGRATING EMPIRICAL EVIDENCE ON THE SERBIAN TRANSITION WITH ORGANISATIONAL LEARNING

Research on the characteristics of organisational learning in the three phases of the Serbian transition reveals the following.

Phase 1, 1989–2000.

- a) Yugoslav/Serbian managers regarded applicable, fresh, and ready-to-use knowledge that contributes to organisational performance as the most significant factor in career success and climbing the career ladder. Accumulated knowledge represented by managerial experience was regarded as of secondary importance.
- b) Managerial knowledge was principally recognised as tacit knowledge, focusing mainly on general management concepts and skills and not on personal experience in a specific business and organisational context, allowing managers as individuals to be successful in any business sector or organisation without any previous practical experience and knowledge about the sector.
- c) Serbian managers learned primarily through exploitation and learning by doing. Activities aimed at fixing errors and resolving problems added to the knowledge base and firm-specific competencies or routines, but without altering the fundamental nature of the organisation's activities.
- d) The main pillar of the transition process during the 1990s, privatisation, did not produce any significant change in managerial values (Janićijević, 2006; Janićijević & Bogićević, 2004), so when an error was detected or a problem identified the managers made decisions based on a set of unquestioned rules, norms, procedures, processes, and assumptions. The absence of any change in managerial assumptions and values made double-loop learning impossible, leaving space for only single-loop learning.
- e) The negative political factors hindering the economy, society, and technology made organisational survival more important than organisational

development, and therefore encouraged ‘trial and error’ learning (described by Argyris and Schön (1996) as a form of single-loop learning) instead of strategically led and organisationally controlled learning based on new assumptions and values.

Phase 2, 2000–2009

- a) Managerial learning was largely influenced by the expected FDI and positive inflows from outside markets, especially in organisations with foreign partners where double-loop learning occurred through learning by listening and observing others (foreign partners as teachers).
- b) It was understood that old business practices, experience, and knowledge should be abandoned for good, and new knowledge adopted instead (organisational forgetting).
- c) Not all organisations or individuals expressed equal learning dynamics or learning types. Operational plans, vague strategic goals, employees’ negative emotions, and general unwillingness to receive new knowledge all imposed constraints on businesses, resulting in single-loop learning and behavioural rather than cognitive change. In other cases, where foreign investment was accepted readily on, double-loop learning occurred, while voluntariness and willingness to accept new knowledge appeared to be an important learning antecedents. This phase has the fewest examples of deutero-learning and exploration, however.

Phase 3, 2010–Present

- a) Importance of intangible capital for competitiveness, productivity and overall economic performance brought a new learning wave, propelled by the Internet economy and then digitalisation, which radically changed the strength and form of managerial and organisational learning.
- b) A stronger private sector, the emergence of start-ups in the information and communication technology (ICT) sector and companies’ strong focus on building a competitive edge through superior knowledge integrated at all levels in the organisational knowledge network resulted in exploration and deutero-learning being the dominant learning forms. Deutero-learning and exploration came explosively in the second part of the second decade of the 21st c. and represented the third generation of learning in the transitional Serbian economy.

These findings confirm Cerović's assertion that the transition process in the post-1989 transformation of Serbia should be analysed in different phases. The research evidence suggests three distinctive phases of Serbian transition: (1) Early transition in 1989–2000, characterised by a narrow concept of reform which relied primarily on insider privatisation and slow and low intensity changes to the institutional context; (2) Revived transition in the period 2000–2009, characterised by renewed transition expectations and radical liberalisation, and significantly influenced by FDI, growth of the private sector, intensive small-scale privatisation, macroeconomic stabilisation, and banking reform; and (3) Closing transition after 2010, following changes introduced by the global economic crisis, characterised by the implementation and stabilisation of all transition changes. Rapid development of the Internet economy, digitalisation, and the explosive growth of the ICT sector and SMEs took the leadership in changing the Serbian economy. Accordingly, we may conclude that the delineation points differentiating the transition phases are related to the scope (whether all necessary reforms regarding liberalisation, privatisation etc. were implemented), pace (the speed of the changes), intensity (whether the implemented changes were new), and conclusiveness (whether the changes were final and internalised) of the transition.

The research shows that the transition process in Serbia did generate organisational learning, but with different learning outcomes; i.e., there were different generations of organisational learning in the different transition phases. The first phase of transition in Serbia resulted in the first generation of organisational learning, characterised by single-loop learning through exploitation and learning by doing, with tacit managerial knowledge about basic managerial methods and techniques reigning supreme. The second phase of transition resulted in the second generation of organisational learning, still characterised by single-loop learning through exploitation and learning by doing but also with the appearance of double-loop learning through listening and observing others and organisational forgetting. The third phase of transition resulted in the third generation of organisational learning, characterised by double-loop and deuterio-learning through exploration and storing explicit knowledge enabled by rapid and wide-range digitalisation.

Therefore, we may propose the following:

Proposition 1: *Organisational learning is positively related to the transition process, whereas the type of learning and form of learning practice, i.e., generation of organisational learning, is related to the scope, pace, intensity, and conclusiveness of the transition process.*

The research also suggests that the main exogenous pillars of the transition progress are different in the three phases. In the early transition phase the main learning antecedent was insider privatisation, during the revived transition the growth in FDI inflow resulted in much wider and deeper learning, and during the closing transition the global technological breakthrough initiated the different forms of a higher level of organisational learning. According to institutional theory, several factors determine the response of an organisation to the imposition of a new institutional pattern (Hinings & Greenwood, 1988; Oliver, 1991), but the speed and consistency of changes in the institutional environment are especially important for transition countries (Newman, 2000, 2001). Rapid and inconsistent changes in the institutional environment do not allow institutions in transition countries to create a clear and consistent institutional pattern in which businesses can function. When managers are confronted with an overly turbulent institutional environment they cannot imagine the necessary institutional pattern and do not know what to learn and implement. In such a situation, organisations respond to the imposition of institutional reform by refusing to implement it, or if that is not possible by implementing a symbolic or modified form. On the other hand, excessively slow changes in the institutional environment condition the managers' perception that the pressure of the institutional environment is weak and they 'have time' to adapt. They use this situation to avoid change or to adapt by implementing a modified or symbolic institutional pattern. In this case, again, the impact of transition on the process of managerial learning will be weak because managers will not be motivated or pressured to learn a new institutional pattern. If managerial learning occurs it will be solely single-loop learning that results in incremental adjustments to the structure and functioning of the business. Thus, the transition process will only initiate double loop managerial learning if the changes in the institutional environment are optimally paced and consistent. In that case, managers will feel pressured to learn a new institutional pattern, and they will be able to learn because the pattern is created in a way and at a pace that they can accept. Because managers are applying totally new patterns of structure and functioning, which

bring discontinuity to their experience, the consequence will be double loop managerial learning. Therefore, we propose the following:

Proposition 2: *The main exogenous ‘transition’ antecedents of organisational learning are related to the method and speed of privatisation, the degree of liberalisation and the increase of FDI, the pace of technological change and the digitalisation of the economy, and the consistency and pace of changes to the institutional environment.*

The research findings suggest that the main endogenous antecedents of organisational learning during the transition in Serbia are related to the response of individual organisations to changes in the institutional environment. In accordance with institutional theory, full-scale organisational learning (double-loop learning) will only appear when the organisation’s response to changes in the institutional environment is in a form of acceptance. If organisations and their managers modify and adapt the new institutional pattern before applying it, the process of organisational learning will be limited to single-loop learning and there will be no double-loop learning. The case is similar if the reaction is a symbolic application of the institutional pattern. Finally, if the reaction of the organisation is to refuse to apply the new institutional model, according to institutional theory there will be no organisational learning. Therefore, we propose the following:

Proposition 3: *The main endogenous ‘transition’ antecedent of organisational learning is related to the individual organisation’s response to changes in the institutional environment (i.e., acceptance, modification, symbolic application, refusal).*

CONCLUSION

This paper highlights the emerging issue of organisational learning in the context of the transitional Serbian economy during the last three decades. By systematically collecting research evidence from Serbia we revealed that organisational learning is positively related to the transition process and that the different transition phases (early, revived, and closing) resulted in distinctive forms of organisational learning and different learning practices. The main exogenous ‘transition’ antecedents of organisational learning were the method and speed of privatisation and liberalisation in the early transition stage, the

increase of FDI in the middle-transition stage, and technological change and digitalisation in the closing transition period. Organisational acceptance of transitional changes proved to be the main endogenous ‘transition’ antecedent of organisational learning.

The basic limitation of this paper is that the research is grounded exclusively in the corpus of Božidar Cerović’s work and his contribution to transition research. His numerous studies put management and business issues on the transitional change agenda, and this paper references some of his important findings while also focusing on learning processes in the context of the transitional Serbian economy, an issue not covered in his own or joint research. Although Božidar Cerović’s work on the Serbian transition is voluminous and offers an authentic reference to Serbian transition, future studies should consider broader transition-related issues, some of which are referred to in this paper. Future research should prioritize endogenous factors of organisational learning in the Serbian economy, since our review shows that they dominated during the first two transition phases and the situation is now changing in favour of stronger endogenous factors – above all the recognition of intellectual capital as an organisational resource, employee and managers’ individual learning as a key driving force behind organisational learning, and HRM policies and practices that promote employee development as a source of long-term competitive advantage.

REFERENCES

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Aleksić Mirić, A. (2012a). Barriers to learning in networks. In K. Kitaoka, A. Marx, J. Fuentes, & C. O’Reilly (Eds.), *Networks for Prosperity: Connecting Development Knowledge Beyond 2015* (pp. 144-153). Vienna: United Nations Industrial Development Organisation.

Aleksić Mirić, A., & Burton, R.M. (2012b). Learning in alliances: How structure makes a difference. In N. Janićijević (Ed.), *The Role of Contemporary Management and Marketing Methods in Improvement of Competitiveness of the Companies in Serbia Within the Process of its Integration to the European Union* (pp. 57-87). Belgrade: CIDEF.

Aleksić Mirić, A. (2013). Učenjem do konkurentnosti: determinante apsorpcionog kapaciteta za učenje kroz međunarodna strateška partnerstva u Srbiji. In N. Janićijević & S. Lovreta, (Eds.), *Konkurentnost preduzeća u Srbiji* (pp. 327-348). Belgrade: CIDEF.

ORGANISATIONAL LEARNING IN SERBIA DURING THE TRANSITION

Almeida, P., & Kogut, B. (1999). Localization of knowledge and the mobility of engineers in regional networks. *Management Science*, 45(7), 905–917.

Argote, L., McEvily, B., & Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management Science*, 49(4), 571–582.

Argote, L., & Ophir, R. (2002). Intraorganisational learning. In J. A. C. Baum (Ed.), *The Blackwell Companion to Organizations* (pp. 181–200). Oxford: Blackwell.

Argyris, C., & Schön, D.A. (1996). *Organizational Learning: A Theory of Action Perspective*. London: Addison Wesley.

Ashworth, R., Boyne, G., & Delbridge, R. (2007). Escape from the iron cage? Organizational change and isomorphic pressures in the public sector. *Journal of Public Administration Research and Theory*, 19, 165–187.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.

Basten, D., & Haamann, T. (2018). Approaches for organizational learning: A literature review. *SAGE Open*, 8(3), 1-20.

Boerner, C.S., Macher, J.T., & Teece, D.J. (2001). A review and assessment of organizational learning in economic theories. In M. Dierkes, A. B. Antal, J. Hild & I. Nonaka (Eds.), *Handbook of Organizational Learning and Knowledge* (pp. 89–117). Oxford: Oxford University Press.

Bogićević Milikić, B., Janićijević, N., & Cerović, B. (2012). Two decades of post-socialism in Serbia: Lessons learned and emerging issues in human resource management. *Journal for East European Management Studies*, 16(4), 445–463.

Bogićević Milikić, B., & Janićijević, N. (2008). *Development of HRM in transition economies: Serbia vs. Slovenia – two reflections of the shared background*. 23rd EIASM Workshop on Strategic HRM, Bled, 3–4 April 2008.

Bogićević Milikić, B., Janićijević, N., Cerović, B., & Nojković A. (2010). Building a human resource management model in Eastern European transition economies: evidence from Serbia. *Advances in Business-Related Scientific Research Conference (ABSRC 2010)*, 8–10 September, Sardinia, Italy.

Bogićević Milikić, B., Janićijević, N., & Nojković A. (2010a). Globalization and convergence of human resource management practices in transition economies: the case of Serbia. 26th EGOS Colloquium, Lisbon: *Waves of Globalization: Repetition and Difference in Organising Over Time and Space*, 28 June –3 July, Lisbon, Portugal.

Bogićević Milikić, B., Janićijević, N., & Nojković, A. (2010b). Can globalization change HRM patterns in transition economies? The evidence from Serbia. In Babić, V. (Ed.), *Contemporary Issues in Economics, Business and Management*, (pp. 179–190), Kragujevac: Faculty of Economics.

- Bogićević Milikić, B., Jančićević, N., & Petković, M. (2008). HRM in transition economies: The case of Serbia. *The South East European Journal of Economics and Business*, 3(2), 75–88.
- Borgatti, S., & Cross, R. (2003). A relational view of information seeking and learning in social networks. *Management Science*, 49(4), 432–445.
- Burton, R. M., & Øbel, B. (2004). *Strategic Organizational Diagnosis and Design: The Dynamics of Fit* (3rd edn). PLACE: Springer Science & Business Media.
- Casile, M., & Davis-Blake, A. (2002). When accreditation standards change: Factors affecting differential responsiveness of public and private organizations. *Academy of Management Journal*, 45(1), 180–195.
- Cerović, B. (2000). Economy of FR Yugoslavia: transition or pre-transition economy? *mimeo*, Faculty of Economics, University of Ljubljana, February.
- Cerović, B. (2006). *Privatisation in Serbia: Evidence and Analysis*. Belgrade: CIDEF.
- Cerović, B. (2009a). Napredak u tranziciji, inicijalni uslovi i privreda Srbije. *Teme*, 2, 353–374.
- Cerović, B. (2009b): Transition, transition progress and global crisis: Serbia and other countries. In Prašević, A., Cerović, B., & Jakšić, M. (Eds.): *Economic Policy and Global Recession*, (Vol 1., pp.321–332). Belgrade: CIDEF.
- Cerović, B. (2012). *Tranzicija: zamisli i ostvarenja*. Belgrade: CIDEF.
- Cerović, B. (2013). Investicije u neopipljivi kapital kao faktor konkurentnosti preduzeća u Srbiji. U N. Jančićević, S. Lovreta (Eds). *Konkurentnost preduzeća u Srbiji* (pp. 305–326), Beograd: CIDEF.
- Cerović, B. (2014). Western Balkans and Serbia: What are ways out from the crisis? *The Role of the State in the New Growth Model of the Serbian Economy*. Beograd: CIDEF.
- Cerović, B., & Aleksić, A. (2005). Culture for business: the Serbian perspective. In J. Prašnikar & A. Cimerman. *Globalno gospodarstvo in kulturna različitost* (p.135–141). Ljubljani: Časnik Finance.
- Cerović, B., Aleksić, A., & Nojković, A. (2007a). Some FDI determinants in the transition economies. In S. Babić, B. Cerović, M. Jakšić & A. Prašćević (Eds.), *Proceedings from International Scientific Conference; Contemporary challenges of theory and practice in economics* (pp. 63–74). Belgrade: CIDEF.
- Cerović, B., Aleksić, A., & Nojković, A. (2007b). Faktori privlačenja stranih direktnih investicija u Srbiji: uticaj sličnosti kulture. U B. Cerović, M. Zec, P. Djukić, B. Živković & Lj. Madžar (Eds.) *Kako završiti privatizaciju u Srbiji, rezultati i perspektive* (pp. 193–205). Beograd: CIDEF.
- Cerović, B., & Dragutinović Mitrović, R. D. (2007). Privatisation effects: Some evidence from Serbia. *Transition Studies Review*, 14(3), 469–487.

ORGANISATIONAL LEARNING IN SERBIA DURING THE TRANSITION

Cerović, B., & Nojković, A. (2008). Measuring transition progress: endogeneity and initial conditions. *Romania*, 30, 72–31.

Cerović, B., & Nojković, A. (2009a). Transition and growth: What was taught and what happened. *Economic Annals*, 54(183), 7–31.

Cerović, B., & Nojković, A. (2009b). Transition economies: a peculiar pattern of growth. In *AISSEC XVII Scientific Conference on Growth and Development Patterns: The Role of Institutions in a Comparative Perspective*, University of Perugia.

Cerović, B., Nojković, A., & Uvalić, M. (2014). Growth and industrial policy during transition. *Economic Annals*, 59(201), 7–34.

Child, J., & Czegledy, A. P. (1996). Managerial learning in the transformation of Eastern Europe: Some key issues. *Organization Studies*, 17(2), 167–179.

Child, J., & Smith, C. (1987). The context and process of organisational transformation; Cadbury limited in its sector. *Journal of Management Studies*, 24(6), 565–593.

Corrado, C., Haskel, J., Jona-Lasinio, C., & Iommi, M. (2013). Innovation and intangible investment in Europe, Japan and the US. *Discussion Paper 2013/1*. London: Imperial College Business School.

Cyert, R. M., & March, J. G. (1963). *A Behavioral Theory of The Firm*. Englewood Cliffs: Prentice Hall.

Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9(2), 284–295.

Dandridge, T., Mitroff, I., & Joyce, W. (1980). Organizational symbolism: A topic to expand organizational analysis. *Academy of Management Review*, 15, 77–82.

Dierkes, M., Antal, A. B., Child, J., & Nonaka, I. (Eds.) (2003). *Handbook of Organizational Learning and Knowledge*. Oxford: Oxford University Press.

DiMaggio, P.J., & Powell W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. *American Sociological Review*, 48(2), 147–160.

Dixon, S.E., Meyer, K.E., & Day, M. (2014). Building dynamic capabilities of adaptation and innovation: A study of micro-foundations in a transition economy. *Long Range Planning*, 47(4), 186–205.

Dutz, M. A., Kannebley, S. J., Scarpelli, M., & Sharma, S. (2012). Measuring intangible assets in an emerging market economy: An application to Brazil. *Policy Research Working Papers No. 6142*. Washington: The World Bank.

Easterby-Smith, M., & Lyles, M. A. (Eds.). (2011). *Handbook of Organisational Learning and Knowledge Management* (2nd ed). Chichester: Wiley.

EBRD (1995). *Transition Report 1995*. London: London: European Bank for Reconstruction and Development.

Fiol, C. M., & Lyles, M. A. (1985). Organisational learning. *Academy of Management Review*, 10(4), 803–813.

Greenwood, R., Oliver, C., Sahlin, K. & Suddaby, R. (2008). Introduction. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (eds.). *The Sage handbook of organizational institutionalism*. (1-47) Thousand Oaks, CA: Sage Publications.

Gruenfeld, D. H., Martorana, P. V., & Fan, E. T. (2000). What do groups learn from their worldliest members? Direct and indirect influence in dynamic teams. *Organisational Behavior and Human Decision Processes*, 82(1), 45–59.

Hamel, G. (1991). Competition for competence and interpartner learning within international strategic alliances. *Strategic Management Journal*, 12(S1), 83–103.

Hidayati, A., Fanani, Z., Prasetyo, K., & Mardijuwono, A. W. (2012). The impact of intangible asset on firms' competitive advantage and market value: empirical examination from emerging market. *Mimeo*. <https://www.yumpu.com/en/document/read/9532945/the-impact-of-intangible-asset-on-firms-competitive-advantage-and->.

Hinnings, C., Greenwood, R. (1988). *The Dynamics of Strategic Change*. London: Basil Blackwell.

Janićijević, N. (2006). Impact of privatization on managers' work-related values. In Cerović, B. (Ed.), *Privatisation in Serbia: Evidence and Analysis* (pp. 265–287). Belgrade: CIDEF.

Janićijević, N., & Bogićević, B. (2004). Impact of privatization on corporate governance and managers' work-related values. In D. Stojanov, & B. Čulahović, B. (Eds.) *From Transition to Development: Globalization and Political Economy of Development in Transition Economies*. (Proceedings of the Second International Conference of the Faculty of Economics Sarajevo). Sarajevo: Faculty of Economics, University of Sarajevo.

Janićijević, N., & Bogićević Milikić, B. (2007). Convergence vs. divergence in human resource management: the Serbian case. In B. Cerović (Ed.), *Management and Marketing under Globalization* (pp. 119–130). Belgrade: CIDEF.

Klein, K. J., & Kozlowski, S. W. (2000). From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organisational Research Methods*, 3(3), 211–236.

Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organisations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel Theory, Research, and Methods in Organisations: Foundations, Extensions, and New Directions* (p.3–90). Jossey-Bass.

Kuznar, A. (2012). *Intangibles in economies and international trade*. ETSG Working Paper. Warsaw: Warsaw School of Economics.

ORGANISATIONAL LEARNING IN SERBIA DURING THE TRANSITION

- Lane, P. J., Salk, J. E., & Lyles, M. A. (2001). Absorptive capacity, learning, and performance in international joint ventures. *Strategic Management Journal*, 22(12), 1139–1161.
- Lavie, D., Kang, J., & Rosenkopf, L. (2011). Balance within and across domains: the performance implications of exploration and exploitation in alliances. *Organisation Science*, 22, 1517–1538.
- Lavie, D., & Rosenkopf, L. (2006). Balancing exploration and exploitation in alliance formation. *Academy of Management Journal*, 49, 797–818;
- Leavitt, B., & March, J. (1988). Organisational learning. *Annual Review of Sociology*, 14, 319–40.
- Liang, D. W., Moreland, R., & Argote, L. (1995). Group versus individual training and group performance: The mediating role of transactive memory. *Personality and Social Psychology Bulletin* 21(4), 384–393.
- Lyles, M. A. (1988). Learning among joint-venture sophisticated firms. *Management International Review* (Special Issue), 28, 85–97.
- Lyles, M. A. (2001). Organizational learning in international joint ventures: the case of Hungary. In M. Dierkes, A. B. Antal, J. Hild & I. Nonaka (Eds.), *Handbook of Organizational Learning and Knowledge* (pp. 681–698). Oxford: Oxford University Press.
- Lyles, M. A., & Salk, J. E. (1996). Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. *Journal of International Business Studies*, 27(5), 877–903.
- Maier, G.W., Prange, C., & Rosenstiel, L. von. (2001). In Dierkes, M., Beroin-Antal, A., Child, J., & Nonaka, I. (Eds.), *Handbook of Organizational Learning and Knowledge*, (pp. 14-34). Boston: Oxford University Press.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science* 2(1), 71–87.
- March, J. G., & Olsen, J. P. (1976). *Ambiguity and Choice in Organizations*. Bergen: Universitetsforlaget.
- Martin-de-Holan, P., & Phillips, N. (2003). Organizational forgetting. In Easterby-Smith, M., & Lyles, M. A. (Eds.), *The Blackwell Handbook of Organizational Learning and Knowledge Management*, (pp.393–409). Oxford: Blackwell Publishing Ltd.
- McEvily, B., & Zaheer, A. (1999). Bridging ties: A source of firm heterogeneity in competitive capabilities. *Strategic Management Journal*, 20(12), 1133–1156.
- McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an organizing principle. *Organization Science*, 14(1), 91–103.

- Meyer, J. W. & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *The American Journal of Sociology*, 83(2), 340–363.
- Meyer, K. E. (2007). Contextualising organisational learning: Lyles and Salk in the context of their research. *Journal of International Business Studies*, 38(1), 27–37.
- Meyer, K. E. & Peng, M. W. (2005). Probing theoretically into Central and Eastern Europe: Transactions, resources, and institutions. *Journal of International Business Studies*, 36(6), 600–621.
- Milisavljević, M. (Ed.), (1994). *Menadžment i menadžeri u Srbiji*. Beograd: Globmark.
- Miller, D. (1996). A preliminary typology of organizational learning: Synthesizing the literature. *Journal of Management*, 22(3), 485–505.
- Mom, T.J.M., Van den Bosch, F.A.J., & Volberda, H.W. (2007). Investigating managers' exploration and exploitation activities: the influence of top-down, bottom-up, and horizontal knowledge inflows. *Journal of Management Studies*, 44, 910–931.
- Nadler, J., Thompson, L., & Boven, L. V. (2003). Learning negotiation skills: Four models of knowledge creation and transfer. *Management Science*, 49(4), 529–540.
- Newman, K.L. (2000). Organizational transformation during institutional upheaval. *Academy of Management Review*, 25(3), 602–619.
- Newman, K. (2001). Radical versus incremental change: role of capabilities, competition and leaders. In Denison D. R. (Ed.) *Managing Organizational Change in Transitional Economies*. Mahwah, NJ: Lawrence Erlbaum Associates
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37.
- Nonaka, I.T., & Takeuchi, H. (1995). *The Knowledge-Creating Company*. Boston, Massachusetts: Harvard Business School Publishing
- Nystrom, P. C., & Starbuck, W. H. (1984). To avoid organizational crises, unlearn. *Organizational Dynamics*, 12(4), 53–65.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management*, 16(1), 145–179.
- Pedersen, J.S., & Dobbin, F. (2006). In search of identity and legitimation: Bridging organizational culture and neoinstitutionalism. *American Behavioral Scientist*, 49(7), 897–907.
- Pettigrew, A. M. (1985). Contextualist research and the study of organizational change processes. *Research Methods in Information Systems*, 1, 53–78

ORGANISATIONAL LEARNING IN SERBIA DURING THE TRANSITION

- Polanyi, M. (2009). *The Tacit Dimension*. Chicago: University of Chicago Press.
- Prašćević, A. (2019). Problemi ekonomske i društvene tranzicije u naučnom opusu profesora Božidara Cerovića. U A. Praščević & M. Jakšić (Eds.). (2019). *Tranzicija, institucije i društveni razvoj – doprinosi profesora Božidara Cerovića* (pp.3–43). Beograd: CIDEF.
- Prašćnikar, J. (Ed.). (2010). *The Role of Intangible Assets in Exiting the Crisis*. Ljubljana: Časnik Finance.
- Prašćnikar, J., Redek, T., & Memaj, F. (Eds.). (2012). *Albania: The Role of Intangible Capital in Future Growth*. Ljubljana: Faculty of Economics Ljubljana.
- Raisch, S. (2008) Balanced structures: designing organizations for profitable growth. *Long-Range Planning*, 41, 483–508.
- Roth, F., & Thum, A. E. (2010). Does intangible capital affect economic growth? *CEPS Working Document* no. 335, Brussels: Centre for European Policy Studies
- Rulke, D. L., Zaheer, S., & Anderson, M. H. (2000). Sources of managers' knowledge of organizational capabilities. *Organizational Behavior and Human Decision Processes*, 82(1), 134–149.
- Scott, R. W. (2008). *Institutions and Organizations: Ideas, Interests and Identities*. 3rd ed. Thousand Oaks, CA: Sage.
- Shaw, R. B., & Perkins, D. N. (1991). Teaching organizations to learn. *Organization Development Journal*, 9(4), 1–12.
- Shrivastava, P. (1983). A typology of organizational learning systems. *Journal of Management studies*, 20(1), 7–28.
- Smith, A. (1776/1937). *The Wealth of Nations*. New York: The Modern Library.
- Smith, E.A. (2001). The role of tacit and explicit knowledge in the workplace. *Journal of Knowledge*, 5(4), 311–321.
- Uvalić, M. (2010). *Serbia's Transition: Towards a Better Future*. London: Palgrave Macmillan.
- Van Ark, B., Hao, J. X., Corrado, C., & Hulten, C. (2009). Measuring intangible capital and its contribution to economic growth in Europe. *EIB papers*, 14(1), 62–93.
- Weber, M. (1922/1978). *Wirtschaft und Gesellschaft* [Economy and Society]. Tübingen: Mohr.
- Wegner, D. M. (1987). Transactive memory: A contemporary analysis of the group mind. In B. Mullen & G. R. Goethals (Eds.). *Theories of Group Behavior* (pp. 185–208). New York, NY: Springer.

Woodside, A. G., & Somogyi, P. (1994). Creating international joint ventures: strategic insights from case research on a successful Hungarian-Japanese industrial enterprise. In P. J. Buckley & P. N. Ghauri (Eds.) *The Economics of Change in East and Central Europe: Its Impact on International Business* (pp. 169–183). London: Academic Press.

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THE SERBIAN PENSION SYSTEM IN TRANSITION: A SILENT BREAK WITH BISMARCK

ABSTRACT: *The pension system in Serbia was set up as Bismarckian earnings-related system almost one hundred years ago. At the outset of the transition process at the beginning of 21st Century, the pension system underwent bold reforms. Despite suggestions from the World Bank to adopt a three-pillar system that would involve a break with the Bismarckian heritage, reforms concentrated on parametric adjustments that strengthened the link between previous earnings and pension benefits. However, as this paper shows, the Bismarckian earnings-related system has subsequently been silently challenged. On the basis of an analysis of the current and perspective replacement rates for various*

earning levels and pension variation indicators, we show how the contributions/benefit link has been undermined. These policy changes have not been defined or understood as a new strategic course of action, nor have the strategic options been debated and analysed. These silent reforms have seemed to be a “quick and easy” solution to tackle high public expenditures and deficits without understanding their implications, and that breaking up with Bismarck implies significant transition costs.

KEY WORDS: *Bismarck, Beveridge, silent break, net replacement rate, pension variation*

JEL CLASSIFICATION: H55, J11, J26

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1. INTRODUCTION

In the late 19th and early 20th century, industrialised economies began introducing public pension systems, at first mostly emulating German social insurance or the means-tested assistance programme for the elderly adopted in Denmark (Gordon, 1988). With the evolution of pension systems, the latter assumed a residual role and universal/basic pensions, rooted in but departing from the social assistance tradition, became the second major public model. Thus, two public pension models were created, Bismarckian social insurance and the Beveridge basic income model (Bonoli, 2003; Ebbinghaus, 2011; Schludi, 2005). This dichotomy has been preserved in modern pension systems, affecting the main objectives, the generosity of public benefits, public expenditure on pensions, the source of financing, the presence of private schemes, mainly due to path dependency effects.

State intervention in pensions is usually justified by market failure and state paternalism, as well as the reasons related to social justice (Barr, 2012; Diamond, 1977). Contrary to the general consensus with regard to state intervention, opinions on the appropriate role of the state diverge. Many differences between systems arise from a different understanding of what the role of the state is, and what the main objectives of public pension systems should be. For the individual, the main objectives of old-age pensions are consumption smoothing and thus provision of a stable living standard over a lifetime, and insurance mainly against the risk of running out of savings. Public policy objectives include poverty relief and redistribution (Barr, 2012).

The different public systems have different pension objectives. Beveridge-type pension models, in the context of a paradigm in which the state plays a minimal role, focus primarily on poverty prevention within a public scheme, while consumption smoothing is delegated to private schemes either as a mandatory requirement or on a voluntary basis backed up by “nudging and tax inducements” (Glennester, 2017). Bismarck-type pension models place more importance on income smoothing, ensuring adequate retirement income related to previous earnings through public provision. Pursuing different objectives has not only led to different paths in the development of public pension programmes, but has also contributed to divergent responses to challenges and crises.

The challenges are many, and are similar to those that have been identified as challenges to the welfare state in general: ageing, globalisation, the changing nature of work (particularly new forms of employment and career interruption), changes in the family structure, rising inequality, and managing public expectations in the context of constant pressure to contain expenditure (Barr, 2012; Bonoli, 2003; Castles, 2004; Gilbert & Terell, 2013; Glennerster, 2017; Matković, 2019). In response to these challenges, pension systems have been constantly undergoing reforms. Since the beginning of the 2000s these reforms have led to elements of convergence between the two types of pension schemes, primarily in terms of pension policy objectives and pension outcomes (Stanić, 2012).

The aim of this article is to demonstrate the unrecognised departure of the Serbian public pension system from its Bismarckian origins and to specify the consequences of such a silent transformation. The article is structured as follows. Following the introduction, the second section briefly presents the four phases of pension system changes in Serbia after 2001, highlighting the Bismarckian legacy and the signs of departure from it. Section three describes the methodology and the data used to demonstrate the signs of a “break with Bismarck”, and section four evaluates indexation, minimum pension changes, and the main pension design indicators in Serbia. The findings are discussed in the section five together with the conclusions.

2. THE LEGACY OF BISMARCK AND PENSION SYSTEM REFORMS IN SERBIA

The first compulsory pension insurance system was introduced by the German government under Chancellor Otto von Bismarck in 1889. Wage earners and lower-paid employees in Germany were insured according to the Old Age and Disability Insurance Law. Compared to modern standards the benefits were low (a replacement rate of up to 30%), the retirement age high (70 years)¹ and the minimum contribution period relatively high (24 years). The system was financed from three sources (employers, employees, and government) and was initially established as a fully funded scheme. Financing on a pay-as-you-go (PAYG) basis

¹ “If the original design of pensions in the nineteenth century had related retirement age to life expectancy, there would be no pensions ‘crisis’” (Barr, 2012).

was not legislated until 1957, although it was de facto implemented throughout the interwar period (Börsch-Supan & Wilke, 2006; Gordon, 1988).²

A typical Bismarckian pension system predominantly relies on a public, PAYG, defined benefit scheme, financed by social insurance contributions. Therefore, current pensioners receive benefits that are financed from the contributions of currently employed workers (thus “pay-as-you-go”). The pension benefits are earnings related, based on a formula that takes into account the employee’s level of earnings and contribution period. The risk falls on the state as the sponsor of the pension plan, i.e., on current and future taxpayers, and contributions are adjusted to meet future obligations.³ The main goal of the Bismarckian public pension system is to maintain a relative standard of living (over the life cycle). Usually there is a minimum income component, safeguarding the level of pensions for low-income earners or for employees with a short contribution history. As a result, Bismarckian pension systems are characterised by high public pension expenditure and high replacement rates, substantial variation in pensions, and small vertical redistribution within the public tier (Stanić, 2012).

For a long time, Bismarck-type pension systems were labelled as highly path-dependent, difficult to change, rigid, and reform resistant in the context of the “almost incapable to reform” continental welfare states (Palier, 2006; Schludi, 2005). Reforms have occurred nonetheless, including both incremental changes and paradigm shifts.

During the last two decades, mainstream parametric reforms in public systems originating in the Bismarckian legacy have encompassed less generous indexation and valorisation procedures, and the extension of the reference period for calculating pensions from a limited number of best or final years’ earnings to a lifetime average. In parallel, the number of years required to qualify for the maximum pension and standard retirement age has increased, including a gradual equalisation of the retirement age for men and women, while some schemes have introduced an automatic link between retirement age and life expectancy. The introduction of an automatic balancing mechanism,

² Depression and inflation during the interwar period eroded pension benefits from fully funded plans, inducing a shift to the PAYG scheme in continental Europe (Myles, 2002).

³ In practice, both contributions and benefits are often adjusted (Barr & Diamond, 2010).

sustainability factors, a reduction coefficient, or links between retirement age and life expectancy are considered to be important for the financial sustainability of public pension systems. Early retirement has been constrained through the extension of minimum contribution years, increased eligibility age, and incentives for late retirement and/or reduction of benefits for early labour market withdrawal (European Commission, 2015; European Commission, 2018; OECD, 2017; Whitehouse et al., 2009; Carone et al., 2016; Palier, 2010; Schludi, 2005). On the revenue side, extended coverage to atypical workers, low-income earners, and the self-employed have resulted in more universal pension systems (Hinrichs, 2010; Schludi, 2005). Increasing contributions, or introducing new taxes earmarked for financing public pensions, have improved the revenue capacity of pension systems and their ability to deliver more adequate benefits.

Some of the reforms have diminished “the ‘corporativistic’ character of social insurance by homogenising both contribution requirements and benefit eligibility across social strata” (Esping-Andersen, 2010). Regarding organisational structure, this tendency has led to the abolition and/or harmonisation of different public pension schemes by occupational status (Hinrichs, 2010; Obinger & Talos, 2010). During the 2008–2009 financial crises, temporary measures were adopted that aimed to reduce benefits through indexation changes or even pension cuts. Additionally, increased contribution rates improved the financial stability of pension systems (Carone et al., 2016). After 2015, measures aimed at poverty reduction and income maintenance gained in importance across the EU.

More systemic reforms of traditional Bismarckian systems have entailed the conversion of defined benefit systems to points systems or to notional defined contributory (NDC) schemes.⁴ Although the same types of reforms are possible in all three closely related variants of PAYG earnings-related pension schemes

⁴ In points systems “workers earn pension points based on their individual earnings for each year of contributions. At retirement, the sum of pension points is multiplied by a pension-point value to convert them into a regular pension payment. NDC schemes record each worker’s contributions in an individual account and apply a rate of return to the accounts. The accounts are “notional” in that both the incoming contributions and the interest charged to them exist only on the books of the managing institution. At retirement, the accumulated notional capital in each account is converted into a stream of pension payments using a formula based on life expectancy at the time of retirement” (OECD, 2006:24).

(OECD, 2006), the NDC system stands out due to many automatic adjustments, “without a need for discretionary political decisions” (Holzmann, 2017), including an automatic link between pension benefits and life expectancy. Beyond changes in earnings-related public plans, two changes in the Bismarckian pension systems have introduced a sharp break with tradition: the introduction of social pensions and the growth of private sector pensions. The latter is considered to be a particularly non-typical feature of the Bismarckian system (Palier, 2010).

During the 1990s most Central and Eastern European (CEE) countries implemented ‘carve-out’ pension privatisation, following the World Bank’s three-pillar pension reform design. Contrary to the CEE transition reform path, a radical change towards privatisation has never been a serious policy option in Continental Europe (Schludi, 2005), but it has still partially occurred through the back door (Orenstein 2011). Retrenchment of the public system opened the space for private provision of complementary rather than carve-out pension plans. Usually a public–private mix was introduced by offering tax advantages and direct subsidies, or even in some cases by converting severance pay into occupational pensions (Ebbinghaus, 2011; Schludi, 2005).

Although the trend toward privatisation seems undeniable, in most EU Member States “the bulk of pension benefits currently remain contribution-based and earnings-related (Bismarckian type system), with a relatively limited role played by private pensions” (Carone et al., 2016). According to the 2018 Pension Adequacy Report, despite broad coverage, the level of savings in occupational schemes is still limited in the Bismarckian pension systems (European Commission, 2018). The analysis of most continental pension systems raises the question of whether the reforms entail “a long goodbye to Bismarck” (Palier, 2010), or in some, a silent break (Conde-Ruiz & González, 2016).

In Serbia at the end of 2000, before the transition commenced, the pension system was a typical representative of the Bismarckian tradition with a single, defined-benefit, PAYG public scheme providing old age, disability, and survivors’ benefits. Compulsory insurance covered employees, employers, the self-employed, and farmers, and the insurance was organised in three separate funds managed by the social partners. Economic hardship, war in the region,

international sanctions, and hyperinflation severely affected the functioning of the pension system during the 1990s. Low GDP, high unemployment and a widespread grey economy, evasion of contribution payments, and liberal eligibility and early retirement criteria generated permanent difficulties in securing sufficient funds for regular pension payments. The necessary 'adjustments' were made by indexing pension benefits to decreasing wages, increasing contribution rates, and reducing expenditure through various dubious mechanisms: disbursement of less than 12 pensions a year, non-constitutional reduction of pensions during 1994–1995 (the so-called 'large' debt to pensioners), distribution of electricity bill vouchers instead of pensions, depreciation of benefits through inflation, and other measures (Matković, 2005).

The democratic government elected in 2001 faced a huge pension bill and a number of unfavourable pension indicators: a large number of pensioners, very high contribution rates, a low insurer-to-pensioner ratio, unsustainably high replacement rates, and low pension benefits in absolute terms (World Bank, 2003a). The first phase of the reform (2001–2004) was marked by a consolidation of the devastated system and major parametric reforms. In 2001, the first efforts focused on consolidating the system, paying pensions regularly, and preparing for evidence-based reforms. In parallel, legislative changes entailed urgent parametric reforms aimed at a rapid financial stabilisation of the system. The two key changes introduced were raising the retirement age by three years at one go (from 55 to 58 for women and from 60 to 63 for men) and shifting from indexation based on wages to mixed 50:50 indexation based on a combination of wages and the cost-of-living (the so-called Swiss formula). In addition, with the goal of reducing redistribution within the system, a single minimum pension amount was introduced instead of four levels based on length of service.

Contrary to the World Bank blueprint, the decision was made to focus the reform efforts primarily on parametric changes in the public pillar and not to pursue 'carve-out' pension privatisation for the time being (Matković, 2001; Altiparmakov & Matković, 2018). A rapid introduction of a so-called "second pillar" was rejected, primarily due to its potentially high transition costs, the underdevelopment of financial markets, and poor experiences in other countries (Matković, 2005). The subsequent abandonment of the second pillar in a number of CEE countries during the crisis was justified both by the high transition costs

and by the high administrative fees and poor returns to pension funds (OECD, 2013).

In April 2003 a framework law was adopted that remained in the Bismarckian pension insurance tradition. A key feature of the new law was a shift from the traditional defined-benefit system to the German points system, with the aim of tightening the link between contributions and benefits. In line with the dominant doctrine at the time, other changes included an extension of the reference period from the ten best years to lifelong earnings, an extension of mandatory coverage to employees in non-standard employment and the tightening of eligibility criteria regarding disability pensions and accelerated pension benefits, the latter with a transitional provision. The concept of total disability was introduced instead of the inability to perform a particular job, and a regular evaluation of disability pensions was imposed. Certain rules in farmers' insurance also changed (Matković, 2005; Mijatović, 2010; Stanić, 2010a). During this phase the contribution rates were first substantially reduced and then slightly increased. Finally, in 2004 the Law on Compulsory Social Insurance Contributions came into force, which put an end to adjusting contribution rates to the needs of pension payments. As a result, the Pension Fund deficit increased and had to be financed by general taxation.⁵ According to the World Bank, “bold changes in the pension system in Serbia, implemented on two occasions, during 2001 and 2003, [were] among the most important achievements in the overall reform program” (World Bank, 2003b:21).

The second phase of pension reform (2005–2008) was marked by the introduction of voluntary pension insurance. During this period the administrative consolidation of the three public pension funds (for employees, the self-employed, and farmers) was finalised, while financial consolidation became effective as of 2011. Among the parametric reforms a further gradual increase in the standard retirement age of two years, relaxation of eligibility criteria for accelerated beneficiaries, and the gradual abandonment of the Swiss formula stand out.⁶

⁵ For more on the issue of deficit, see Bajec & Stanić, 2005

⁶ For details on indexation and minimum pension development see Section 4.

The defining feature of the third phase (2009–2013) was the freezing of public pensions during 2009 and 2010 as part of fiscal austerity measures. In 2010, legislative changes focused mainly on setting up new indexation and fiscal rules that linked the uprating of pensions partly to GDP growth. During this phase, military insurance was integrated into the overall pension system, including fully harmonised eligibility requirements. Towards the end of the period, pensioners with low pensions received several instalments of one-off assistance from the budget (Stanić, 2010b; Government of the Republic of Serbia, 2014).

Finally, in the last phase (2014 to the present) additional legislative changes stipulated penalties for early retirement and a further gradual increase in the retirement age for women to 65 (to equalise with that of men in 2032). After several years of erratic pension indexation, not in accordance with The Law on Pension and Disability Insurance, the amendments legitimise the existing situation by stipulating that the Budget System Law has jurisdiction over pension growth. In addition, the Law on the Temporary Regulation of Pension Disbursement that effectively reduced the higher pensions was repealed. Additional provisions envisaged one-off payments, at the government's discretion. During this period a number of laws and decrees regulated further eligibility criteria for specific professions (police, judicial officers), although this is contrary to the Law on Pension and Disability Insurance and to the principle of consistent regulation of the pension system (Government of the Republic of Serbia, 2018: 213).⁷

3. METHODOLOGY AND DATA

Following Casamatta et al. (2000), Disney (2004), and Stanić (2012) we define pension benefit as:

$$b = (1 - \alpha)\bar{b} + \alpha W$$

where b is pension benefit coming from the mandatory public pension system; \bar{b} is the flat, i.e., redistributive component of the benefit; and W denotes the previous wage, i.e., an individual's earnings history. The parameter α is the

⁷ The Law on Pension and Disability Insurance stipulates that only sectoral law can regulate pension entitlements (Articles 5 and 7).

‘Bismarckian factor’ assigning a weight to the earnings-related component in the pension benefit while $(1 - \alpha)$ is the ‘Beveridge factor’ assigning weight to the flat component, i.e., the redistributive element. The higher the α , the more closely the benefit is linked to previous earnings and the less redistributive the system is, i.e., more Bismarckian. When $\alpha = 0$ the pension benefit is flat and the system is purely Beveridgian; i.e., there is higher vertical redistribution within the system.

We use two pension design indicators to proxy the above formula: the theoretical net replacement rate (RR) as a proxy for the Bismarckian factor, and the pension variation as a proxy for the Beveridge factor. The hypothetical/theoretical RR is the most usual indicator for assessing the adequacy of a pension system. It has been developed “to measure the extent to which pension systems enable workers to preserve their previous living standard when moving from employment to retirement” (European Commission, 2006). The hypothetical standardised approach is used in order to isolate the specific design issues while also allowing comparison across countries (Stanić, 2017). The RR can be calculated as a current RR, showing the design of the pension system for those currently retiring, as well as a prospective (expected) RR that reflects future entitlements under present legislation (Stanić, 2008).

Currently the European Commission Social Protection Committee and its Indicator Sub-Group (henceforth EC-ISG) and the OECD carry out the most prominent work on RRs. The EC-ISG calculates both current and prospective RRs while the OECD calculates only future RRs, for those just entering the labour market.

The EC-ISG defines RR as the ratio of pension benefit to final pre-retirement income (benefit in the first year of retirement divided by income during the year preceding retirement). The base case under this methodology is a single person with a 40-year career until retirement age (e.g., beginning work at 25 and retiring at 65) with constant average earnings. In addition, they calculate a flat low-earning profile at two-thirds of average earnings, rising careers, different seniority and retirement ages, and various other factors. In calculating prospective RRs the macroeconomic assumptions are specific to each country, which is the biggest problem with EC-ISG data in cross-country comparisons (Stanić, 2008).

The OECD defines the RR as the ratio of the pension benefit to individual lifetime-average earnings re-valued in line with economy-wide earnings growth. Under the baseline assumptions of a flat career worker (meaning a worker earning the same percentage of the economy-wide average earnings throughout their career), the lifetime average re-valued earnings and the individual final earnings are identical. Therefore, for flat career workers there is no difference between the OECD and EC (ISG) definitions. The OECD calculates only prospective (expected) RRs for current workers just entering the labour market at the age of 20 and retiring at the statutory retirement age. Since the statutory retirement age varies across countries, the length of the full career varies as well (40 years for retirement at 60, 45 years for retirement at 65, 47 years for retirement at 67). In most cases the retirement age is 45 years, meaning that RRs according to OECD methodology are higher than RRs according to EC-ISG methodology. This is a major disadvantage of the OECD methodology. The OECD methodology fixes the macroeconomic assumptions for all countries to 2% annual inflation and 1.25% annual real wage growth. Though this is not a realistic assumption, it “ensures that the outcomes of the different pension regimes are not affected by different economic conditions. In this way, differences across countries in pension levels reflect differences in pension systems and policies alone” (OECD, 2017: 98).

In this article, we mainly follow EC-ISG methodology and only use OECD methodology for international comparison, for several reasons: (1) the advantage of a single set of macroeconomic assumptions, (2) more countries available for comparison, and not only EU countries, and (3) the net RR is available for the first pillar (mandatory system, public or private including near-universal schemes). The EC-ISG calculates net RRs for both first and second pillars. For international comparison, countries are grouped into Bismarckian, Beveridgian, and Nordic according to Stanić (2010b and 2012).⁸

We carried out five calculations of prospective (future) RRs in Serbia. Four of the calculations are based on various scenarios concerning macroeconomic assumptions for a worker with an average 40 years' career. The fifth calculation

⁸ The exception is Denmark, which is usually classified as a Beveridge country; however, it is a borderline case and in this concrete situation fits better with Nordic countries.

uses the OECD methodology for a set of macroeconomic assumptions, and a career length of statutory retirement age minus 20, which is currently 45 years.

The first scenario uses the OECD’s set of economic assumptions. Price inflation is assumed to be 2% per year. Real earnings are assumed to grow by 1.25% per year on average. Given the assumption for price inflation, this implies a nominal wage growth of 3.275% (OECD, 2017). Since the formula in Serbia is related to real GDP growth, given the real earnings growth of 1.25% we assume a maximum GDP growth of 3%, which means no real indexation of general point. We assume indexation with CPI once a year. The scenarios presented in Table 1 are variations on this theme.

Table 1: Assumptions used to calculate RR, 5 scenarios

Scenario	Macroeconomic assumptions	Indexation	Years of service
Scenario 1. (OECD assumptions)	2% CPI, 1.25% real wage growth, 3% real GDP growth	CPI	40
Scenario 2.	2% CPI, 2.5% real wage growth, 3% real GDP growth	CPI	40
Scenario 3.	2% CPI, 3% real wage growth, 4% real GDP growth	CPI (PDI and BS Law 2010)	40
Scenario 4.	2% CPI, 3% real wage growth, 4% real GDP growth	GDP real growth – 3% (BS Law 2014)	40
Scenario 5. (OECD methodology)	2% CPI, 1.25% real wage growth, 3% real GDP growth	CPI	45

Following Disney (2004) and Stanić (2012) we use the indicator ‘pension variation’ to measure the degree of progressivity (redistribution) in the pension system, or the ‘Beveridge factor’ $(1 - \alpha)$. Pension variation is defined as a

coefficient of variation (CV) of replacement rates for various earning levels. For this analysis we used the following levels compared to the Serbian average wage: 20%, 40%, 100%, 200%, 300%, and 400%. The coefficient of variation is a normalised measure of dispersion of a probability distribution defined as the ratio of the standard deviation to the mean ($CV = \frac{\sigma}{\mu}$). Hence the pension variation is defined as the standard deviation between RRs for six types of earners (20%, 40%, 100%, 200%, 300%, and 400%), divided by the average RR for these six types of earning profiles. We also introduce another indicator to measure the weight of the flat component in the pension system ($1 - \alpha$). This is the minimum payment (minimum pension plus various payments topping up the minimum pension) relative to the pension of an average full-career worker.

4. INDEXATION METHOD, REDISTRIBUTIVE ELEMENTS, AND THE MAIN PENSION DESIGN INDICATORS IN SERBIA

This section reviews the indexation methods, redistributive elements and pension design in Serbia. It focuses firstly on an overview of general point and pensions in payment indexations, before moving on to provide an overview of minimum pension level changes and other redistributive provisions and the main historical, current, and prospective pension design indicators.

4a. Overview of general point and pensions in payment indexations

In the last two decades the modality of uprating the general point value and pensions has been changed too many times. We present the indexation changes classified according to the phases explained in section 2 above.

Phase I: 2001–2004

After the wage indexation practiced during the 1990s (though often only nominally due to irregular payment of benefits), 2001 saw a shift to the Swiss formula. Under the 2003 Law, pensions in payment and the general point were indexed four times a year to CPI growth and average wage growth in the previous quarter. The indexation percentage followed the Swiss formula being based on the sum of one half percent of the change in CPI and one half percent of the change in wages (Stanić, 2010a).

Phase II: 2005–2008

Following the 2005 amendments to the Law on Pension and Disability Insurance, the plan was to index pensions in payment and the general point to CPI growth since 2009 twice a year. The transition phase was envisaged as 2006–2008, in which the general point and pensions in payment were supposed to be indexed according to the modified Swiss formula, with a lower percentage of wage growth taken into account each year: 37.5% in 2006, 25% in 2007, and 12.5% in 2008 (Stanić, 2010a). However, these 2005 amendments also envisaged an extraordinary indexation whenever the average level of pension benefits in a given year fell below 60% of the net average wage. Such an extraordinary indexation was supposed to be performed in January the following year over a period of three years (*ibid.*)⁹ This was a political bargain to some extent; hence this amendment was sometimes dubbed the “Socialist Party of Serbia (SPS) amendment” (Stanić, 2008: 82). It seemed at the time that decision-makers did not actually believe that the benefit ratio would fall below 60% of the average wage. However, that actually happened when in 2007 the benefit ratio fell below 60%, though the wage statistic was overestimating the average wage at the time and hence, when the methodology was changed in 2008, it turned out that the benefit ratio in fact had not fallen below 60%. Nevertheless, an extraordinary indexation of 11% had already been enforced in January 2008 (Stanić, 2011).

Another extraordinary indexation took place in October of the same year (2008) – an extra 10% was added to the regular indexation in response to the demands of the Party of United Pensioners of Serbia (PUPS), part of the then new Serbian coalition government (Stanić, 2008, 2011). These extraordinary adjustments ensued together with regular indexation; hence in nominal terms the overall uprating of pensions in 2008 was above 30%, and almost 15% in real terms. This occurred at the beginning of the economic crisis when there was a fall in GDP, wages, and employment; hence the economic trends were completely divergent from the rise in pensions.

Altogether, this led to a dramatic jump in pension expenditure and a deficit in the pension system, and in particular subsidies and transfers from the budget (Stanić, 2011). The increase in pensions coupled with the fall in GDP led to pension

⁹ Article 75 of the 2005 Law Amending the Pension and Disability Insurance Law

expenditure as a percentage of GDP surging from around 11.5% in 2007 to almost 13% in 2008 and 14% in 2009 (Government of the Republic of Serbia, 2018).

Phase III: 2009–2013

As a result of the economic crisis, pensions were frozen throughout 2009 until the end of 2010. Amendments to the Law on Pension and Disability Insurance adopted at the end of 2010 foresaw biannual uprating (on April 1 and October 1) by the consumer price change in the preceding six months. If GDP in the previous calendar year had grown more than 4% in real terms, the pensions were to be indexed in April to the percentage representing the difference between the real GDP growth rate and the benchmark of 4%. This actually meant no real growth, or, in an optimistic scenario, very modest real growth. As a transitional solution, for the first two years, on 1 October 2011 and 1 April 2012, a version of the ‘Swiss formula’ was proposed: the percentage difference between inflation and real GDP growth. In addition, in December 2010 pensions were exceptionally adjusted with a 2% increase (Government of the Republic of Serbia, 2011, 2014).

The Law Amending the 2010 Law on the Budget System¹⁰ also legislated pension indexation – introducing the precedent of legislating pension law with another law – establishing the indexation outlined above until 2015 at least, and probably much longer – “until the share of pension expenditure in GDP attains 10%” (Government of the Republic of Serbia, 2011). However, like the 2005 legislation, the modality of indexation envisaged by the amendments in the 2010 Law was never applied. In fact, pensions have been uprated on an ad hoc basis, as a rule by rates below price growth rates. In September 2012, immediately before the implementation of Article 80,¹¹ the Law was amended and as a result, pensions were uprated by 2% in October 2012 and April 2013. The Law was amended again in July 2013, and pensions were uprated by 0.5% in October 2013 and April 2014. A 1% increase was envisaged for October 2014, and the application of Article 80 of the PDI Law, governing uprating, was finally envisaged as of April 2015.

¹⁰ Official Gazette of RS 54/2009, 73/2010, 101/2010, 101/2011, 93/2012, 62/2013 and 63/2013 – corrigendum.

¹¹ Indexation with CPI or real growth above 4% GDP growth.

However, in December 2013, the Law was amended again. Under these amendments, the uprating foreseen by Article 80 of the Law was postponed once more. “From April 2015 to the end of 2016, biannual uprating by 0.5% was anticipated; further, uprating of pensions in October 2014 was conditioned on equalisation of wages/salaries in the public sector if adopted by July 1, 2014” (Government of the Republic of Serbia, 2014).

Phase IV: end of 2014 to the present

There was no indexation in October 2014 since the precondition (equalisation of wages in the public sector) was not fulfilled. Instead, the Law on the Temporary Regulation of Pension Disbursement was passed, which envisaged the ‘temporary’ reduction of higher pensions from November 2014. In particular, it entailed “a reduction in pensions higher than RSD 25,000, as follows: pensions higher than RSD 25,000 and lower than RSD 40,000 are reduced by the amount calculated by multiplying the pension amount in excess of RSD 25,000 by the coefficient of 0.22; pensions higher than RSD 40,000 are reduced by the sum of the amount obtained by multiplying RSD 15,000 by the coefficient of 0.22 and the amount obtained by multiplying the pension amount in excess of RSD 40,000 by the coefficient of 0.25”¹² (Government of the Republic of Serbia, 2018).

The effective pension reduction ranged from zero for pensions below RSD 25,000 to 20% for the highest pensions (Table 2)

Table 2: Effective pension reduction with Temporary Regulation of Pension Disbursement

According to the Law on PDI (October 2014)	25,000	30,000	32,300	40,000	50,000	60,000	70,000	80,000	90,000	100,000	120,000
Reduced pension amount	25,000	28,900	30,694	36,700	44,200	51,700	59,200	66,700	74,200	81,700	96,700
Effective reduction	0%	3.7%	5.0%	8.3%	11.6%	13.8%	15.4%	16.6%	17.6%	18.3%	19.4%

Source: Government of the Republic of Serbia (2018).

In addition, changes in the PDI Law from the end of 2014 envisaged that while the Law on the Temporary Regulation of Pension Disbursement was in effect, indexation of pensions would not be performed by the PDI law but rather

¹² Law on the Temporary Regulation of Pension Disbursement, Articles 2 and 3.

according to the Law on the Budget System.¹³ An amendment to the Budget System Law at the end of 2014 stipulated that the fiscal management principles required confining pension expenditure to 11% of GDP instead of 10%. In addition, the indexation formula in the PDI law (article 80) linking the October indexation to CPI growth, and the April indexation to the percentage difference between the GDP real growth rate and the rate of 4%, was changed to the following formula: “from April, pensions can be indexed up to the sum of the consumer price growth rate in the previous six months and part of the real GDP growth rate in the previous year above 3%, and from October they can increase up to the consumer price growth rate in the previous six months”. At the same time, Article 80 is still present in PDI law, making the two laws incompatible. Furthermore, this Budget System Law amendment introduced the following formula: when the fiscal conditions are fulfilled, whether there will be a pension indexation and, if so, what the percentage will be “is decided by the Government, at the proposal of the Ministry”.¹⁴

What followed were amendments to the Budget System Law at the end of every year from 2014, so that pensions were indexed by 1.25% in December 2015 and by 1.5% in December 2016. In December 2017, pensions and the general point value were raised by 5%, which was the first time in several years that the increase was above the consumer price growth rate (Government of the Republic of Serbia, 2018).

Amendments to the Pension and Disability Insurance Act, adopted in September 2018, ended the ‘temporary’ pension reduction that started at the end of 2014. The method of pension indexation is still regulated by the Law on the Budget System, the only difference being that the formulation changed from “while the Law on the Temporary Regulation of Pension Disbursement is in effect” to “until the financial sustainability of the pension and disability insurance systems is achieved”.

4b. Overview of minimum pension level changes and other redistributive provisions

Legislative amendments in 2005 increased the minimum pension – set in 2001 to 20% of the average monthly (gross) wage of the previous year and then indexed

¹³ Official Gazette no. 142/2014.

¹⁴ Official Gazette no. 142/2014.

using the Swiss formula – in January 2006 to 25% of the previous year's average wage (except for farmers). From that moment on, it was indexed like other pension benefits, but with a condition of extraordinary indexation if it were to fall below 20% of the previous year's average wage (Government of the Republic of Serbia, 2011).

Amendments to the law in 2010 again stipulated extraordinary indexation of the minimum pensions as of 1 January 2011, for “a percentage providing that the share of the minimum pension amount in January 2011 in the average net wage in the Republic of Serbia in 2010 is higher for a percentage point relative to the share of the minimum pension in 2010 in the average net wage net of taxes and contributions of employees in the Republic of Serbia in 2010”. In addition, they specified that the minimum pension could not fall below 27% of the average wage net of taxes and contributions from the previous year (*ibid*).¹⁵ At the same time, these amendments decreased the maximum lifetime personal coefficient from 4 to 3.8, while the ceiling for paying contributions stayed at the same level of five average wages.

In September 2012, similar to the model that existed in Belgrade after 2008, all pensioners whose pensions in August of the same year did not exceed 15,000 dinars received four instalments of 4,000 dinars, which were supposed to be equivalent to a thirteenth pension of 16,000 dinars, but was actually spread over the period August 2012 to August 2013. Some 460,000 retirees received this assistance (Matković and Stanić, 2014). Later on, based on the Conclusions of the Government from the end of 2016, 2017, and 2018, all pension beneficiaries received a one-off payment of 5,000 dinars at the end of 2016 and 2017 and 3,000 dinars at the end of 2018.

Amendments to the Pension and Disability Insurance Act adopted in September 2018 provided a basis for a special form of payment to pensioners, to be decided by the government depending on the financial possibilities of the budget, but the funds for this purpose could not exceed 0.3% of GDP on an annual basis. This payment was designed to raise pensions paid in September before ending the ‘temporary’ pension reduction to at least 5% in nominal terms for both those

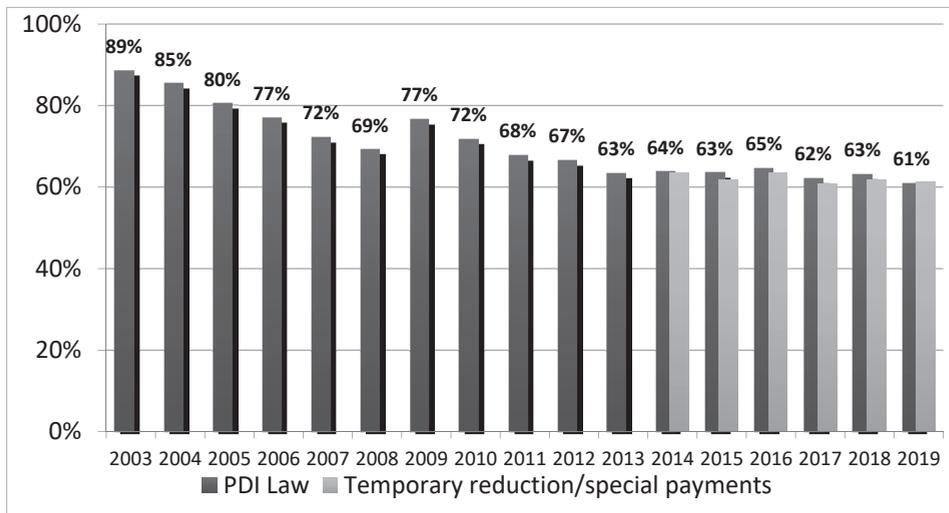
¹⁵ Official Gazette of RS, Nos. 34/03, 64/04-AD, 84/04-other law, 85/05, 101/05-other law, 63/06-AD, 5/09, 107/09, 101/10 article 28.

whose pensions in nominal terms were reduced in 2014 and those whose pensions were not reduced – pension below 25,000 RSD in October 2014 – or were reduced by less than 5% – pensions of around 32,000 RSD in October 2014. This special form of payment was paid from November 2018 and a decree adopted in December 2018 determined its payment until December 2019.

4c. Main historical, current, and prospective pension design indicators

When the reform process began in 2003 the replacement rate was almost 90% and decreased over time to around 61% in 2019 (Figure 1).

Figure 1: Net replacement rate in Serbia, 2003–2019



Source: Authors’ calculation. Note: 40 years’ flat career, average earner.

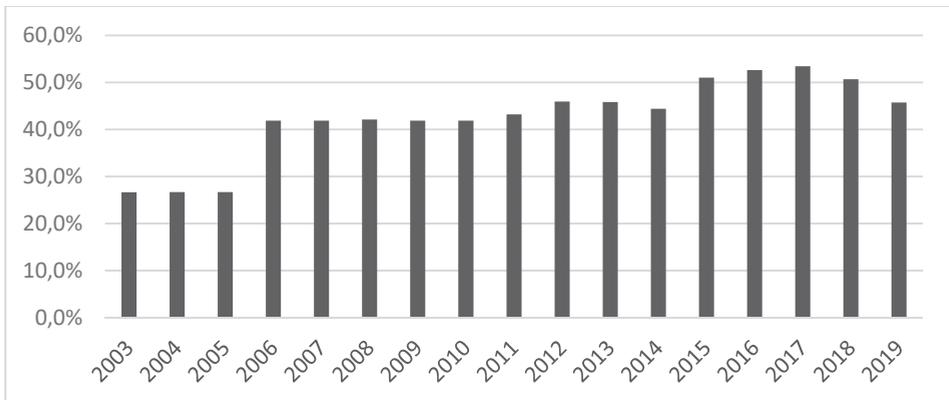
The pension variation indicator shows a significant rise in vertical redistribution over previous decades. The coefficient of variation of the net RR for various earning levels increased from 26.7% in 2003 to over 40% after 2006 and more than 50% during the ‘temporary’ reduction of higher pensions in 2015–2018 (Table 3 and Figure 2).

Table 3: Net RR for various earning levels, CV

	20%	40%	100%	200%	300%	400%	CV
2003	158.8%	91.6%	91.6%	91.6%	91.6%	91.6%	26.7%
2004	148.0%	85.3%	85.3%	85.3%	85.3%	85.3%	26.7%
2005	139.5%	80.5%	80.5%	80.5%	80.5%	80.5%	26.7%
2006	176.5%	88.3%	77.0%	77.0%	77.0%	77.0%	41.9%
2007	165.8%	82.9%	72.3%	72.3%	72.3%	72.3%	41.9%
2008	159.4%	79.7%	69.2%	69.2%	69.2%	69.2%	42.1%
2009	156.6%	78.3%	68.3%	68.3%	68.3%	68.3%	41.9%
2010	164.9%	82.4%	71.9%	71.9%	71.9%	71.9%	41.9%
2011	157.5%	78.8%	67.9%	67.9%	67.9%	64.5%	43.2%
2012	162.8%	81.4%	66.6%	66.6%	66.6%	63.3%	45.9%
2013	154.6%	77.3%	63.4%	63.4%	63.4%	60.2%	45.8%
2014	148.0%	74.0%	63.5%	62.3%	61.9%	58.7%	44.4%
2015	147.3%	73.7%	61.7%	55.0%	52.6%	48.9%	51.0%
2016	154.5%	77.3%	63.6%	55.8%	53.4%	49.8%	52.6%
2017	150.5%	75.3%	60.9%	54.1%	50.5%	47.8%	53.5%
2018	151.1%	75.6%	61.8%	56.8%	54.8%	51.4%	50.7%
2019	148.6%	74.3%	61.3%	61.0%	61.0%	57.9%	45.7%

Source: Authors' calculation. Note: 40 years' flat career, various earning levels.

Figure 2: Pension variation: coefficient of variation of RR for different levels of earnings, Serbia 2003–2019

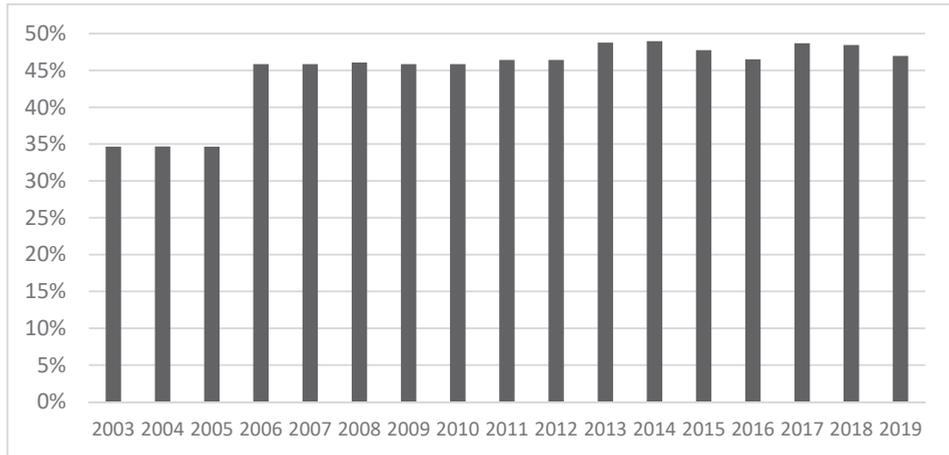


Source: Authors' calculation

This increase was primarily due to the increase in the minimum pension since the beginning of 2006, followed by a series of minimum pension increases and

‘special’ payments for those on a minimum pension (Figure 3). In recent years the minimum payment has been almost 50% of the full pension of an average worker.

Figure 3: Minimum pension payment relative to pension of average full-career worker



Source: Authors’ calculation. Note: Minimum pension payment includes minimum pension and other payments topping up minimum pension.

The prospective net RR shows a substantial decline over the future decades, the extent of which depends on the macroeconomic assumptions adopted; the more pessimistic the assumptions, the slower is the decline likely to be. Therefore, scenario 1 (Table 4) using OECD macroeconomic assumptions of only 1.25% real wage growth shows the lowest decline.

Table 4. Prospective net RR, various scenarios

	2020	2025	2030	2035	2040	2045	2050	2055	2062
Scenario 1.	56.5%	53.1%	49.9%	46.9%	44.1%	40.9%	39.0%	36.6%	33.6%
Scenario 2.	56.5%	50.0%	44.2%	39.0%	34.5%	30.5%	27.0%	23.8%	20.0%
Scenario 3.	56.5%	48.8%	42.1%	36.3%	31.3%	27.0%	23.3%	19.5%	16.3%
Scenario 4.	56.5%	51.3%	46.5%	42.1%	38.2%	34.6%	31.4%	28.5%	24.8%
OECD methodology	63.6%	59.8%	56.2%	52.8%	49.6%	46.6%	43.8%	41.2%	37.8%

Source: Authors’ calculation

Source: Authors' calculation. Note: See section 3 for assumptions; the first four scenarios are calculated for a 40 years' long career, while the fifth calculation (OECD methodology) gives the RR for 45 years of service.

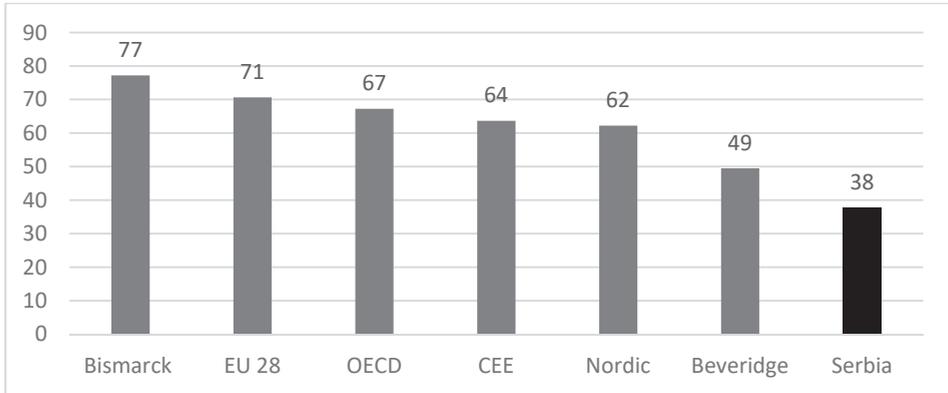
The long-term projections for those entering the labour market in their 20s are not particularly realistic, but are calculated by the OECD method to illustrate the effects of current legislation and for comparison with other countries. In this long perspective under the current legislation, Serbia would have the lowest net RR among all EU and OECD countries including Beveridge countries, apart from the UK (Table 5 and Figure 4).

Table 5: Prospective net RR (male): Serbia in international comparison in 2062

	Pension age	Net RR		Pension age	Net RR
Austria	65	91.8	Australia	67	42.6
Belgium	65	66.1	Canada	65	53.4
France	64	74.5	Ireland	68	42.3
Germany	65	50.5	Japan	65	40.0
Greece	62	53.7	New Zealand	65	43.2
Italy	71	93.2	Netherlands	71	100.6
Luxembourg	60	88.4	Switzerland	65	44.9
Portugal	68	94.9	United Kingdom	68	29.0
Spain	65	81.8	United States	67	49.1
Bismarck	65	77.2	Beveridge	67	49.5
Czech R.	65	60.0	Denmark*	74	80.2
Estonia	65	57.4	Norway	67	48.8
Hungary	65	89.6	Sweden	65	54.9
Latvia	65	59.5	Finland	68	65.0
Poland	65	38.6	Nordic	69	62.2
Slovak R.	68	83.8			
Slovenia	60	56.7			
CEE	65	63.7	Serbia	65	37.8

Source: OECD (2017); Authors' calculation for Serbia. Note: OECD methodology, RR for those entering the labour market in 2017. * Denmark RR is high due to the significantly longer years of service and the occupational scheme included in the calculation.

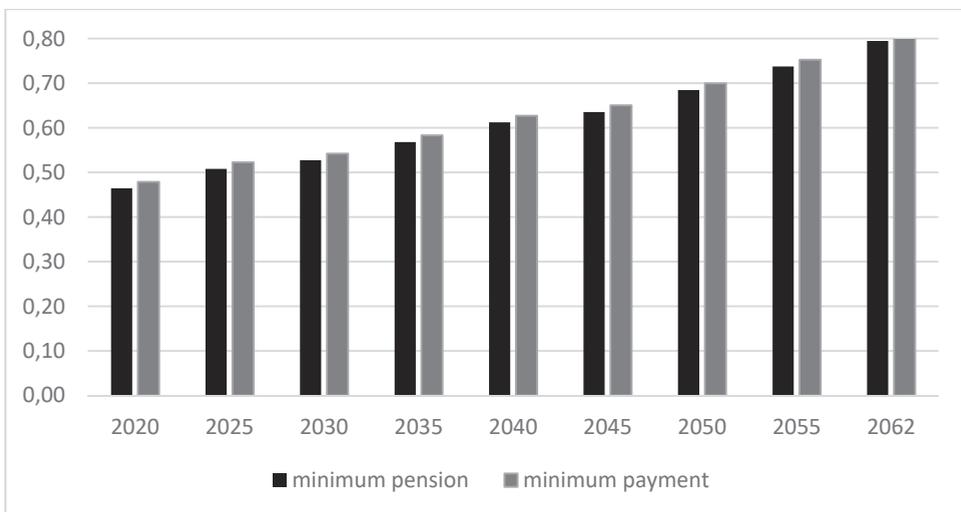
Figure 4: Prospective net RR – groups of countries and Serbia



Source: OECD (2017); authors' calculation for Serbia

A long-term projection shows that the minimum pension will soon reach above 50% of the average full-career worker's pension if nothing changes in the current legislation. For illustration, Figure 5 presents an option including the 'special payment' that is currently in force.

Figure 5: Projection of minimum pension and minimum payment relative to pension of average full-career worker under current legislation



Source: Authors' calculation for Serbia. Note: EC-ISG methodology (full-career worker, 40 years of service) and OECD macroeconomic assumptions (1.25% real wage growth and 2% CPI)

5. CONCLUSION – A SILENT BREAK WITH BISMARCK

The Serbian pension system has undergone major changes over the last two decades. Some changes have been consistent with the core logic of the Bismarck model, some were implemented in line with contemporary requirements, and some clearly indicated a departure from Bismarck. The first group, present in the first reform phase, includes reforms such as the shift to a points system and other changes that resulted in a tighter link between contributions and pensions. Harmonisation of eligibility requirements across social strata and consolidation of separate pension funds belongs to the second group. The third group, starting in 2005, includes changes that resulted in reduced replacement rates and the delinking of pensions and earnings. These changes indicate a shift towards a completely different model (Beveridge) in which the primary objective of the public pension scheme is poverty prevention, and in which post-retirement income maintenance is provided through private pension schemes.

The presented analysis clearly demonstrates these tendencies. Net RR declined from almost 90% in 2003 to around 61% in 2019. The pension variation indicator shows a significant increase in vertical redistribution, from 26.7% in 2003 to over 40% after 2006 and to more than 50% during the ‘temporary’ reduction of higher pensions in 2015–2018. Similarly, in 2025 the minimum pension payment relative to the pension of the average full-career worker will be above 50%. Bearing in mind that the minimum pension is paid to those with only 15 years of service, this implies a substantial redistribution toward those with a small number of years of service.

The prospective net RR shows a substantial decline over the next ten years if existing legislation stays in force, while this decrease will be dramatic in the long run. For illustration, if nothing changes in the existing legislation, those that entered the labour market in 2017 at 20 years old and retire at 65 will have a net RR of only 38% under the assumption of 1.25% real wage growth and 3% real GDP growth. This would be a lower RR than in almost any EU or OECD country, even lower than the average RR in Beveridge-type systems, which average 50%.

Why does this matter? Both models – Bismarck and Beveridge – exist and both are constantly reforming, pursuing financial sustainability and pension adequacy. Is one system (Beveridge) better than another (Bismarck)? Does it provide a

better response to the challenges facing modern welfare states, or better social protection? The answers to these important questions form a separate topic, beyond the scope of this paper, and are partly ideological issues (Barr, 2012). However, what is certain is that such a shift is progressing silently, without consensus and without informing the public, and perhaps even without an understanding of the true extent of the changes and its consequences.

A few issues related to non-transparency and high transitional costs stand out. *First*, the silent transition from an income maintenance model to a poverty prevention model has precluded any expert or stakeholder debate about such an important change and its consequences, above all regarding the winners and losers in this transition. *Second*, if it is decided to change to a poverty prevention model, the general public should be made aware of the fact that in the future the public pension system will only provide a minimum old-age income and that additional savings will be required to secure an acceptable standard of living. *Third*, the shift should be made explicit, since it entails additional adjustments in the public pension tier. For example, in line with the Bismarckian model and the public system's objective of income maintenance, the maximum amount of earnings subject to social security contributions is very high. In a poverty prevention public model the ceiling is lower, allowing higher earners to invest more in private retirement plans. *Fourth*, older workers approaching retirement age cannot adapt to such a significant paradigm shift. These generations have neither the time nor the financial capacity to make additional savings, partly due to the high contributions they have already invested in the mandatory tier. This argument implies a transitional cost, as in the case of carve-out privatisation. *Finally*, in the EU there is an increasing demand for reform transparency and better information on future pension claims, regarding both public and private schemes (Wichhorst et al., 2011).

In addition to this non-transparent structural change, our analysis demonstrates that since 2005 there has been another extremely unfavourable trend involving the reinforcement of uncertainty, primarily with respect to pension indexation: "formulas that changed so frequently that they were never truly implemented" (Government of the Republic of Serbia, 2018: 233) and regulation of pension indexation through the Budget System Law, first tacitly and later explicitly. Overall, the 'patchwork' of reforms and measures taken so far have not been part

of a coherent strategy; some of the measures are inconsistent, justified by opposing arguments, and occasionally concentrated only on the expenditure side (Matković, 2016).

Our analysis suggests the necessity of re-addressing strategic issues – above all, whether the main objective of a public pension system should be income maintenance or poverty prevention. Other related dilemmas include re-examining the level of intra-generational redistribution in the public system, the role of private pensions, and the potential status of social pensions and other non-contributory benefits vis-à-vis insurance within the social protection system. With regard to parametric changes, potential reforms primarily include the automatic linking of retirement age with life expectancy, additional measures to demotivate early withdrawal from the labour market, tightening conditions for accelerated benefits, and re-examining the concept of farmer pensions.

Finally, it should be noted that further stabilisation of the pension system crucially depends on employment, labour force participation, and productivity growth, and requires a reduction in the informal economy as well as a strengthening of fiscal discipline.

REFERENCES

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Altiparmakov, N., & Matković, G. (2018). The development of private pensions in Serbia: caught between a generic blueprint and an uncondusive local environment. *Transfer: European Review of Labour and Research*, 24(1), 57–71.

Bajec, J., & Stanić, K. (2005). Koliki je stvarno deficit penzionog sistema u Srbiji? *Kvartalni monitor ekonomskih trendova i politika u Srbiji*, (1), 58–64.

Barr, N., & Diamond, P. (2010). Reforming pensions: Lessons from economic theory and some policy directions. *Economia: Journal of the Latin American and Caribbean Economic Association*, 11(1), 1–23.

Barr, N. (2012). *Economics of the Welfare State*. Oxford: Oxford University Press.

Bonoli, G. (2003). Two worlds of pension reform in Western Europe. *Comparative Politics*, 35(4), 399–416.

- Börsch-Supan, A.H., & Wilke, C. B. (2006). The German public pension system: How it will become an NDC system look-alike. In R. Holzmann and E. Palmer (Eds.). *Pension Reform: Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes* (pp. 573-610). Washington DC: The World Bank.
- Carone, G., Eckefeldt, P., Giamboni, L., Laine, V., & Pamies Sumner, S. (2016). Pension reforms in the EU since the early 2000s: Achievements and challenges ahead *European Economy Discussion Paper 2016/42*. Brussels: European Commission Directorate General for Economic and Financial Affairs.
- Casamatta, G., Cremer, H., & Pestieau, P. (2000). Political sustainability and the design of social insurance. *Journal of Public Economics*, 75(3), 341-364.
- Castles, F. (2004). *The Future of the Welfare State: Crisis Myths and Crisis Realities*. Oxford: Oxford University Press.
- Conde-Ruiz, J.I., & González, C.I. (2016). From Bismarck to Beveridge: the other pension reform in Spain. *SERIEs Journal of the Spanish Economic Association* (7), 461-490.
- Diamond, P. A. (1977). A framework for social security analysis. *Journal of Public Economics*, 8 (3), 275-298.
- Disney, R. (2004). Are contributions to public pension programmes a tax on employment? *Economic Policy*, 19 (39), 269-311.
- Ebbinghaus, B. (2011). Introduction: Studying pension privatization in Europe. In B. Ebbinghaus (Ed.). *The Varieties of Pension Governance: Pension Privatization in Europe* (pp. 3-22). Oxford: Oxford University Press.
- Esping-Andersen, G. (2010). Prologue: What does it mean to break with Bismarck? In B. Palier (Ed.). *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe* (pp. 11-18). Amsterdam: Amsterdam University Press.
- European Commission (2006). *Current and Prospective Theoretical Pension Replacement Rates*. Report of the Indicators Sub-group (ISG) of the Social Protection Committee (SPC). Brussels: European Commission.
- European Commission. (2015). *The 2015 Ageing Report: Economic And Budgetary Projections For The 28 EU Member States (2013-2060)*. Brussels: European Commission.
- European Commission. (2018). *Pension Adequacy Report 2018: Current and Future Income Adequacy in Old Age in the EU. Volume 1*. Brussels: European Commission.
- Gilbert, N. & Terell, P. (2013). *Dimensions of Social Welfare Policy* (8th ed.). Boston: Pearson.
- Glennerster, H. (2017). *Understanding the Cost of Welfare* (3rd ed.). Bristol: Bristol University Press.

Gordon, M.S. (1988). *Social Security Policies in Industrial Countries: A Comparative Analysis*. Cambridge: Cambridge University Press.

Government of the Republic of Serbia. (2011). *First National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia: The Status of Social Exclusion and Poverty Trends in the Period 2008–2010 and Future Priorities*. Belgrade: Government of the Republic of Serbia.

Government of the Republic of Serbia. (2014). *Second National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia: The Status of Social Exclusion and Poverty Trends in the Period 2011–2014 and Future Priorities*. Belgrade: Government of the Republic of Serbia.

Government of the Republic of Serbia. (2018). *Third National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia for the period from 2014 to 2017: The Status of Social Exclusion and Poverty Trends in the Period 2014–2017 and Future Priorities*. Belgrade: Government of the Republic of Serbia.

Hinrichs, K. (2010). A social insurance state withers away. welfare state reforms in Germany – or: attempts to turn around in a cul-de-sac. In B. Palier (Ed.). *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe* (pp. 45–72). Amsterdam: Amsterdam University Press.

Holzmann, R. (2017). The ABCs of nonfinancial defined contribution (NDC) schemes. *International Social Security Review*, 70(3), 53–77.

Matković, G. (2001). Reforme socijalnog sektora. In D. Hiber (Ur.). *Strategija reformi* (pp. 23–26). Beograd: CLDS.

Matković, G. (2005). Reform of pension and disability system. In B. Begović and B. Mijatović (Eds.). *Four Years of Transition in Serbia* (pp. 337–347). Belgrade: CLDS.

Matković, G. (2016). Mirovinski sustav Srbije u svjetlu krize. *Revija za socijalnu politiku*, 23(1), 99–119.

Matković, G. (2019). The welfare state in Western Balkan countries: challenges and options. *Stanovništvo*, 57(1), 27–52.

Matković, G., & Stanić, K. (2014). *Socijalna zaštita u starosti: Dugotrajna nega i socijalne penzije*. Beograd: Fakultet za ekonomiju, finansije i administraciju, Centar za socijalnu politiku, & Tim za socijalno uključivanje i smanjenje siromaštva. Beograd; Vlada Republike Srbije.

Mijatović, B. (2010). *Penzijsko osiguranje poljoprivrednika*. Beograd : USAID Sega projekat

Myles, J. (2002). A new social contract for the elderly? In G. Esping-Andersen (Ed.). *Why We Need a New Welfare State* (pp. 130–172). Oxford: Oxford University Press.

Obinger, H., & Talos, E. (2010). Janus-faced developments in a prototypical Bismarckian welfare state: Welfare reforms in Austria since the 1970s. In B. Palier (Ed.). *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe* (pp. 101–128). Amsterdam: Amsterdam University Press.

- OECD. (2006). Pension-system Typology. *OECD Pensions at a Glance 2005: Public Policies across OECD Countries*. Paris: OECD.
- OECD. (2013). *Pensions at a Glance 2013: OECD and G20 Indicators*. Paris: OECD.
- OECD (2017). *Pensions at a Glance 2017: OECD and G20 Indicators*. Paris: OECD.
- Orenstein, M. (2011). Pension privatization in crisis: Death or rebirth of a global policy trend? *International Social Security Review*, 64(3), 65–80.
- Palier, B. (2006). The Politics of reforms in Bismarckian welfare systems. *Revue Française des Affaires Sociales*, (5), 47–72.
- Palier, B. (Ed.) (2010). *A Long Goodbye to Bismarck? The Politics of Welfare Reform in Continental Europe*. Amsterdam: Amsterdam University Press.
- Schludi, M. (2005). *The Reform of Bismarckian Pension Systems. A Comparison of Pension Politics in Austria, France, Germany, Italy and Sweden*. Amsterdam: Amsterdam University Press.
- Stanić, K. (2010a). *Penzijski sistem u Srbiji – Dizajn, karakteristike i preporuke*. Beograd : USAID Sega projekat.
- Stanić, K. (2010b). Efekti dosadašnjih i nove promene u penzijskom sistemu. U B. Mijatović (Ur.). *Institucionalne Reforme u 2010. godini*. Beograd: Centar za liberalno- demokratske studije.
- Stanić, K. (2012). *Pension system design and its effect on saving*. (Unpublished doctoral dissertation). PhD thesis, University of Nottingham, UK.
- Stanić, K. (2017). Indicators in the field of pensions. In B. Mladenović (Ed.). *Monitoring Social Inclusion in Serbia – Third revised edition*. Belgrade: Social Inclusion and Poverty Reduction Unit of the Government of Serbia.
- Wichhorst, W., Gerard, M., Kendzia, M. J., Mayrhuber, C., Nielsen, C., Rünstler, G., & Url, T. (2011). *Pension Systems in the EU – Contingent Liabilities and Assets in the Public and Private Sector* (IZA Research Reports No. 2011/42). Bonn: IZA Institute of Labor Economics.
- Whitehouse, E., D’Addio, A., Chomik, R., & Reilly, A. (2009). Two decades of pension reform: What has been achieved and what remains to be done? *Geneva Papers on Risk and Insurance – Issues and Practices*, 34(4), 515–535.
- World Bank. (2003a). *Serbia and Montenegro Public Expenditure and Institutional Review Volume II: Serbia*. Washington DC: The World Bank
- World Bank. (2003b). *Serbia and Montenegro Recent Progress on Structural Reforms*. Washington DC: The World Bank.

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DETERMINANTS OF INSTITUTIONAL TRUST IN TRANSITION ECONOMIES: LESSONS FROM SERBIA

ABSTRACT: *This study aims to provide evidence on the drivers of institutional trust in transition economies. Trust in institutions is of critical importance for the consolidation of democracy, as well as for political and social stability. Bearing in mind the political developments during the transition, the fragile democracies of post-socialist countries have faced significant challenges in terms of declining institutional trust, leading to problems of legitimacy and government ineffectiveness. Therefore, the transition countries represent a fertile ground for testing the theories that explain the origins and dynamics of institutional trust. In this paper we explore the level of institutional trust in Serbia and test the alternative views on the determinants of trust in key institutions of*

cultural and institutional theories. The cultural perspective implies that the level of trust in institutions is dependent on citizens' long-standing and deep-seated cultural norms, while the institutional approach explains trust as the outcome of individual perceptions of institutional performance. In order to examine the cultural and institutional variables that explain trust in a set of public institutions in Serbia, we employ individual-level data from the Life in Transition Survey. The analysis is aimed at generating policy suggestions and measures that can raise institutional credibility.

KEY WORDS: *trust, institutions, norms, institutional performance, post-communist transition*

JEL CLASSIFICATION: P26, P30, Z13

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1. INTRODUCTION

Institutional trust is an extensively discussed topic in a growing body of literature on democratic stability, economic growth, social cohesion, and good governance. It is an indispensable element of a democratic political system. Serving as a link between citizens and the institutions representing them, institutional trust is considered an important determinant of the effectiveness and legitimacy of democratic governments. Multi-dimensional models of system support (Norris, 1999a) emphasize that a long-lasting and persistent lack of trust in regime institutions can challenge regime legitimacy. This is especially perceived as a problem from the perspective of democratic consolidation of the new political regimes in post-communist countries. These countries face widespread distrust in institutions, as has been reported in numerous empirical studies (Mishler & Rose, 1997; Kornai & Rose-Ackerman, 2004; Sztompka, 1999).

The political transformation of post-communist countries and the uncertain prospects for strengthening public support for the new democratic institutions has therefore drawn attention to the issue of the origins of institutional trust. A review of the literature on institutional trust indicates that there are several competing theoretical traditions that explain the origins of trust and offer seemingly different perspectives regarding the possibility of post-communist regimes generating trust in institutions. The cultural perspective argues that trust is exogenous to the political sphere and that it originates from deeply rooted beliefs and cultural norms communicated through early-life socialization processes. Cultural theories consider trust in institutions as an extension of interpersonal trust (Almond & Verba, 1963). Basically, it is individuals' general predisposition to trust or distrust that shapes trust in institutions. By contrast, the institutional perspective considers trust as politically endogenous, directly related to policy outputs (Rothstein, 2003). Institutional trust is rationally based and is built on individual perceptions of institutional performance. Institutional performance here is broadly defined, encompassing political and economic outcomes as well as the fairness and impartiality of government procedures. In the case of stable societies with consistently functioning institutions, the two alternative perspectives need not be mutually exclusive, as initial predispositions to trust or distrust are reinforced by later evaluations of institutional performance. However, in the case of post-communist societies that have undergone fundamental changes in social and political

institutions and suffered an obvious institutional discontinuity, the two alternative theories provide significantly different predictions. More precisely, these theories differ in their expectations regarding the new regimes' capacity to generate sufficient trust to consolidate democratic institutions (Mishler & Rose, 2001). The path-dependent nature of trust, as suggested by cultural theories, would take generations to build the trust required for a functional democracy, whereas if trust is determined by the quality of policy outcomes, institutions could generate public support by enacting sound policies and eliminating corrupt practices. In essence, these two lines of thought disagree on the relative importance of early-life socialization versus experience based on perceived performance for building institutional trust.

The purpose of this study is to test alternative theories on the origins of institutional trust in a single-country framework, in order to explain the drivers of institutional trust in Serbia. As institutional trust is recognized as one of the crucial elements of democratic consolidation, countries with low levels of trust are assumed to be less successful in consolidating their democratic systems. As an example, Serbia is a country that still finds itself in a state of prolonged democratic transition. Although the country has experienced more than two decades of political and economic reform, it is classified as a semi-consolidated (defective or flawed) democracy. Irregularities in electoral procedures and violation of elements that guarantee respect for democratic norms and institutions in recent years even indicate a certain democratic setback. Drawing on individual-level data from the large-scale public opinion survey *Life in Transition*, we estimate a multiple regression model of trust in order to explore whether institutional trust in Serbia is determined predominantly by cultural or institutional factors. Based on the experience of other post-communist countries, it is expected that the impact of cultural heritage will diminish over time, while the significance of institutional learning (experience of contemporary political and economic institutions) should be stronger. Testing the relevance of cultural and institutional factors as determinants of institutional trust in Serbia has important implications from the standpoint of policymaking aimed at building trust. Our research aims to identify the prevailing sources of institutional trust in Serbia and point to potential solutions for strengthening citizens' trust in institutions. The analysis contributes to research on the patterns of public support in post-communist countries and their prospects for strengthening institutional trust.

The paper is organized as follows. After introductory notes, section 2 provides a review of the literature on institutional trust and its determinants. In section 3 we specify an econometric model of institutional trust, describe the data used, and elaborate on the choice of variables. Section 4 presents and discusses the results of the empirical analysis. The last section provides concluding remarks and some policy implications.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1. On the importance of institutional trust

The concept of trust is related to expectations of the likely behaviour of people or institutions (Rose-Ackerman, 2001a). An increasing academic interest in trust is associated with its role in overcoming the uncertainty that arises from the complexity of social life. While interpersonal trust refers to horizontal relations between individuals, institutional trust refers to the vertical relationship between citizens and political institutions. Institutional trust, comprehended as citizens' trust in a number of public institutions and actors, indicates whether these institutions act in accordance with public expectations (Tollbert & Mossberger 2006). Under conditions of limited knowledge and incomplete information about the political process and the behaviour of public officials that affects the lives of the ordinary citizens, trust enables actors to handle the uncertainty immanent in everyday transactions.

Exploring the causes of the advancement or decline of nations, Acemoglu and Robinson (2012) conclude that the quality of institutions is the fundamental determinant of the long-term development of society. The quality of institutions depends not only on their efficiency in providing goods and services, but also on their reliability in the eyes of citizens, and citizens' confidence in their effectiveness. Supporting the viability of democratic regimes (Chanley et al., 2000) and reducing transaction costs (Braithwaite & Levi, 1998), institutional trust appears to be a key foundation of a country's political life. It is considered the backbone of good governance and a stable democracy (World Bank, 1992). A high level of trust indicates that citizens consider political institutions as competent, authorizing them to represent their interests (Citrin & Muste, 1999). Moreover, it reinforces support for democratic regimes, encourages information exchange, increases government responsibility (Knack, 2002), and reduces corruption (Rose

& Shin, 2001). It is crucial for the legitimacy of a democratic regime (Braithwaite & Levi, 1998) and plays an important role in institutional development (Tollbert & Mossberger, 2006). Citizens that trust political institutions also tend to perceive collective decisions as legitimate, regardless of whether these decisions are in accordance with their interests (Rudolph & Evans, 2005). In societies where citizens perceive collective decisions as legitimate there is no need for costly control mechanisms (Gamson, 1968). It is difficult to implement policies and regulations when institutional trust and legitimacy are low. In such conditions citizens are less willing to comply with political decisions, so governments resort to coercive measures of rule enforcement, making governance more difficult and expensive.

The legitimacy issue is of particular importance for democratic consolidation in the post-communist countries, where the low levels of institutional trust threaten the survival of democratic regimes (Dogan & Higley, 1998). The specificity of trust patterns in post-communist countries compared to established democracies is related to the profound legacy of distrust in public institutions left by the previous regime (Mishler & Rose, 1997). The widespread corruption has affected the impartiality of public officials, leading citizens to create strong informal networks and develop particularized trust (Reiser, 1999). These strong interpersonal connections served as a protection against the repressive state (Wedel, 1992). Thus, it has been difficult for the newly developed democratic institutions to earn citizens' trust easily. It is therefore not unexpected that institutional trust in new democratic regimes is highly unstable, potentially endangering the consolidation of democratic institutions. As it serves as a buffer against autocratic regression (Badescu & Uslaner, 2003), institutional trust is crucial in emerging democracies.

Institutional trust is also assumed to have economic implications. Trust facilitates the cooperation of individuals and their engagement in collective action, and strengthens the incentive to finance public goods (Meikle-Yaw, 2006). The capacity of the state to collect taxes depends to a large extent on citizens having confidence in its institutions (Kuokstis, 2012). A low level of trust may affect citizens' readiness to pay taxes and consequently the quantity and quality of public services. Hellman and Kaufmann (2004) argue that an increase in perceived corruption in the business environment erodes trust in the judiciary and fosters tax evasion. Furthermore, a low level of trust may affect investment decisions because

citizens and businesses are less liable to take risks, affecting innovation, employment decisions, and long-term growth.

It is assumed that a decline in institutional trust widens the gap between society and the state, with negative repercussions for the country's ability to mobilize national resources and govern economic development (Diamond, 2007). This is why restoring institutional trust is considered one of the most important challenges of the 21st century. However, some authors consider that excessive unconditional trust by citizens can be as problematic as a lack of trust (Norris, 1999b). Although a low level of trust can be interpreted as a symptom of a weak civil society, unrestrained trust can cause political apathy and diminish the mechanisms of government accountability (Gamson, 1968). It can undermine government effectiveness so that a vicious cycle of declining trust and government ineffectiveness is created (Miller, 1974). This means that a certain critical stance towards government policy and actions encourages the accountability of government officials and consequently the quality of decision-making, and can actually strengthen democracy (Norris, 1999a; Rosanvallon, 2008). Thus, the decline of institutional trust need not necessarily produce negative effects (Cook & Gronke, 2005).

2.2. The alternative approaches to explaining the origins of institutional trust

Numerous empirical studies identify a trend of declining levels of institutional trust in consolidated democracies, as well as relatively low trust levels in the emerging democracies. As the deterioration of trust seems to be a continuing feature of contemporary democratic politics, the origins of institutional trust have sparked a vivid debate (Braithwaite & Levi, 1998; Warren, 1999).

Basically, there are two alternative explanations of institutional trust: cultural and institutional. The cultural approach emphasizes political culture as a source of institutional trust, accentuating values and attitudes as key determinants of trust (Almond & Verba, 1963; Putnam, 1993). Institutional theories consider institutional trust to be the result of a rational calculation of costs and benefits, based on citizens' evaluation of institutional performance and fairness (Easton, 1965; Mishler & Rose, 1997; Tyler, 1998). The vast majority of studies are based on these competing theories.

In the cultural approach, socialization processes and the pattern of interpersonal relations are essential for understanding institutional trust. Since different individuals have different priorities, they are likely to react differently to the same incentives (Inglehart, 1999; Shi, 2001). According to Almond and Verba (1963), norms and values significantly affect the process of generating institutional trust. Institutional trust is grounded in long-lasting and deep-rooted beliefs and embedded in cultural norms that are passed on to individuals through the early-life socialization process. Since socialization patterns differ significantly across socioeconomic groups, gender, and cohorts, the predisposition to trust varies in line with these individual attributes (Mishler & Rose, 1997). Micro-level cultural theories imply that substantial variation in individual values, linked to differences in age, gender, family background, income, education, etc., affect individual socialization environments and personal experience, thereby causing significant variation in the predisposition to trust (Dalton, 1996). A number of studies exploring the sources of institutional trust therefore include demographic factors such as age, gender, and education (Christensen & Lægveid, 2002).

Since institutional trust is embedded in cultural norms such as national identification or interpersonal trust, it is exogenous to the political sphere. In countries where prevailing ethnic identities tend to crosscut national identification, this precondition of institutional trust can be particularly challenged (Berg & Hjerm, 2010). Nevertheless, the most frequently explored source of institutional trust within the cultural framework is interpersonal trust, while institutional trust is simply perceived as an extension of interpersonal trust. When people trust fellow citizens they tend to cooperate with each other and are more likely to trust formal institutions (Putnam et al., 1993; Mishler & Rose, 2001).

The relationship between interpersonal and political trust is a widely discussed topic. Both types of trust correspond to the same type of belief, albeit oriented to different objects. Some empirical studies find a significant relationship between interpersonal and institutional trust. The direction of causality goes from trust in people to trust in institutions: individuals that trust fellow citizens also incline to trust institutions (Brehm & Rahn, 1997; Levi, 1998). Others consider these phenomena as independent, associated with different economic, social, and political factors (Newton, 1999; Inglehart, 1999). There is no conclusive evidence that in-

terpersonal trust will necessarily translate into institutional trust: empirical research provides evidence for both arguments. Nor is there a definitive answer regarding causality direction. According to Hall (2002), erosion of interpersonal trust is likely to undermine institutional trust or vice versa, or a set of exogenous factors could be depressing both.

The institutional approach is embedded in the rational choice perspective (Miller, 1974; Mishler & Rose, 1997; Mishler & Rose, 2001; Hutchison & Johnson, 2011). Within this framework, institutional trust is determined by government performance rather than cultural norms (Newton, 2001). Citizens trust institutions on the basis of rational evaluations of institutional design and performance (Huseby, 2000). It is therefore endogenous to political processes (Mishler & Rose, 2001). Trust in institutions acts as a specific form of public support, referring to citizens' positive evaluation of institutional performance (Easton, 1965). Institutions that perform well economically and politically generate trust (Jennings, 1998; Hetherington, 1998; Brennan, 1998; Mishler & Rose, 2001; Rogowski, 1974), while poorly performing institutions encourage scepticism and distrust (Mishler & Rose, 2005). Institutional performance at the level of local governance is of particular importance for citizens' trust in institutions, since their performance is clearly observable and strongly determines the quality of citizens' lives. A vast amount of empirical research has identified the impact of socio-tropic evaluations of economic performance (Miller & Borelli, 1991; Hetherington, 1998; Mishler & Rose, 2001), while others confirm the significance for institutional trust of perceptions of individual economic positions (Citrin & Green, 1986; Mishler & Rose, 2001; Brehm & Rahn, 1997). In terms of political performance, individual evaluations of a system's ability to provide civil liberties, fair treatment, and transparent and effective governance are crucial for explaining trust in institutions (Rothstein, 1998; Mishler & Rose, 1997; Johnson, 2005).

A distinct subset within institutional theories of trust concerns the importance of procedural fairness (Grimes, 2006; MacCoun, 2005; Esaiasson, 2010) or procedural justice (Lind & Tyler, 1988; Tyler, 1988; Tyler, 2006) for institutional trust and institutional legitimacy. According to the theory of procedural fairness, willingness to comply with the rules and decisions created and implemented by public officials depends on citizen's perceptions as to whether these decisions are fairly and impartially implemented, rather than whether they view the decisions

as beneficial to themselves or their group (Tyler, 2006). Perceived procedural fairness is correlated with institutional legitimacy, defined either as institutional trust or willingness to accept decision outcomes (Hibbing & Theiss-Morse, 2002). This suggests that individuals are concerned not only with institutional outcomes but also with the fairness of the decision-making process that leads to these outcomes, and that citizens' evaluation of the fairness of government processes is related to their trust in political institutions.

In the empirical literature there is a clearly established link between procedural fairness, political trust, and institutional legitimacy in general. Analysing the experience of the United States and Norway, Miller and Listhaug (1999) conclude that individuals who perceive they are being treated fairly by the authorities tend to be more trusting towards political institutions. Linde (2012) obtains similar results in his study of the relationship between public authorities' perceived fairness and political trust in ten countries in Central Europe. Tyler (2006) demonstrates that citizens' perceptions of the fairness of the justice system in the United States are more significant in shaping its legitimacy than perceptions of its effectiveness. Two types of procedural justice are important here: justice in the quality of decision-making procedures and justice in the quality of the treatment that people receive in that process. Analysis performed by Grimes (2006) also confirms that procedural fairness influences citizens' trust in the authorities and their willingness to accept a decision outcome. Citizens' perceptions regarding an authority's willingness to engage in public dialogue, explain and justify its decisions, and address citizens' concerns are central to citizens' trust in the authority. Regarding the post-communist economies, Linde (2012) demonstrates that public perceptions of procedural fairness and the extent of corruption strongly affect institutional trust and system support in post-communist EU member states. Esaisson (2010) cites several reasons why citizens are interested in decision-making procedures: they may consider fair treatment as a moral right and procedural fairness as a reason to trust public officials, or as a sign that public authorities respect them. Perceptions of procedural fairness also help them evaluate outcomes when the fairness of outcomes themselves is uncertain.

In the cultural approach, institutional trust is a barometer of democracy (Putnam 1993; Almond & Verba, 1963). From this perspective the decline in institutional trust in many countries during recent decades represents a major problem, since

it could indicate a process of political alienation and declining social capital. In the institutional approach a decline in institutional trust does not represent a significant problem since it reflects citizens' perception of economic and political performance and the fairness of institutions. It should be noted, however, that mechanisms that generate trust operate differently in established and developing democracies.

Although offering different views on the origins of trust, the cultural and institutional approaches agree that trust is something that individuals learn and that it stems from experience. However, the time horizon varies significantly. Cultural theories insist on the predominant importance of the experience of early-life socialization, while institutional theories posit that learning is based on actual experience of institutions and that their political and economic performance fundamentally determines the trust in institutions.

Although cultural theories emphasize interpersonal trust as the foundation of institutional trust, this does not mean that institutional performance is unimportant. The main argument is that the cultural impact is more profound, even conditioning evaluations of economic and political performance (Eckstein et al., 1988). For instance, in societies that do not tolerate corruption, perceptions of corruption have a stronger impact on institutional trust than in societies where corruption is widespread and more tolerated. Conversely, the institutional approach emphasizes institutional performance as a source of institutional trust while not underestimating the importance of cultural inheritance. In an environment of stable and consistent political institutions, social influence and institutional performance should produce similar effects on institutional trust (Mishler & Rose, 2001).

Explaining the origins of trust has significant implications for emerging market economies. If trust in institutions is embedded in social norms and determined through the socialization process, generating the trust necessary for democratic institutions to perform effectively will take decades or generations. However, if trust is determined by institutional performance, democratic regimes can earn trust by implementing sound policies and fighting corruption, which implies a considerably shorter time horizon.

3. METHODOLOGY AND DATA

3.1. The models of institutional trust

In testing the explanatory power of the cultural and performance determinants of institutional trust we draw on the lifetime learning model (Mishler & Rose, 2001), which considers trust in institutions as a function of institutional performance evaluation, but also accounts for early-life pre-political experiences, expressed in the form of interpersonal trust:

$$Tinst_i = B_1PE_i + B_2IT_i + u \quad , \quad (1)$$

where $Tinst$ represents a vector of trust in institutions in a given period; B_1 and B_2 are coefficient vectors; PE indicates contemporary evaluations of institutional performance; IT stands for interpersonal trust, and u is an error term. Since longitudinal data on trust in institutions in post-communist countries is unavailable, the model assumes citizens' ability to evaluate the performance of current institutions regardless of past experience, making trust in institutions a variable dependent on contemporary institutional performance. We slightly adjust the model for the purpose of determining separately the effects of evaluations of political and economic performance on institutional trust:

$$Tinst_i = B_1PE_{pol_i} + B_2PE_{ec_i} + B_3IT_i + u \quad (2)$$

In the second equation the vector of institutional performance is divided into vectors of institutions' political (PE_{pol}) and economic (PE_{ec}) performance. In addition to interpersonal trust, we include basic socio-demographic factors in the set of cultural variables as proxies for early-life socialization. As the theory suggests a possible reciprocal relationship between institutional and interpersonal trust (Brehm & Rahn, 1997), we test for the presence of endogenous variables or potential strong instruments that could affect the relationship between the dependent variable and the predictors in the model. We find that all independent variables appear to be exogenous and estimate the model with the micro-level survey data using the ordinary least squares procedure. More precisely, we conduct separate OLS regressions for the cultural, political performance, and economic performance variables, so as to assess the relative effects of each block of variables on

institutional trust. Finally, we test the combined model that includes all cultural and performance variables.

3.2. Data source and variables

The analysis in our paper is based on the survey data on institutional and interpersonal trust, and social influences and perceptions of political and economic institutional performance, collected in the most recent, third round of the EBRD's *Life in Transition Survey* (LiTS) (EBRD 2016). LiTS is a large-scale cross-national public opinion survey, conducted across the transition region, covering in its latest round 51,000 households in 34 countries (the countries of the former communist bloc in Central and Eastern Europe plus Turkey, Cyprus, Greece, and for the sake of comparison, Germany and Italy). It is a household survey that explores the attitudes and experiences of people living in the transition region and provides a fairly comprehensive picture of their views on various social, economic, and political issues, such as democracy, the market economy, the role of the state, etc. The data used in our analysis was collected at the end of 2015 and the beginning of 2016 through face-to-face interviews in 1,507 households in Serbia. Since trust in institutions is a phenomenon that does not fluctuate daily but changes relatively slowly, we believe that findings on the determinants of trust based on this data are still relevant.

The dependent variable in our analysis relates to the measure of institutional trust. In the LiTS, measuring trust in institutions is based on the question: "To what extent do you trust the following institutions?" and is indicated on a 5-point scale where 1 represents complete distrust, and 5 stands for complete trust. The list comprises 14 different institutions: the presidency, the government, regional government, local government, the parliament, courts, political parties, the armed forces, the police, banks and the financial system, foreign investors, non-governmental organizations, trade unions, and religious institutions (as listed in the LiTS questionnaire).

In creating a composite measure of institutional trust, we assume that trust tends to be generalized across different institutions, which implies that citizens do not have the ability to make sophisticated distinctions between democratic institutions. Although the Principal Component Analysis (PCA) performed on the data on trust in all 14 institutions produces 3 factor components with eigenvalues

larger than 1.0, the first component accounts for 59.5% of the total variance in all measures of trust (the second and the third components explain 8.4% and 7.67% respectively). After the orthogonal rotation of the three factor components (Table 1), the loadings indicate that the first rotated factor measures trust in state institutions (the presidency, the government, regional government, local government, the parliament, the courts, and political parties). The second factor is clearly a measure of trust in private and non-governmental organizations, while the third measures trust in the army, police, and the church (blanks in place of factor loadings <0.3). Based on the PCA results, we construct our composite measure of institutional trust by averaging individual scores of trust in institutions reflected by the first dimension.

Table 1: Dimensions of trust in institutions

Variable	Three-factor model		
	Rotated factor I	Rotated factor II	Rotated factor III
The presidency	0.3679		
The government	0.3880		
Regional government	0.3815		
Local government	0.3659		
Parliament	0.3995		
The courts	0.3071		
Political parties	0.3969		
The armed forces			0.6592
The police			0.5085
Banks and the financial system		0.3087	
Foreign investors		0.4593	
Non-governmental organizations		0.6150	
Trade unions		0.4649	
Religious organizations			0.4393
Eigenvalue	8.33	1.17	1.07
Percentage of variance	59.53	8.40	7.67
KMO measure of sampling adequacy (overall)	0.9429		

Source: EBRD Life in Transition Survey III, 2016.

The theories explaining origins of trust suggest a number of individual-level determinants of trust in institutions that we include in our model. Our key independent variables are divided into those related to the cultural perspective and those reflecting institutional performance.

The set of cultural variables reflects social influences and values as well as socialization experiences that affect people’s attitudes towards institutions. The variable closely intertwined with trust in institutions relates to interpersonal trust, measured in the survey by asking respondents: “Generally speaking, would you say that most people can be trusted, or that you can’t be too careful in dealing with people? Please answer on a scale of 1 to 5, where 1 means that you have complete distrust and 5 means that you have complete trust.” The advantage of this measure is that interpersonal trust is measured by the same metrics as institutional trust, and that it is measured directly, not utilizing different proxies. The group of cultural predictors also includes standard socio-demographic variables, including education, age, gender, and urbanity status, as proxies for the socialization influences.

Table 2: Independent variables – political and economic performance

Variable	Question <i>To what extent do you agree with the following statements? Please indicate on a scale of 1 to 5, where 1 means that you strongly disagree and 5 means that you strongly agree.</i>
Political performance variables	
Political situation (retrospective)	<i>The political situation in our country is better today than around 4 years ago.</i>
Perceived corruption (retrospective)	<i>There is less corruption now than around 4 years ago.</i>
Free and fair elections	<i>Free and fair elections exist in my country.</i>

Independent press	<i>A press that is independent from the government exists in my country.</i>
Impartial courts	<i>A court system that treats all citizens equally rather than favouring some over others exists in my country.</i>
Economic performance variables	
State of the economy (retrospective)	<i>The economic situation in our country is better today than around 4 years ago.</i>
State of the economy (present)	<i>On the whole, I am satisfied with the present state of the economy.</i>
Individual economic conditions (retrospective)	<i>My household lives better nowadays than around 4 years ago.</i>
Individual economic conditions (present)	<i>All things considered, I am satisfied with my financial situation as a whole.</i>

Source: EBRD Life in Transition Survey III questionnaire

The independent variables capturing the effects of the perceived quality of institutions on individuals' trust include political and economic performance variables. The LiTS enables measurement of individuals' evaluations of perceived economic and political success (see Table 2 for a detailed description of the variables and the questions used). Political performance measures capture citizens' perceptions of the regime's capacity to produce desired outputs in the domain of equal treatment, political liberties, corruption, and government fairness. The economic performance variables include both socio-tropic and egocentric evaluations of the current economic conditions and enable comparison with economic performance 4 years ago.

3.3. The level of institutional trust in Serbia

The data on public support for democratic institutions in Serbia a decade and a half after the beginning of institutional transformation indicates that the median Serbian citizen is distrustful of institutions in general, while this holds especially true for the institutions of representative democracy. As reported in Table 3, only

3 out of 14 institutions enjoy positive overall levels of trust: the armed forces, the police, and religious institutions (mean values of trust over 3.00). On the other hand, citizens most distrust political institutions such as political parties, parliament, and local government. Across our set of political institutions, an average of 41% respondents are distrustful, 32% are neutral, and 27% express positive trust.

Table 3: Institutional trust in Serbia

Institution	Distrust (%)	Neutral (%)	Trust (%)	Mean
The presidency	35.0	25.1	39.9	2.98
The government	37.1	27.6	35.3	2.88
Regional government	40.3	37.5	22.2	2.68
Local government	42.5	34.2	23.3	2.65
Parliament	39.4	36.3	24.3	2.72
The courts	39.0	32.9	28.1	2.78
Political parties	52.8	34.0	13.2	2.37
Armed forces	11.8	23.6	64.6	3.72
The police	26.2	24.7	49.1	3.30
Banks and the financial system	29.3	35.9	34.8	3.00
Foreign investors	37.9	35.7	26.4	2.77
Non-government organizations	44.0	29.9	26.1	2.65
Trade unions	40.3	35.7	24.0	2.71
Religious institutions	20.0	29.5	50.5	3.42

Source: EBRD Life in Transition Survey III, 2016. *Note:* Trust scores on a scale of 1–5 are recoded so that 1–2 = Distrust; 3 = Neutral; 4–5 = Trust.

This pattern of low public support for institutions that are vitally important for the development of representative democratic systems (political parties, government, parliament), while actively supporting the least democratic, hierarchical institutions (the church, the army), has been recorded throughout the transition process in Serbia, as evidenced in earlier rounds of the LiTS and our previous studies (Golubović et al., 2014; 2018). The trend of weak citizen support for institutions responsible for the implementation of reforms, and strong support for

institutions whose transformation was necessary for the development of democracy, appears to remain. This is especially troublesome from the perspective of democratic consolidation (Diamond, 1999) and has been evidenced in the early years of transition in a number of post-communist countries.

4. TESTING ALTERNATIVE THEORIES ON THE ORIGIN OF TRUST

The individual-level theories on the origins of institutional trust suggest that individuals' trust in institutions varies according to their different socialization experiences (social influences, education, trust in people – as implied by the cultural perspective) or due to different perceptions of the institutions' political and economic performance (from the viewpoint of institutional theories). Therefore, a comprehensive understanding of where trust originates should take into account a range of variables that embody both cultural and institutional factors. In order to explore how the suggested explanatory variables affect the level of institutional trust, we estimate separate multiple regression models of trust to assess the relative effects of cultural, political performance, and economic performance variables. In addition, we test the combined model that includes both cultural and performance variables. The estimated coefficients of regressing institutional trust on a selected set of predictors are presented in Table 4.

The regression results indicate that the explanatory power of the performance variables in shaping citizens' trust in institutions is relatively strong, inclining to confirm institutional theories of the origins of trust. The cultural model (Model 1) is statistically significant in terms of the F-statistics, but explains only 5% of the variance in institutional trust. Models including political performance (Model 2) and economic performance (Model 3) variables have significantly stronger explanatory power. The determination coefficient of the combined model (4) is slightly larger than that including the evaluation of political performance, suggesting that cultural predictors add very little to the explanation of the origins of institutional trust.

Table 4: OLS estimations of the determinants of institutional trust

VARIABLE	Model 1	Model 2	Model 3	Model 4
Education	-0.026 [0.022]			-0.016 [0.016]
Age	-0.0003 [0.002]			-0.0004 [0.001]
Gender	-0.037 [0.060]			0.043 [0.043]
Urbanity status	0.0897 [0.064]			0.124*** [0.046]
Interpersonal trust	0.240*** [0.031]			0.091*** [0.023]
Political situation (retrospective)		0.177*** [0.025]		0.117*** [0.029]
Perceived corruption (retrospective)		0.205*** [0.025]		0.162*** [0.027]
Free and fair elections		0.139*** [0.027]		0.139*** [0.026]
Independent press		0.154*** [0.027]		0.152*** [0.027]
Impartial courts		0.087*** [0.026]		0.054** [0.026]
State of the economy (retrospective)			0.318*** [0.028]	0.068** [0.031]
State of the economy (present)			0.214*** [0.031]	0.076*** [0.028]
Individual economic conditions (retrospective)			0.013 [0.032]	-0.026 [0.027]
Individual economic conditions (present)			0.061** [0.028]	0.042* [0.025]
Constant	1.957*** [0.238]	0.493*** [0.069]	1.136*** [0.075]	0.032 [0.178]
Observations	1,074	1,074	1,074	1,074
Adjusted R-squared	0.050	0.514	0.353	0.532
F statistics	12.4 (0.000)	228.01 (0.000)	147.03 (0.000)	88.13 (0.000)

Note: Standard errors in square brackets, p-values in parenthesis; *** p<0.01, ** p<0.05, * p<0.1

The only cultural variable that is statistically significant in Model 1 is interpersonal trust, with a rather strong positive influence on institutional trust. This finding partly confirms the cultural perspective and the assumption that trust in people tends to affect individuals' attitudes in terms of a more favourable disposition towards institutions. This result is in line with a number of previous empirical studies (Putnam, 1993; Inglehart, 1997; Luhiste, 2006). However, based on our data, these results are generated only when the set of cultural variables is assessed in isolation. When accounting for various performance variables the power of this predictor is significantly lower (an increase in interpersonal trust by one point on the 5-point scale raises institutional trust by 0.09 points in the combined model). None of the other proxies for cultural influences (education, age, gender, urbanity status) have statistical significance, while all of them, including interpersonal trust, explain only 5% of the total variance in trust in institutions.

Regressing institutional trust on the perceived political performance variables (Model 2) reveals that individual evaluations of political performance have a substantial impact on shaping citizens' trust in institutions. The five political performance variables combined explain as much as 51% of the variance in institutional trust. All variables are statistically significant, with relatively large effects on the dependent variable. The results imply that perceived institutional performance in providing fair and just governance generates stronger trust in institutions. The largest single influence on trust is produced by individual perceptions of the spread of corruption in society. Individuals who believe that the level of corruption has decreased in the previous four years tend to rank 0.2 points higher on the trust scale ($p < 0.01$). Similarly, believing that the political situation has improved over the last years increases individuals' trust in institutions by 0.18 ($p < 0.01$). People who believe that institutions treat them fairly and that the political system provides freedom and justice (existing free and fair elections, press independent from the government, courts that treat all citizens equally) are more likely to trust institutions.

The model of trust including the perceived economic performance variables (Model 3) supports the assumption that citizens' satisfaction with economic conditions has a robust effect on institutional trust. Three of the four economic performance variables appear to be statistically significant in the model, all of them

combined explaining around 35% of the total variance in trust. Socio-tropic economic evaluations have primacy over evaluations of individual household conditions. Individuals who perceive an improvement in overall macroeconomic conditions over recent years or are satisfied with the current state of the economy by one point on the scale tend to rank higher on the trust scale, by 0.32 and 0.21 points respectively ($p < 0.01$). Considerations of present individual economic conditions affect institutional trust to a certain extent, although the impact is rather weak (0.06 points at $p < 0.05$). Retrospective evaluations of household economic position do not impact trust in institutions in our model. This finding is unsurprising, as a number of empirical explorations of this relationship have confirmed that socio-tropic economic evaluations matter more than assessments of individual economic position (Mishler & Rose, 2001, 2002; Luhiste, 2006), aligning the citizens in our sample with individuals throughout the post-communist world, and also in established democracies (Clarke et al., 1992). Such behaviour is founded on the fact that individuals hold government institutions responsible for national economic conditions rather than individual well-being. If evaluated positively in terms of providing sound economic policies and a favourable economic environment, institutions enjoy higher levels of citizen trust.

Models of institutional trust including evaluations of political and economic performance (models 2 and 3) speak strongly in favour of the institutional perspective on the origins of trust. The results of these regressions confirm that individuals in Serbia trust institutions if they believe institutions are performing effectively. Our combined model of trust (Model 4) that takes into account both cultural and performance variables does not yield much new information. The addition of the cultural variables to the model containing performance predictors does not substantially increase the explained variance. The political performance variables remain significant in the combined model with slightly lower coefficient values, indicating the persistent explanatory power of perceptions of political performance for institutional trust.

We believe the combined model of institutional trust that explains 53% of the variance to be well-fitted. Standard post-estimation procedures were performed to assure that no assumptions of the OLS regression were violated. The Breusch-Pagan/Cook Weisberg heteroscedasticity test indicates homogenous residuals ($\text{Prob} > \chi^2 = 0.4844$), while the Shapiro-Wilk test for normal data confirms the

normal distribution of residuals ($\text{Prob} > z = 0.1156$). No multicollinearity was detected between the independent variables. In this model, two cultural variables seem to affect institutional trust to a certain extent. Interpersonal trust remains significant, although the value of the coefficient is 2.5 times smaller, indicating that interpersonal trust loses its explanatory power when accounting for the performance variables. Urbanity status appears to produce a certain effect on trust in institutions, in the sense that individuals living in rural areas tend to trust institutions more. Evaluations of economic performance remain significant in the combined model, although with decreased coefficient values. The baseline conclusion that follows from the analysis is that individual evaluations of political performance decisively affect trust in institutions.

5. CONCLUDING REMARKS

The findings of our analysis of institutional trust in Serbia imply a widespread distrust in the representative institutions that are the corner stone of modern democracies. In order to identify factors that determine the level of institutional trust in Serbia we tested the relevance of the cultural and institutional approaches. Both theoretical perspectives on the origins of trust predict low levels of institutional trust in post-communist countries, but for different reasons. Cultural theories suggest that the legacy of distrust and the political culture inherited from the previous regime are the main causes of the absence of trust in new democracies, while institutional theories ascribe this to the poor performance of the democratic institutions. Either way, distrust in institutions is a severe threat to the legitimacy of democratic regimes. Distrust easily slips into a more general discontent with democracy and paves the way for populist or anti-democratic political forces. Under such conditions the issue of building trust in institutions is crucial.

Our results imply that trust in institutions is by and large endogenous, strongly supporting institutional explanations of the sources of trust. Although a certain effect of interpersonal trust as a cultural determinant cannot be overlooked, we find that institutional performance – particularly perceived political performance – has a stronger explanatory power than the cultural variables. The figures also speak in favour of socio-tropic economic evaluations as a factor affecting institutional trust. As long as citizens positively evaluate the conduct and performance of institutions in providing civil liberties, fair and transparent governance, and a

favourable economic environment, institutions will enjoy public support. Citizens in Serbia believe that the political system fails to provide an equal playing field for all citizens and deliberately discriminates. This relationship between citizens and institutions is the cause of the weak support for the political regime and its institutions, seriously obstructing the country's chances of consolidating its democracy.

The implications for government policies aimed at strengthening institutional trust in the long run are that government procedures need to be improved: the response to public priorities needs to be effective, citizens' freedoms need to be protected, and corruption needs to be eradicated. This study indicates that institutions earn trust by being trustworthy. Bearing in mind the time horizons suggested by the cultural and institutional theories regarding institutions' ability to generate sufficient trust to consolidate democracy, our results might be regarded as optimistic. If trust simply depends on improving government procedures the process could take months or years, but it is certainly an easier option than decades or generations of building trust by changing social norms or socialization patterns. However, it is not likely that trust in Serbian institutions will increase in the near future. As Freedom House reports indicate, the quality of democratic governance in Serbia has steadily declined for four consecutive years due to electoral irregularities, limited freedom of the press, and a hostile atmosphere toward the civil sector (Freedom House, 2018). Serbia is also regarded as a country with high levels of corruption, as measured by the CPI (Transparency International), with no recorded positive results in fighting corruption in the last decade. Therefore, generating trust in Serbian institutions will continue to be a challenge.

REFERENCES

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- Acemoglu, D., & Robinson, J. (2012). *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. New York: Crown Publishing Group.
- Almond, G., & Verba, S. (1963). *The Civic Culture*. Boston: Little, Brown and Co.
- Badescu, G., & Uslander, E.M. (Eds.) (2003). *Social Capital and the Transition to Democracy*. London: Routledge.

DETERMINANTS OF INSTITUTIONAL TRUST

- Braithwaite, V., & Levi, M. (Eds.) (1998). *Trust and Governance*. New York: Russell Sage.
- Berg, L., & Hjern, M. (2010). National identity and political trust. *Perspectives on European Politics and Society*, 11 (4), 390–407.
- Brehm, J., & Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American Journal of Political Science*, 41(3), 999–1923.
- Brennan, G. (1998). Democratic trust: A rational choice theory view. In V. Braithwaite and M. Levi (Eds.), *Trust and Governance* (pp. 197–217). New York: Russell Sage Foundation.
- Chanley, V. A., Rudolph, T. J., & Rahn, W. M. (2000). The origins and consequences of public trust in government. *Public Opinion Quarterly*, 64(3), 239–256.
- Citrin, J., & Green, D.P. (1986). Presidential leadership and the resurgence of trust in government. *British Journal of Political Science*, 16 (4), 431–453.
- Citrin, J., & Muste, C. (1999). Trust in government. In Robinson, J.P., Shaver, P.F. & L.S. Wrightsman (Eds.), *Measures of Political Attitudes* (pp. 465–532). San Diego: Academic Press.
- Clarke, H. D., Elliott, E., Mishler, W., Stewart, M., Whiteley, P. F., & Zuk, G. (1992). *Controversies in Political Economy*. Boulder, CO: Westview.
- Christensen, T., & Læg Reid, P. (2002). *Trust in government – the relative importance of service satisfaction, political factors and demography*. (Working paper No. 2002/18) Bergen: Stein Rokkan Centre for Social Studies, Bergen University Research Foundation.
- Cook, T. E., & Gronke, P. (2005). The skeptical American: Revisiting the meanings of trust in government and confidence in institutions. *Journal of Politics*, 67(3), 784–803.
- Dalton, J. R. (1996). *Citizen Politics: Public Opinion and Political Parties in Advanced Western Democracies*. Chatham, NJ: Chatham House.
- Dalton, J. R. (2000). The decline of party identifications. In Dalton, J.R. and M.P. Wattenberg (Eds.), *Parties Without Partisans: Political Change in Advanced Industrial Democracies* (pp. 20–36). Oxford: Oxford University Press.
- Diamond, L. (1999). *Developing Democracy: Toward Consolidation*. Baltimore and London: The Johns Hopkins University Press.
- Diamond, L. (2007). *Building Trust in Government by Improving Governance*. Paper presented at the 7th Global Forum on Reinventing Government. Vienna, 27 June 2007.
- Dogan, M., & Highley, J. (1998). *Elites, Crises, and the Origins of Regimes*. New York: Roman and Littlefield.
- Easton, D. (1965). *A System Analysis of Political Life*. New York: John Wiley & Sons, Inc.

EBRD (2016). Life in Transition Survey III [database]. <http://www.ebrd.com/what-we-do/economic-research-and-data/data/lits.html>

Eckstein, H., Frederick J., Fleron, Jr., Hoffmann, E.P., & Reisinger, W. M. (1998). *Can Democracy Take Root in Post-Soviet Russia? Explorations in State–Society Relations*. Lanham, MD: Rowman & Littlefield.

Esaiasson, P. (2010). Will citizens take no for an answer? What government officials can do to enhance decision acceptance. *European Political Science Review*, 2(3), 351–371.

Freedom House (2018). *Nations in Transit 2018*. Washington, DC: Freedom House.

Gamson, W. A. (1968). *Power and Discontent*. Homewood, IL: Dorsey Press.

Grimes, M. (2006). Organizing consent: The role of procedural fairness in political trust and compliance. *European Journal of Political Research*, 45 (2), 285–315.

Golubović, N., Džunić, M., & Marinković, S. (2014). A comparative analysis of social capital in the Western Balkan countries. *Industrija*, 42(2), 71–92.

Golubović, N., Džunić, M., & Marinković, S. (2018). The origins of institutional trust in Serbia – a performance-based approach. In Marković, Lj. and D. Demirdizen Çevik (Eds.) *Society, Culture, National Identity & Immigration* (pp. 89–103). London: IJOPEC Publication Limited.

Hall, P. A. (2002). Great Britain: The role of government and the distribution of social capital. In Putnam, R.D. (Ed.) *Democracies in Flux. The Evolution of Social Capital in Contemporary Society* (pp. 21–58). Oxford: Oxford University Press.

Hellman, J., & Kaufmann, D. (2004). *The Inequality of Influence*. In: Kornai J., Rose-Ackerman S. (eds) *Building a Trustworthy State in Post-Socialist Transition. Political Evolution and Institutional Change*. Palgrave Macmillan, New York.

Hetherington, M. J. (1998). The political relevance of political trust. *The American Political Science Review*, 92 (4), 791–808.

Hibbing, J. R., & Theiss-Morse, E. (2002). *Stealth Democracy. Americans' Beliefs About How Government Should Work*. Cambridge: Cambridge University Press.

Huseby, B. M. (2000). *Government Performance and Political Support. A Study of How Evaluations of Economic Performance, Social Policy and Environmental Protection Influence Popular Assessments of the Political System*. Trondheim: Institutt for sosiologi og statsvitenskap.

Hutchison, M. L., & Johnson, K. (2011). Capacity to trust? Institutional capacity, conflict, and political trust in Africa, 2000–2005. *Journal of Peace Research*, 48 (6), 737–52.

Inglehart, R. (1997). *Modernization and Postmodernization: Cultural, Economic and Political Change in 41 Societies*. Princeton: Princeton University Press.

DETERMINANTS OF INSTITUTIONAL TRUST

Inglehart, R. (1999). Trust, well-being and democracy. In M. Warren (Ed.), *Democracy & Trust* (pp. 88–120). Cambridge: Cambridge University Press.

Jennings, K. (1998). Political trust and the roots of devolution. In V. Braithwaite and M. Levi (Eds.), *Trust and Governance* (pp. 2018–244). New York: Russell Sage Foundation.

Johnson, I. (2005). Political trust in societies under transformation. *International Journal of Sociology*, 35(2), 63–84.

Kornai, J., & Rose-Ackerman, S. (2004). *Building a Trustworthy State in Post-socialist Transition*. New York: Palgrave Macmillan.

Knack, S. (2002). Social capital and the quality of government: Evidence from the United States. *American Journal of Political Science*, 46 (4), 772–787. _

Kuokstis, V. (2012). Trust and taxes: Estonian and Lithuanian fiscal performance during the crisis. *APSA 2012 Annual Meeting Paper*. Washington, DC: American Political Science Association

Levi, M. (1998). *Of Rule and Revenue*. Berkeley: University of California Press.

Lind, E. A., & Tyler, T. R. (1988). *The Social Psychology of Procedural Justice*. New York: Plenum.

Linde, J. (2012) Why feed the hand that bites you? Perceptions of procedural fairness and system support in post-communist democracies. *European Journal of Political Research*, 51(3), 410–434.

Luhiste, K. (2006). Explaining trust in political institutions: Some illustrations from the Baltic States. *Communist and Post-Communist Studies*, 39(4), 475–496.

MacCoun, R. J. (2005). Voice, control, and belonging: The double-edged sword of procedural fairness. *Annual Review of Law and Social Science*, 1(1), 171–201.

Meikle-Yaw, P. A. (2006). *Democracy Satisfaction: The Role of Social Capital and Civic Engagement in Local Communities*. Mississippi: Mississippi State University, Department of Sociology, Anthropology and Social Work.

Miller, A. H. (1974). Political issues and trust in government: 1964–1970. *American Political Science Review*, 68(03), 951–72.

Miller, A. H., & Borelli, S. A. (1991). Confidence in government during the 1980s. *American Politics Quarterly*, 19 (2), 147–173.

Miller, A. H., & Listhaug, O. (1999). Political performance and institutional trust. In P. Norris, (Ed.), *Critical Citizens: Global Support for Democratic Government* (pp. 204–216). Oxford: Oxford University Press.

Mishler, W., & Rose, R. (1997). Trust, distrust and skepticism: Popular evaluations of civil and political institutions in post-communist societies. *The Journal of Politics*, 59(02), 418–451.

- Mishler, W., & Rose, R. (2001). What are the origins of political trust? Testing institutional and cultural theories in post-communist societies. *Comparative Political Studies*, 34(1), 30–62.
- Mishler, W., & Rose, R. (2002). Learning and re-learning regime support: the dynamics of post-communist regimes. *European Journal of Political Research*, 41 (1), 5–36.
- Mishler, W., & Rose, R. (2005). What are the consequences of trust? A test of cultural and institutional theories in Russia. *Comparative Political Studies*, 38(9), 1050–1078.
- Newton, K. (1999). Social and political trust in established democracies. In P. Norris, (Ed.), *Critical Citizens: Global Support for Democratic Government* (pp. 169–187). New York: Oxford University Press.
- Newton, K. (2001). Trust, social capital, civil society, and democracy. *International Political Science Review*, 22 (2), 201–14.
- Norris, P. (Ed.) (1999a). *Critical Citizens: Global Support for Democratic Government*. Oxford: Oxford University Press.
- Norris, P. (1999b). Conclusion: The growth of critical citizens and its consequences. In Norris, P. (Ed.), *Critical Citizens: Global Support for Democratic Governance* (pp. 257–272). Oxford: Oxford University Press.
- Putnam, R. D. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- Reiser, M. (1999). Trust in Transition. *Working Paper No 39*. London: European Bank for Reconstruction and Development.
- Rogowski, R. (1974). *Rational Legitimacy: A Theory of Political Support*. Princeton, NJ: Princeton University Press.
- Rosanvallon, P. (2008). *Counter-Democracy: Politics in an Age of Distrust*. Cambridge: Cambridge University Press.
- Rose-Ackerman, S. (2001a). Trust and honesty in post-socialist societies. *Kyklos*, 54 (2–3), 415–443.
- Rothstein, B. (1998). *Just Institutions Matter: The Moral and Political Logic of the Universal Welfare State*. Cambridge: Cambridge University Press.
- Rothstein, B. (2003). Social capital, economic growth and quality of government: The causal mechanism. *New Political Economy*, 8(1), 49–71.
- Rudolph, T. J., & Evans, J. (2005). Political trust, ideology and public support for government spending. *American Journal of Political Science*, 49(3), 660–671.

DETERMINANTS OF INSTITUTIONAL TRUST

Shi, T. (2001). Cultural values and political trust: A comparison of the people's Republic of China and Taiwan. *Comparative Politics*, 33(4), 401–419.

Sztompka, P. (1999). *Trust: A Sociological Theory*. Cambridge: Cambridge University Press.

Tyler, T. (1988). What is procedural justice? Criteria used by citizens to assess the fairness of legal procedures. *Law & Society Review*, 22(1), 103–136.

Tyler, T. (2006). Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology*, 57 (2), 375–400.

Warren, M. (1999). Democratic theory and trust. In M. Warren (Ed.), *Democracy and Trust* (pp. 310–345). Cambridge: Cambridge University Press.

Wedel, J. R. (Ed.). (1992). *The Unplanned Society: Poland During and After Communism*. New York: Columbia University Press.

World Bank (1992). *Good Governance and Development*. Washington: The World Bank.

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THE IMPACT OF INSTITUTIONAL QUALITY ON ECONOMIC GROWTH: A COMPARATIVE ANALYSIS OF THE EU AND NON-EU COUNTRIES OF SOUTHEAST EUROPE

ABSTRACT: *The quality of institutions and its impact on economic growth has become more important in recent years, especially in transition countries that must reform their institutions to create a market economy and meet the preconditions for joining the EU. This is the case with the countries of Southeastern Europe, some of which are already EU members, while others are in the process of joining the EU. This paper examines the effects of institutional quality on the economic growth of South-East Europe and compares these effects in EU and non-EU countries for the period 1996–2017, using Worldwide Governance Indicators (WGI) to measure the quality of institutions and the GDP growth rate. The panel autoregressive distributed lag (ARDL) approach is used to analyse the*

relationship between institutional quality and economic growth. The results show that in EU countries there is a long-run relationship between institutional quality and economic growth for all significant variables, while in the non-EU countries only government effectiveness, political stability and absence of violence, regulatory quality, and voice and accountability are statistically significant. Furthermore, in EU countries there is no short-run relationship between institutional quality and economic growth, while in the non-EU countries of SEE, regulatory quality and voice and accountability are significant.

KEY WORDS: *institutional quality, economic growth, South-East Europe, Worldwide Governance Indicators, GDP*

JEL CLASSIFICATION: O43, O47, C33

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1. INTRODUCTION

The quality of institutions and its impact on economic growth has become more important in recent years, especially in transition countries that have to reform their institutions to create a market economy and meet the preconditions for joining the EU. North (1991) defines institutions as constraints designed by people who shape political, economic, and social interactions. They consist of informal prohibitions (sanctions, customs, codes of conduct) and formal rules (laws, property rights). When the prosperity of a country is evaluated its institutions must be taken into account. Legal and administrative organisations, which are the pillars of a society, establish an environment for the creation of social well-being. The legal and administrative frameworks within which individuals, businesses, and government interact to generate revenue and ensure economic prosperity define the institutional environment. Institutional support for the development of market freedoms, finding the optimal level of regulation, preventing corruption, freeing the judiciary from political dependence, and protecting the environment are also important (Račić & Pavlović 2012).

According to the 1993 Copenhagen Criteria, the first criterion a country seeking to become an EU member must meet is that of stable institutions that guarantee democracy, the rule of law, human rights, and respect for and protection of property. Accordingly, it is necessary to build an institutional framework that will be able to align the functioning of institutions with these criteria and with EU institutions in order that the country can become an EU member state. This is the case with the countries of Southeastern Europe (SEE), some of which are already EU members, while others are in the process of joining the EU. Therefore, the aim of this paper is to examine the effects of institutional quality on the economic growth of Southeast European countries and to compare these effects in EU and non-EU countries. The hypotheses of the research are as follows:

Hypothesis 1: There is a long-run relationship between economic growth and quality in SEE countries, EU member countries, and non-EU countries.

Hypothesis 2: There is a short-run relationship between economic growth and institutional quality in both non-EU and EU SEE countries.

Hypothesis 3: In response to a short-run shock, the convergence to the long-run equilibrium will be faster in the SEE EU member countries than in non-EU SEE countries.

Paper is structured as follows. After the introduction, section 2 provides a literature review of previous studies of the impact of institutional quality on economic growth. Section 3 presents the data and methodology. Section 4 presents the empirical results and discussion, and section 5 concludes.

2. LITERATURE REVIEW

Since the transition of former socialist countries to market economies, interest in the quality of institutions as a determinant of economic growth has increased (Elster et al., 1998; Rodrik, 2008; Acemoglu & Robinson, 2010; Gani, 2011; Nawaz et al., 2014; Shapkova & Disoska, 2017). Although there is a lot of research on the disparities between countries, no determination has been reached as to how to reduce these disparities. However, empirical and theoretical research examining the determinants of economic growth has found the quality of institutions to be an essential determinant of inequality between countries.

Several authors have argued that the quality of institutions significantly affects economic growth. Referring to the quality of institutions, Kaufmann et al. (2011) highlight the following characteristics: government competence to formulate and implement key economic policies effectively; the quality of the electoral system that enables the election, monitoring, and change of government; and the appreciation of these institutions by citizens and the government that governs the economic and social interactions between them. The failure of several countries to implement the transition has been attributed to weak institutional quality (Rodrik, 2008): standard reforms did not produce lasting results because deeper institutional factors were unfavourable.

Numerous studies have shown that growth depends on an accumulation of human capital and access to modern technologies, which is conditioned by institutional characteristics such as the organisation and functioning of the manufacturing sector, government efficiency, the rule of law, and the quality of the legal system. Mauro (1995), Knack and Keefer (1995), and Barro (1997) also find institutions to be vital for investment and long-term sustainable growth. Hall

and Jones (1999) find that differences in the quality of institutions worldwide cause variation in capital accumulation, education, and productivity growth, and unequal income distribution.

Acemoglu and Robinson (2010) consider institutions to be a key determinant of economic growth that cause unequal development across a country. Institutions that design incentives in society can stimulate or reduce economic activity. Murphy et al. (1993) find that poor-quality institutions can slow down economic activity by directing economic agents to redistributive policies with lower economic returns instead of growth-enhancing economic activities.

Nawaz et al. (2014) conduct an empirical analysis to determine the effect of institutions on economic growth in Asian economies from 1996 to 2012 using Generalized Method of Moments (GMM) with fixed effects. The results show that there is a relationship between institutions and economic growth and that these effects differ in developed and developing countries. Furthermore, they find that institutions are more effective in determining long-run economic growth in developed than developing countries, and that institutions in developing countries need to change in order to facilitate economic growth. Shapkova and Disoska (2017) investigate the impact of trade and institutions on economic growth in transition economies in Central and Eastern Europe and the Western Balkans from 2000 to 2016 using panel regression analysis. The results show a positive relationship between economic growth and the rule of law, control of corruption, regulatory quality, and voice and accountability.

Samarasinghe (2018) examines the impact of governance and institutional quality on economic growth for 145 countries from 2002 to 2014 using fixed-effects and random-effects panel regression models. The results show a significant positive relationship between economic growth and control of corruption at the 5% significance level, and between economic growth and political stability and absence of violence at the 10% significance level. Han et al. (2014) examine whether governance indicators explain development performance. They find that government effectiveness, political stability, control of corruption, and regulatory quality all have a more significant positive impact on a country's growth than voice and accountability and the rule of law. The authors propose that low-income countries should try to improve government effectiveness, the rule of law,

and regulatory quality, while decreasing the level of corruption. On the other hand, middle-income and high-income countries will benefit if voice and accountability and political stability are improved (Han et al. 2014).

Iqbal and Daly find that an absence of the rule of law, inadequate political and public policies, and a lack of reliable infrastructure constitute a weak institutional framework that cannot contribute to the development of a market economy and economic growth (Iqbal & Daly, 2004). They argue that in transition economies democracy is associated with economic growth, while in democratic countries a lower level of corruption is associated with rapid economic growth. North (1990) finds that good quality institutions can stimulate economic growth by reducing uncertainty and promoting efficiency. Gani (2011) investigates the relationship between economic growth and voice and accountability and finds a negative relationship between these variables. Furthermore, he finds a negative relationship between the control of corruption and economic growth in developing countries. He advocates that developing countries improve voice and accountability, regulatory quality, and the rule of law, as the main obstacles to their economic growth. Furthermore, these countries can enhance economic growth by reducing the level of corruption, since high levels of corruption weaken the quality of institutions.

Djankov et al. (2003) find that better-regulated countries grow faster and that long-term sustainable economic growth depends on the quality of institutions. Without well-functioning institutions, all policies and processes are less efficient, and markets cannot function well if EU accession countries do not strengthen their institutions in parallel with fulfilling other conditions. The risk of formally entering the end of negotiations without sufficient administrative capacity increases, i.e., without quality institutions with trained personnel that can function efficiently in the EU. A lack of sufficient quality institutions fails to meet certain EU accession requirements and may impact a country's economic growth by curtailing appropriate pre-accession funding (Đurović, 2016). Moreover, infrastructure, macroeconomic stability, and trade reform cannot contribute to the competitiveness of an economy without an excellent institutional framework. The ultimate goal of raising the competitiveness of the economy is to raise the living standard of the population, and this cannot be achieved without an appropriate development strategy and the elimination of systemic constraints,

which implies the correction of economic policy and the strengthening of market institutions, institutions, and the rule of law (Maksimović, 2012).

3. DATA AND METHODOLOGY

Kaufmann et al. (2008) created aggregate and individual governance indicators that include the following dimensions of governance:

- *Voice and accountability* – the extent to which citizens of a particular country can participate in the choice of government; perceptions of freedom of expression, freedom of association, and freedom of the media.
- *Political stability and absence of violence* – the likelihood that the government will be destabilised or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism.
- *Government effectiveness* – the quality of public services, the quality of the civil service and the degree of its independence from political pressure, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
- *Regulatory quality* – the government's ability to formulate and implement policies and regulations that allow and promote private sector development.
- *The rule of law* – the extent to which institutions trust and respect the rules of society, and the quality of contract performance, property rights, police and court work, and the likelihood of crime and violence.
- *Control of corruption* – the extent to which public authority is used for private gain, including both major forms of corruption and the extent to which elites and private interests abuse state institutions.

The methodology encompasses several hundred variables from 31 different data sources and contains management perceptions such as reports from respondents, NGOs, commercial business information providers, and public sector organisations worldwide. The composite indicator of effective institutional governance is expressed through a system of equations in standard regular units in the range of -2.5 to 2.5 (Jakopin, 2018).

This paper uses annual data for six governance indicators (WGI) and the GDP growth rate for the period 1996–2017 for five SEE EU member countries (Croatia,

Romania, Bulgaria, Greece, and Slovenia) and five non-EU SEE countries (Serbia, Bosnia and Herzegovina, North Macedonia, Albania, and Montenegro). Data were retrieved from the World Bank database.

The model follows Samarasinghe (2018), Gani (2011), and Nawaz et al. (2014). Samarasinghe (2018) includes only political stability and absence of violence/terrorism, control of corruption, and voice and accountability. Since there was no problem of multicollinearity between variables, our model includes three additional indicators: government effectiveness, regulatory quality, and the rule of law. The idea of examining the impact of institutional quality on the economic growth of EU and non-EU members is based on Nawaz et al. (2014), who examine these effects separately for developed and developing Asian countries.

The following equation establishes the model:

$$GDP_{it} = f(VA_{it}, PS_{it}, GE_{it}, RQ_{it}, RL_{it}, CC_{it}) \quad (1)$$

where GDP_{it} is GDP growth of country i in period t , VA_{it} is voice and accountability of country i in period t , PS_{it} is political stability and absence of violence/terrorism of country i in period t , GE_{it} is government effectiveness of country i in period t , RQ_{it} is the regulatory quality of country i in period t , RL_{it} is the rule of law of country i in period t , CC_{it} is control of corruption of country i in period t ; and $t = 1996, \dots, 2017$.

Therefore, the following long-term (2) and short-term (3) equations are estimated simultaneously:

$$GDP_{it} = \alpha_1 + \sum_{l=1}^{p_t-1} \beta_{il}^* GDP_{i,t-l} + \sum_{l=0}^{q_i} \delta_{il}^* VA_{i,t-l} + \sum_{l=0}^{k_i} \theta_{il}^* PS_{i,t-l} + \sum_{l=0}^{m_i} \gamma_{il}^* GE_{i,t-l} + \sum_{l=0}^{n_i} \rho_{il}^* RQ_{i,t-l} + \sum_{l=0}^{s_i} \nu_{il}^* RL_{i,t-l} + \sum_{l=0}^{u_i} \tau_{il}^* CC_{i,t-l} + e_{it} \quad (2)$$

$$\begin{aligned}
 DGDP_{it} = & \varphi ECT_{i,t-l} + \sum_{l=1}^{p_i-1} \beta_{il} DGDP_{i,t-l} + \sum_{l=0}^{q_i} \delta_{il} DVA_{i,t-l} + \\
 & \sum_{l=0}^{k_i} \theta_{il} DPS_{i,t-l} + \sum_{l=0}^{m_i} \gamma_{il} DGE_{i,t-l} + \sum_{l=0}^{n_i} \rho_{il} DRQ_{i,t-l} + \\
 & \sum_{l=0}^{s_i} \vartheta_{il} DRL_{i,t-l} + \sum_{l=0}^{u_i} \tau_{il} DCC_{i,t-l} + \alpha_2 + e_{it}
 \end{aligned} \tag{3}$$

where β_{il}^* , δ_{il}^* , θ_{il}^* , γ_{il}^* , ρ_{il}^* , ϑ_{il}^* , τ_{il}^* are long-run coefficients and β_{il} , δ_{il} , θ_{il} , γ_{il} , ρ_{il} , ϑ_{il} , τ_{il} are short-run coefficients.

The equations are estimated separately for two groups of countries: EU SEE countries and non-EU SEE countries. A cross-section dependence test and unit root tests are applied to determine whether cross-section dependence exists between data and whether the data are integrated of the same order. The Auto-Regressive Distributed Lag (ARDL) approach is used to determine whether there is a short-run and long-run relationship between economic growth and institutional quality.

4. RESULTS AND DISCUSSION

Table 1 shows the descriptive statistics for all the variables used in the study. The average GDP growth rate for EU member SEE countries from 1996 to 2017 is 2.33, while for non-EU SEE countries the average growth rate is 4.38, higher than in the observed EU countries. The minimum GDP growth rate is -9.13 for EU countries (Greece in 2011) and -12.15 for non-EU countries (Serbia in 1999), recorded when the countries were suffering from crisis and war, respectively. The maximum GDP growth rate in the observed period was 8.36 for EU countries (Romania in 2004) and 88.96 for non-EU countries (Bosnia and Herzegovina in 1996). The average values of the six dimensions of governance for EU countries are above zero, but below one. In EU countries the highest average value is for the dimension voice and accountability (0.67), while the lowest average value is for the dimension control of corruption (0.15). The situation is the same for non-EU countries (Table 1).

Table 1: Descriptive Statistics for Variables

	Mean	Median	Min	Max	SD	Obs.
EU Countries						
GDP (%)	2.33	3.29	-9.13	8.36	3.73	110
VA	0.67	0.56	-0.29	0.56	0.31	95
PS	0.45	0.46	-0.38	1.31	0.40	95
GE	0.38	0.39	-0.57	1.19	0.45	95
RQ	0.55	0.58	-0.18	1.09	0.28	95
RL	0.33	0.16	-0.63	1.26	0.47	95
CC	0.15	-0.02	-0.62	1.21	0.46	95
Non-EU Countries						
GDP (%)	4.38	3.47	-12.15	88.96	9.61	108
VA	-0.002	0.07	-1.21	0.34	0.27	94
PS	-0.30	-0.40	-2.14	0.82	0.49	88
GE	-0.31	-0.26	-1.19	0.35	0.36	89
RQ	-0.10	-0.09	-0.91	0.50	0.32	89
RL	-0.07	-0.24	-1.01	1.26	0.59	94
CC	-0.41	-0.36	-1.20	0.52	0.28	94

Note: Author’s calculation in EViews 10; VA – voice and accountability, PS – political stability and absence of violence, GE – government effectiveness, RQ – regulatory quality, RL – rule of law, CC – control of corruption.

The lowest value for voice and accountability in EU countries is -0.29 (Croatia in 1998), while the highest is 0.56 (Bulgaria in 2009). The lowest value of voice and accountability in Croatia is probably the consequence of war and the political situation. The lowest and highest value of this dimension in non-EU countries is recorded in Serbia in 1996 and 2006 (-1.21 and 0.34, respectively). The lowest value of voice and accountability in 1996 in Serbia is the result of the volatile political situation, international sanctions, and the economic crisis, as well as the wars in the surrounding countries. Between 2013 and 2015, Serbia’s score for voice and accountability increases. North Macedonia and Bosnia and Herzegovina have negative values for voice and accountability until 2011, while Albania increases its voice and accountability score from 2011. Political stability and absence of violence had the lowest negative values in Romania in 2000 (EU countries) and Serbia in 1998 (non-EU countries), and the highest values in Slovenia in 1996 (EU countries) and Montenegro in 2009 (non-EU countries).

Croatia made the most progress in the observed period, as it successfully implemented policy frameworks and adjusted its institutional system to the EU *acquis communautaire* as a precondition for EU accession. On the other hand, North Macedonia, a candidate country for EU membership, made the least progress in terms of political stability and absence of terrorism, primarily due to political instability in the country but also to disagreements with Greece over the country's name.

The lowest government effectiveness between 1996 and 2017 was in Romania in 1998 and Bosnia and Herzegovina in 1996, while the highest values were recorded in Slovenia in 2008 and Montenegro in 2005. As the efficiency of institutions in Bosnia and Herzegovina is below the average of transition countries – especially EU candidate countries – it cannot count on significant progress towards European integration unless it improves the efficiency of its institutions. Considerable improvement in the quality of institutions in Bosnia and Herzegovina would undoubtedly lead to an increase in economic growth and development in the medium-to-long term (Efendić, 2010).

The lowest value of regulatory quality was in Bulgaria and Bosnia and Herzegovina in 1996, and the highest values were in Slovenia in 1996 and North Macedonia in 2017. The minimum values for government efficiency and regulatory quality were recorded in Bosnia and Herzegovina during the years of war and political instability (Radulović, 2018). Rule of law had the lowest values in Croatia in 1996 and Albania in 2000, and the highest values in Slovenia and Serbia in 1998. Given that the rule of law measures the perception of the extent to which institutions are trusted and the rules of society are respected – especially the quality of contract execution, property rights, and the police and courts – and the likelihood of crime and violence, this value of the sub-index should signal to society and the authorities that the quality of institutions in this segment needs to be improved. Control of corruption was lowest in Romania and Serbia in 1998, and highest in Slovenia and Montenegro in the same year. Control of corruption improves slightly in Romania immediately before and a year after joining the EU, but has worsened since 2008 (Bartlett et al., 2013). Institutional underdevelopment is one of the key drivers of corruption in underdeveloped economies where market institutions are still developing (Jakopin, 2018). The general conclusion is that corruption control is weak in all SEE countries

regardless of their EU membership, primarily because the level of corruption control remains low in Romania and Bulgaria despite their EU membership. These results may also be due to slower changes in informal institutions that are incorporated into the culture and history of the observed SEE countries (Penev & Rojec 2014).

The Pesaran CD test (Pesaran, 2004) was used to test whether there is cross-section dependency in the time series, because it can lead to substantial bias in estimations. The null hypothesis that there is no cross-section dependence (correlation) was tested, and results showed that there is cross-section dependence in GDP for EU countries, and in GDP, VA, PS, GE, RQ, and CC for non-EU countries (rejected null hypothesis), so a change of these variables in any of the observed countries affected the other countries as well (Table 2). The null hypothesis was not rejected for VA, PS, GE, RQ, RL, and CC for EU countries, and RL for non-EU countries (Table 2).

Table 2: Cross-section Dependence Test

Variable	EU Countries	Non-EU Countries
	t-Statistics	
GDP	8.71*	1.68***
VA	-0.45	1.93***
PS	1.14	8.39*
GE	0.44	2.26**
RQ	-1.47	3.61*
RL	1.29	10.39
CC	0.95	7.09*

Note: Author’s calculation in EViews 10. * significant at the 1% level; ** significant at the 5% level; *** significant at the 10% level. VA – voice and accountability, PS – political stability and absence of violence, GE – government effectiveness, RQ – regulatory quality, RL – rule of law, CC – control of corruption.

Depending on the results of the Pesaran CD test, a unit root test of the first generation (if there is no cross-section dependence) and of the second generation (if there is cross-section dependence) is used. Table 3 shows the results of the Im, Pesaran, & Shin (IPS) unit root test (Im et al. 1997). The results show that the variables GDP, VA, and PS for EU countries are stationary at level, while the

variables GE, RQ, RL, and CC are stationary at the first difference. The results also show that the variables GDP and CC for non-EU countries are stationary at level, while the variables VA, PS, GE, RQ, and RL are stationary at the first difference (Table 3).

Table 3: Im, Pesaran, & Shin (IPS) Unit Roots Tests

EU Countries	Im, Pesaran, & Shin (IPS)		Non-EU Countries	Im, Pesaran, & Shin (IPS)	
	Intercept	Intercept & Trend		Intercept	Intercept & Trend
GDP	-2.58*	-1.86**	GDP	3.77*	-3.14*
VA	-1.46**	-3.71*	VA	-0.05	0.29
PS	-3.07*	-1.22*	D(VA)	4.82*	-4.86*
GE	-0.80	-1.12	PS	0.25	-1.34***
D(GE)	-6.62*	-4.91*	D(PS)	-7.01*	-4.13*
RQ	-0.46	-1.59***	GE	-0.38	-3.23*
D(RQ)	-4.70*	-5.25*	D(GE)	-9.03*	-7.81*
RL	0.42	-2.79*	RQ	-0.28	-1.46***
D(RL)	-8.04*	-6.68*	D(RQ)	-10.09*	-7.75*
CC	-1.25	-0.57	RL	-0.71	-3.13*
D(CC)	-3.95*	-4.89*	D(RL)	-7.26*	-4.95*
			CC	-3.09*	-3.19*

Note: Author’s calculation in EViews 10. * significant at the 1% level; ** significant at the 5% level; *** significant at the 10% level. VA – voice and accountability, PS – political stability and absence of violence, GE – government effectiveness, RQ – regulatory quality, RL – rule of law, CC – control of corruption.

The Kao test of cointegration (Kao, 1999) was used to test the null hypothesis that there is no cointegration among variables when GDP is the dependent variable. The results of the Kao test show that there is cointegration among variables for EU countries ($t=-1.60, p<0.05$) at the 5% significance level, and for non-EU countries ($t=-3.49, p<0.01$) at the 1% significance level. Since the variables are not integrated of the same order, the panel ARDL model developed by Pesaran et al. (1999) may be applied to determine whether there is a short-run and long-run relationship between economic growth and the six dimensions of governance.

The optimal lag length is determined using Akaike Information Criterion (AIC) and is found to be ARDL (1, 1, 1, 1, 1, 1) for both EU and non-EU SEE countries.

Table 4 shows the model estimation results for the long-run relationship between the six dimensions of governance and economic growth. The results show a long-run relationship between institutional quality and economic growth in EU countries for all significant variables. There is a positive long-run relationship between economic growth and the rule of law and control of, while there is a negative long-run relationship between economic growth and voice and accountability, political stability and absence of violence, government effectiveness, and regulatory quality.

In the case of non-EU SEE countries there is only a long-run relationship between economic growth and government effectiveness, political stability and absence of violence, regulatory quality, and voice and accountability. Furthermore, the results showed that there is a positive long-run relationship between economic growth and political stability and absence of violence and government effectiveness, while there is a negative long-run relationship between economic growth and voice and accountability and regulatory quality.

Table 4. Panel ARDL Long-Run Results

Variable	Coefficient	Std. Error	t-Statistic	p
EU Countries				
VA	-29.44*	1.01	-29.24	0.00
PS	-11.62*	0.77	-15.15	0.00
GE	-2.47**	1.05	-2.35	0.02
RQ	-18.88*	1.37	-13.81	0.00
RL	5.46*	1.39	3.91	0.00
CC	64.92*	1.43	45.37	0.00

Non-EU Countries				
VA	-4.09**	1.87	-2.19	0.03
PS	4.07*	1.29	3.15	0.00
GE	5.31***	2.72	1.96	0.06
RQ	-19.89*	2.49	-7.99	0.00
RL	-3.69	3.55	-1.04	0.30
CC	3.09	2.27	1.20	0.24

Note: Author’s calculation in EViews 10. Dependent variable: GDP. * significant at the 1% level; ** significant at the 5% level; *** significant at the 10% level. VA – voice and accountability, PS – political stability and absence of violence, GE – government effectiveness, RQ – regulatory quality, RL – rule of law, CC – control of corruption.

It is evident that in both EU and non-EU SEE countries there is a negative long-run relationship between economic growth and voice and accountability and regulatory quality. This is in line with results obtained by Gani (2011). Moreover, it is interesting that in both EU and non-EU SEE countries there is a long-run relationship between economic growth and political stability and absence of violence, but in EU countries the relationship is negative and in non-EU countries it is positive (Table 4). The results for non-EU SEE countries are in line with the results obtained by Samarasinghe (2018) and Han et al. (2014).

The error correction term (ECT) for both EU and non-EU SEE countries is negative and statistically significant and shows how much of the disequilibrium caused by a shock in the short run will be corrected in the long run. In the case of SEE countries the EU members’ error correction term is -0.58 and statistically significant at the 5% level and shows that in response to a shock the speed of adjustment towards equilibrium is 58% annually. The error correction term (ECT) for non-EU SEE countries is -0.88 and statistically significant at the 1% level and shows that in response to a shock the speed of adjustment towards equilibrium is 88% annually. Therefore, convergence to the long-run equilibrium will be faster in the non-EU SEE countries (Table 5).

Table 5: Panel ARDL Short-Run Results

Variable	Coefficient	Std. Error	t-Statistic	p
EU Countries				
ECT	-0.58**	0.27	-2.18	0.03
D(VA)	4.42	11.18	0.39	0.69
D(PS)	4.86	7.29	0.67	0.51
D(GE)	1.95	1.70	1.15	0.26
D(RQ)	7.77	7.01	1.11	0.27
D(RL)	-11.69	14.79	-0.79	0.43
D(CC)	-10.13	15.62	-0.65	0.52
C	18.06**	8.72	2.07	0.04
Non-EU Countries				
ECT	-0.88**	0.34	-2.61	0.01
D(VA)	-15.81*	5.74	-2.76	0.01
D(PS)	0.60	1.42	0.42	0.67
D(GE)	2.76	7.42	0.37	0.71
D(RQ)	16.74**	8.23	2.03	0.05
D(RL)	-6.21	14.41	-0.43	0.67
D(CC)	-6.99	6.92	-1.01	0.32
C	5.29***	2.72	1.94	0.06

Note: Author’s calculation in EViews 10. Dependent variable: GDP. * significant at the 1% level; ** significant at the 5% level; *** significant at the 10% level.

Furthermore, there is no short-run relationship between economic growth and the six dimensions of governance in EU member SEE countries, while there is a short-run relationship between economic growth and regulatory quality and voice and accountability in non-EU SEE countries.

The results also show that there is a negative short-run relationship between economic growth and voice and accountability. The result is in line with the results obtained for the long-run relationship and those obtained by Gani (2011). Moreover, the results show that there is a positive short-run relationship between economic growth and regulatory quality in non-EU countries that is opposed to the results obtained for the long-run relationship (Table 4). However, the results are in line with those obtained by Shapkova and Disoska (2017) for transition countries and by Han et al. (2014).

5. CONCLUSION

The study examines the long-run and short-run relationship between economic growth and institutional quality, measured through six dimensions of governance for ten SEE countries (five EU members and five non-EU members) from 1996 to 2017. The panel ARDL test results show a long-run relationship between institutional quality and economic growth in EU countries, with all six dimensions of governance being significant, while in the non-EU countries only government effectiveness, political stability and absence of violence, regulatory quality, and voice and accountability are statistically significant. Therefore, Hypothesis 1 – that there is a long-run relationship between economic growth and institutional quality in both EU and non-EU SEE countries – is partially proven. Furthermore, the results show that there is no short-run relationship between institutional quality and economic growth in the EU countries, while regulatory quality and voice and accountability are significant in the non-EU SEE countries. Hypothesis 2 – that there is a short-run relationship between economic growth and institutional quality in both EU and non-EU SEE countries – is also partially proven. Hypothesis 3 – that in response to a short-run shock the convergence to the long-run equilibrium will be faster in the EU member SEE countries than in the non-EU SEE countries – is rejected because the results of the panel ARDL model show that the error correction term is -0.58 for EU member SEE countries, and -0.88 for non-EU SEE countries, indicating that the speed of adjustment towards equilibrium is higher in the non-EU member SEE countries.

The results of the research show that there is a long-term and a short-term relationship between the quality of institutions and economic growth, which should show economic policymakers that to achieve economic growth in SEE countries, more attention should be paid to the quality of institutions. Furthermore, the findings for institutional quality in EU member states reveal the challenges and issues that non-EU countries should overcome before joining the EU. The results of the research show that non-EU member states should focus their actions on increasing their control of corruption because this indicator of the institutional quality has the strongest positive effect on economic growth in the long run in EU member states. Depending on data availability, future research could be extended to more country groups and could compare and apply quality indicators to other institutions. It would also be useful to include countries with

higher levels of development to highlight differences between developed and developing countries.

REFERENCES

- Acemoglu, D. & J. Robinson (2010). The role of institutions in growth and development. *Review of Economics and Institutions*, 1(2), 1–33.
- Bartlett, W., Čučković, N., Jurlin, K., Nojković, A. & Popovski, V. (2013). *Institutional quality and growth in EU neighbourhood countries. WP5/11 SEARCH Working Paper*. Barcelona: AQR-IREA Research Group, University of Barcelona.
- Barro, R. J. (1997). *Determinants of Economic Growth: A Cross-Country Empirical Study*. Cambridge, MA: MIT Press.
- Djankov, S., Glaeser, E., La Porta, R., Lopez-de-Silanes, F. & Shleifer, A. (2003). The new comparative economics. *Journal of Comparative Economics*, 31(4), 595–619.
- Durović, G. (2016). *Evropska unija i Crna Gora*. Podgorica: EU Info Centar.
- Efendić, A. (2010). Efikasnost institucija kao determinanta ekonomskog razvoja BiH i napretka na putu EU integracija. *X international seminar: Corporate Governance – Pravać ekonomskog oporavka BiH*. Sarajevo: Fond Otvoreno Društvo BiH.
- Elster, J., Offe, C. & Preuss, U. (1998). *Institutional Design in Post-Communist Societies: Rebuilding the Ship at Sea*. Cambridge: Cambridge University Press.
- Gani, A. (2011). Governance and growth in developing countries. *Journal of Economic Issues*, 45(1) 19–40.
- Hall, R. & Jones, C. I. (1999). Why do some countries produce so much output per worker than others? *Quarterly Journal of Economics*, 114, 83–116.
- Han, X., Khan, H. & Zhuang, J. (2014). Do governance indicators explain development performance? A cross-country analysis. *ADB Economics Working Paper Series*. Mandaluyong: Asian Development Bank.
- Im, K.S., Pesaran, MH, & Shin, Y. (1997). Testing for unit roots in heterogeneous panels. *DAE Working Paper 9526*. Cambridge: University of Cambridge.
- Iqbal, N. & Daly, V. (2014). Rent-seeking opportunities and economic growth in transitional economies. *Economic Modelling*, 37, 16–22.

- Jakopin, E. (2018). Privredni rast i institucionalna tranzicija Republike Srbije. *Ekonomski horizonti*, 20(2), 95–108.
- Kao, C. (1999). Spurious regression and residual-based tests for cointegration in panel data. *Journal of Econometrics*, 90(1), 1–44.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2008). Governance matters VII: Aggregate and individual governance indicators, 1996–2007. *World Bank Policy Research Working Paper, No 4654*. Washington, DC: The World Bank
- Kaufmann, D., Kraay, A. & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues. *Hague Journal on the Rule of Law*, 3, 220–246.
- Knack, S. & Keefer, P. (1995). Institutions and economic performance: Cross-country tests using alternative institutional measures. *Economics and Politics*, 7(3), 207–227.
- Maksimović, Lj. (2012). Sistemska ograničenja konkurentnosti privrede Srbije. *Ekonomski horizonti*, 14 (2), 99–109.
- Mauro, P. (1995). Corruption and growth. *Quarterly Journal of Economics* 110(3), 681–712.
- Murphy, K. M., Shleifer, A. & Vishny, R. W. (1993). Why is rent-seeking so costly to growth? *The American Economic Review*, 83(2), 409–414.
- Nawaz, S., Iqbal, N. and Khan, M. A. (2014). The Impact of Institutional Quality on Economic Growth: Panel Evidence. *The Pakistan Development Review*, 53(1), 15–31.
- North, D. (1990). *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.
- North, D. C. (1991). Institutions, *Journal of Economic Perspectives*, 5(1), 97–112.
- Penev, S. & Rojec, M. (2014). The future of FDI in South-Eastern European countries: Messages from new EU member states. *Economic Annals*, 59 (202), 43–67.
- Pesaran, M. H., Shin, I. & Smith, R. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94, 621–634.
- Pesaran, M. H. (2004). General diagnostic tests for cross-section dependence in panels. *CESifo Working Papers, No.1233*. Munich: CESifo GmbH.
- Račić, Ž. i Pavlović, M. (2012). Analiza globalnog indeksa konkurentnosti Republike Srbije. In N. Vukmirović, M. Bajić, & Lj. Pašić (Eds.). *Tehnološke inovacije generatora privrednog razvoja* (pp. 16–24). Banja Luka : Savez inovatora Republike Srpske.
- Radulović, M. (2018). Institucionalna ograničenja konkurentnosti privrede Republike Srbije u procesu priključivanja EU. In V. Leković, & P. Veselinović (Eds.). *Zbornik radova Naučnog skupa*

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Institucionalne promene kao determinanta privrednog razvoja Republike Srbije (pp. 397–415).
Kragujevac : Ekonomski fakultet Univerziteta.

Rodrik, D. (2008). Second-best institutions. *American Economic Review: Papers & Proceedings*, 98(2): 100–104.

Samarasinghe, T. (2018). Impact of Governance on Economic Growth. *MPRA Paper No. 89834*.
Munich: Munich Personal RePEc Archive.

Shapkova, K. K. & Disoska, E. M. (2017). Influence of trade and institutions on economic growth in transitional economies: evidences from countries from Central and Eastern Europe and Western Balkans. *Economic Analysis*, 50(3–4), 32–42.

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IN MEMORY OF PROFESSOR BOŽIDAR CEROVIĆ (1947-2018)*

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It is a great honour for me to commemorate our friend and colleague, Professor Božidar Cerović, widely addressed informally as Cera, who left us prematurely in September 2018 after a long illness that he fought with courage and determination. The commemoration of our friend Cera is an honour but also quite a responsibility, for he was a brilliant speaker whose eloquence and wit are difficult to match.

Cera was a remarkable scholar, a devoted friend, and an active member of the European Association for Comparative Economic Studies (EACES). He graduated from the University of Belgrade's Faculty of Economics in 1970, where he also got his Master's Degree and PhD. He became a research assistant as early as 1971, working with one of the most eminent professors of those times, Miladin Korać and later became a Full Professor at the Faculty. He taught various courses during his long career, including Political Economy, Microeconomic Analysis, Theory of Production and, more recently, Principles of Economics and Economics of Transition. Cera was Editor-in-Chief of *Economic Annals* from 2012-2018 (issues 194-218) to which he dedicated much time and effort.

Cera's scientific contributions include a wide range of publications: 10 monographs, 14 edited books, and some 100 articles published in national and international journals. His first book, *The Economics of Self-Managers (Ekonomija samoupravljača)*, was published in 1982 in Serbo-Croatian and was dedicated to the Yugoslav system of self-management. It included a valuable discussion of Benjamin Ward's and Jaroslav Vanek's theory of the labour-managed firm, at a time when relatively little was known about these theories in Yugoslavia. After 1989 his later books and articles focused primarily on various topics related

* Text of an obituary speech given by Professor Milica Uvalić at the Economic Annals/ EACES Workshop on "The Comparative Economics of Transition in South East Europe" held at the Faculty of Economics, University of Belgrade on 20th September 2019.

to Transition in Eastern Europe – privatisation, macroeconomic stabilisation, economic growth, restructuring, corporate governance, institutional reform, industrial policy, globalisation, and effects of the global economic crisis – in reference to both Yugoslavia (later Serbia) and Central and Eastern Europe.

The volume *Privatization in Serbia*, edited by Cera and published in 2006, contained papers presented at an EACES workshop in Belgrade and was one of the first comprehensive studies in English devoted to the topic. Another two books edited by Cerović and myself were on topical issues: *Western Balkans' Accession to the European Union: Political and Economic Challenges*, a collection of papers presented at a conference organized by the European University Institute in Montecatini Terme (Italy) and published in 2010 and *Controversies of Economic Development during Transition: Serbia and the Western Balkans*, published in Serbian in 2011.

However, Cerović's most outstanding publication is his voluminous (681 pages) monograph *Transition: Visions and Outcomes (Tranzicija: zamisli i ostvarenja)*, published in 2012, a collection of his most important papers on transition written from the late 1980s until 2012. In the book's 26 Chapters, he wanted to confront the initial vision of transition with the actual outcomes in order to illustrate how many concepts suggested during the early transition discussions had in fact not been realised. The first 12 chapters deal with the main conceptual issues of the transition to a market economy formulated in the 1990s, including key definitions and early debates about the transformational recession, macroeconomic stabilisation, privatisation, sequencing of reforms, and institutional reform. The second part contains 14 chapters on the actual outcomes of transition, including growth performance, privatisation results, and unexpected surprises, nine chapters of which deal specifically with Serbia. Given its extensive coverage of the most important issues of transition, the volume will be invaluable to scholars and future generations of Serbian students studying systemic changes in Eastern Europe.

Professor Cerović held many prestigious positions during his long career. At the University of Belgrade he was Dean of the Faculty of Economics, a member of the University Council, Head of the PhD. Studies Committee, Chair of the Council for Social Sciences and Humanities, and a member of the Senate. For many years he was the President of the Scientific Society of Economists of Serbia, which he was particularly proud of, and a member of the Serbian Academy of Economic Sciences. He was a member of a number of international networks and associations, including EACES and the Association of Southeast European

Economic Universities (ASECU). As President of ASECU, Cera delivered his last keynote speech at the ASECU Conference in Nitra (Slovakia) in May 2018. He was also on the editorial boards of a number of prestigious academic journals, including *Croatian Economic Survey*, *Ekonomska misao*, *Ekonomske ideje i praksa*, *Transition Studies Review*, and *the Journal of Contemporary Economic and Business Issues*. Cera also received an important French decoration: he was *Chevalier de l'Ordre des Palmes Académiques*.

As many of us will remember, Cera was a very active member of EACES. He served on the Executive Committee for two terms during 2004–2010. He organised the 9th bi-annual EACES conference in September 2004 in Belgrade and several EACES workshops, including those in Belgrade and Miločer, Montenegro. Cera maintained an active presence in the Association until his very last days. Although his illness prevented him from attending, he co-authored a paper with Jasna Atanasijević and myself, *The Serbian economy ten years after the global economic crisis*, which was presented at the 16th EACES Conference in Warsaw and at the Economic Annals/EACES Workshop on “The Economics of Transition in South East Europe” at the Faculty of Economics in Belgrade, both held in September 2019. A revised version of the paper is published in this issue of *Economics Annals*.

Cera left behind much more than his valuable scientific work. Many of you will remember his wonderful hospitality at the 9th bi-annual EACES conference in Belgrade in September 2004 and on various other occasions. As organiser of these events, Cera took care not only of the scientific part of the conferences and of publishing a book of the proceedings, but also of all possible details, from unforgettable meals with several dozen different dishes to live music and boat rides.

He was an intellectual of a special kind: he had a critical mind and was truly dedicated to his work, but he also had great knowledge in many fields that extend far beyond economics. Cera was very active in one of the most important Serbian soccer teams, Red Star, where he held important positions for many years, the last as Vice-President of the Executive Board. His interest in sports led him to write articles about controversial issues related to the privatisation of sports clubs. Cera knew how to enjoy life and had an irrepressible *joie de vivre*, especially when it came to music, delicious food and drink, art, and travelling to exotic places.

Cera was an extremely generous person – with his time, his commitment to teaching, his care for younger colleagues and students, his comments on other

people's work, and his hospitality – but he was also profoundly honest – a rare quality nowadays – consistent in his views, and a great defender of those values he regarded as important. He will be greatly missed by all of us for a very long time.

REFERENCES

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Cerović, B. (Ed.) (1982). *Ekonomija samoupravljača [The Economics of Self-Managers]*. Novi Beograd: Istraživačko-izdavački centar SSO Srbije.

Cerović, B. (Ed.) (2006). *Privatisation in Serbia: Evidence and Analyses*. Belgrade: CIDEF.

Cerović, B. & Uvalić, M. (Eds.). (2010). *Western Balkans' Accession to the European Union: Political and Economic Challenges*. Belgrade: Faculty of Economics of the University of Belgrade, Publishing Centre.

Cerović, B. & Uvalić, M. (Eds.). (2011). *Kontroverze ekonomskog razvoja u tranziciji – Srbija i Zapadni Balkan [Controversies of Economic Development during Transition – Serbia and the Western Balkans]*. Beograd: Ekonomski Fakultet.

Cerović, B. (2012). *Tranzicija: zamisli i ostvarenja [Transition: Visions and Outcomes]*. Beograd: Ekonomski fakultet Univerziteta u Beogradu.

INSTRUCTIONS TO AUTHORS

Economic Annals is an international professional journal published quarterly by the Faculty of Economics, University of Belgrade. It publishes research in all areas of economics and business administration, particularly for transition and emerging economies. The journal encourages the submission of original unpublished works, not under consideration by other journals or publications. Contributions written in English and in electronic form should be forwarded to: ea@ekof.bg.ac.rs.

The journal maintains high scientific standards. Papers submitted for publication should be original, relevant and scientifically accurate. Authors are expected to provide new information or analysis and should present a summary of the conclusions they draw, maintaining coherence and compactness of their reasoning. The originality of the work is subject to test by iThenticate crosscheck. The texts should also follow appropriate technical standards and stylistic criteria. UK spelling (specialisation, labour, etc.) should be used, while both UK and US abbreviations are acceptable.

All submitted papers will undergo a double-blind refereeing process. An anonymous version of the paper should be submitted along with a separate cover page, containing the article's title, author's name and affiliation, e-mail address, and a suggested running head (an abbreviated form of the title of no more than 50 characters with spaces). The cover page should also contain a short abstract of between 100 to 200 words, summarising the major points and conclusions of the paper, a list of up to five keywords and up to five two-digit codes in accordance with the Journal of Economic Literature (JEL) classification (<https://www.aeaweb.org/econlit/jelCodes.php>).

Papers should be prepared as a single file (including text, notes, references, figures, and tables) in MS-Word. Papers should be submitted in A4 page format (21×29.7 cm), left and right margins cm, top and bottom 4.5 cm, in font Times New Roman 12, single line spacing. There should be no tabs in paragraphs and a single line spacing should separate paragraphs and titles. Tables, figures and footnotes should be included as they are intended to appear in the final version. Footnotes (in font 10) should be kept to a minimum and numbered as superscripts. Papers which do not conform with the above instructions will not be taken into consideration.

As a rule, submitted articles should not exceed 8,000 words. All pages apart from the first one should be numbered. Subtitles should be concise, clearly marked in bold, and numbered (up to two levels of numbering). No other entries should be bolded. Formulae should be numbered on the right-hand side of the page. In case of long proofs, these should be inserted in a separate Appendix, following the References. Tables and Figures must not use colour, and should be in a format easy to edit, for instance they should take half a page (or a full page) within the indicated margins. They should be clearly labelled at the top, with a legend at the bottom, and should be logically ordered, using Arabic numerals. Sources of the data should be given below tables and figures.

Papers should follow APA style guideless: <https://apastyle.apa.org/style-grammar-guidelines/references/examples#textual-works>. Some key points watch out for are as follows. Parenthetical references in the text and in footnotes should be listed by the author surname, with the year of publication in parentheses; in case of more than one author use an ampersand, for instance: (Atkinson, Picketty & Emmanuel, 2011). Narrative citations within the text should use “and” rather than ampersand, for instance: Djankov, Glaeser and La Porta (2003). Use an ampersand in the list of references. When citing works with one or two authors, include the author name(s) in every citation. For works with three or more authors, include the name of only the first author plus “et al.” in every citation (even the first citation). Include all author names in the list of references. If the author is unknown, the first few words of the reference should be used; this is usually the title of the source. For example: (*A guide for economy*, 2019). Multiple works by the same author are sorted by date in ascending order; if the works are in the same year they should be ordered alphabetically by title and allocated a letter (a, b, c, ...) after the date. Cite only the works you have read and incorporated into your writing; readers may find long strings of citations difficult to understand. Before submitting your paper, check that all references cited in the paper are included in the reference list at the end of the paper, and that all papers included in the reference list have been cited in the text.

References should be left aligned in alphabetical order in the reference list, according to the following formats:

Article in journals

Author surname(s), initial(s). (Year). Article title. Journal, Volume number (issue or part number, optional), page numbers. DOI.

Rodrik, R., Subramanian, D., & Trebbi, F. (2004). Institutions rule: the primacy of institutions over geography and integration in economic development. *Journal of Economic Growth*, 9(2), 131-165.

[https://DOI: 10.1023/B:JOEG.0000031425.72248.85](https://doi.org/10.1023/B:JOEG.0000031425.72248.85).

Book

Author surname, initial(s). (Year). *Title*. Publisher location: Publisher

De Grauwe, P. (2020) *Economics of Monetary Union* (13th ed.). Oxford: Oxford University Press.

Edited book

Author surname, initial(s). (Ed(s)). (Year). *Title*. Publisher location: Publisher

Baltagi, B.H. (Ed.). (2003). *A Companion to Theoretical Econometrics*. Oxford: Blackwell

Book with several authors

When there are multiple authors, list them all, with the addition of ampersand (&) before the last surname. If there are more than seven authors, list the first six, then write three full stops (...), and at the end write the last author.

Acemoglu, D. & Robinson, J.A. (2006). *Economic Origins of Dictatorship and Democracy*. Cambridge: Cambridge University Press.

Baumol, W. J., Panzar, J. C. & Willig, R.W. (1982). *Contestable Markets and the Theory of Industry Structure*. New York: Harcourt, Brace, Jovanovich, Inc.

Chapter in book

Last name of the chapter author, initial(s). (Year). Chapter title. In editor initial(s), surname (Ed.). *Title* (ed., pp.). Publisher location: Publisher

McMillan J., & Woodruff C. (2003) The central role of entrepreneurs in transition economies. In G. S. Fields, & G. Pfefferman (Eds.). *Pathways Out of Poverty* (pp. 105-121). Dordrecht: Springer. https://doi.org/10.1007/978-94-010-0009-3_6.

E-Book

Author surname, initial(s). (Year). *Title*. URL

Perry, R.B. (1909). *The Moral Economy*.

[https://manybooks.net/book/137844/read#epubcfi\(/6/2\[id00000\]!/4/2\[id00000\]/1:0\)](https://manybooks.net/book/137844/read#epubcfi(/6/2[id00000]!/4/2[id00000]/1:0))

Technical Reports or Working Papers

Individual authors

Author surname, initial(s) or corporate name. (Year). Title. (Report or Working Paper No.). URL.

Cătuți, M., Kustova, I. and Egenhofer, C. (2020) *Delivering the European Green Deal for Southeast Europe: Do we need a regional approach?* (CEPS Research Report No. 2020/1). https://www.ceps.eu/wp-content/uploads/2020/06/RR_2020-01_European-Green-Deal-for-South-Eastern-Europe.pdf.

Corporate authors

American Psychological Association, Task Force on the Interface Between Psychology and Global Climate Change. (2009). *Report of the APA Task Force on the Interface Between Psychology and Global Climate Change*.

<http://www.apa.org/science/about/publications/climate-change.aspx>

Newspaper Articles

Author surname, initial(s). (Year, Month Day). Title. *Title of Newspaper*, p. or pp. URL*

*only include if the article is online.

Note: the date includes the year, month and date.

Smialek, J. (2020, May 2). Hotel Group Will Return Tens of Millions in Small Business Loans. *The New York Times*, pp. 10.

<https://www.nytimes.com/2020/05/02/business/economy/ashford-hotels-virus-monty-bennett.html>

Website

Author surname, initial(s). (Year, month day). *Title*. URL

Mitchell, J.A. (2017, May 21). *How and when to reference*.

<https://www.howandwhentoreference.com>

