

Dušan Vujović
Metropolitan University
Faculty of Economics, Finance and
Administration
Belgrade

THE CHALLENGES OF INCOME CONVERGENCE AT TIMES OF THE FOURTH INDUSTRIAL REVOLUTION

Izazovi konvergencije dohotka u vreme četvrte
industrijske revolucije*

Abstract

The paper argues that Serbia must address a complex set of challenges as it prepares for the EU accession and seeks convergence to the European quality of life within a reasonable timeframe. To successfully close institutional, infrastructure and income gaps with core EU countries, while, at the same time, responding to likely pressures from the Fourth Industrial Revolution requiring profound social, industrial and organizational changes, the country will have to first address the institutional legacy of the past which now stands in the way of introducing modern, efficient and transparent governance systems into the state, public and private sector. The only institutional and policy scenario that supports this growth path may be more demanding, but it offers relatively fast convergence based on a smart industrial policy and deep structural changes of economic organization, education and social systems. New social consensus may not be easy to reach, but it will be well worth the effort if it offers a base to fend off future governance risks and ensure prosperity in the challenging new digital world.

Keywords: *Fourth Industrial Revolution, income convergence, smart growth, industrial policy, institutional development, governance.*

Sažetak

U radu se pokazuje da Srbija mora da razreši kompleksan skup izazova koji je čekaju na putu Evrointegracija i približavanja evropskom kvalitetu života u razumnom roku. Da bi eliminisala kašnjenje u domenu institucija, infrastrukture i dohodaka u odnosu stare članice EU, i istovremeno uspešno odgovorila na verovatne pritiske koje će stvarati četvrta industrijska revolucija tražeći duboke socijalne, industrijske i organizacione promene, Srbija će morati pre svega da se izbori sa institucionalnim bremenom prošlosti koje se danas direktno suprotstavlja uvođenju modernih, efikasnih i transparentnih upravljačkih sistema u državi, javnom i privatnom sektoru. Institucionalni i ekonomsko-politički scenario koji podržava takvu putanju razvoja je zahtevniji od alternativa, ali on nudi relativno brzu konvergenciju dohotka na osnovu pametne industrijske politike i dubokih strukturnih promena ekonomske organizacije, obrazovnog i socijalnog sistema. Novi društveni konsensus neće biti lako dostići, ali je on vredan truda pošto će konačno ponuditi osnovu da se minimiziraju budući rizici lošeg upravljanja i osigura trajni prosperitet u stalnim izazovima novog digitalnog sveta.

Ključne reči: *četvrta industrijska revolucija, konvergencija dohotka, pametan rast, industrijska politika, institucionalni razvoj, upravljanje.*

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Introduction

Based on the 2017 Eurostat data, Serbia lags more than seven times behind core European countries (EU-15) in GDP per capita. In purchasing power parity (PPP) terms, the gap is smaller, but still large (over three times). More importantly, both nominal and PPP income gaps have been quite persistent in the past decades. Based on the actual growth rates recorded since the beginning of the global crisis, Serbia will need about 185 years to converge to nominal and PPP incomes of the EU-15. By contrast, the countries of Central and Southeast Europe which recently joined the EU will close the PPP income gap with the EU-15 in less than 20 years.

To achieve the same result – income convergence with the EU-15 in 20 years – Serbia would need to sustain an 8 percent average annual GDP per capita growth in PPP terms. At somewhat lower and more realistic growth rates, the time needed to close the real income gap would increase to 24 years (at 7 percent average annual growth), 30 years (at 6 percent), and more than 40 years at real income growth of 5 percent.

Obviously, dynamic and sustainable economic growth represents the key for income convergence with Europe and the basis for a better quality of life in Serbia and the Western Balkan (WB) region as a whole. This view is shared by almost all rational economic, social and political stakeholders. Real differences in views emerge as soon as we address the practical institutional and policy issues that would represent the basis for achieving such dynamic and sustainable long-run economic growth in real domestic and international circumstances.

The European and global economic context. The European and global context gains importance in an increasingly connected world economy. During 2018-2019 the global economy will continue the steady expansion started in mid-2016, albeit at slightly lower annual growth rates (3.5-3.7%) due to higher oil prices and restrictive trade measures between the US and China. In the medium run, output gaps in the EU and other advanced economies will gradually close and bring down potential growth dynamics in line with the prime drivers: slower expansion in working-age populations and modest productivity gains possibly caused

by the challenges of the ensuing Fourth Industrial Revolution. In addition, US growth will be adversely affected by fading fiscal stimulus and expected tighter monetary policy, while China will continue to grow at high but declining rates.

As a result, in the absence of substantial institutional reforms and policy changes, Serbia and the Western Balkan region are likely to experience a more limited scope for faster real per capita growth over the next five years and, thus, probably face the risk of falling further behind in living standards. Additional risks of trade barriers and reverse capital outflows in response to weaker macro fundamentals and (actual and perceived) political instability are of critical importance. The availability of otherwise ample financial resources for economic growth and development will be progressively limited for countries that do not meet the highest financial regulatory and taxation standards. This includes macro and microprudential policies critical for financial stability and increased resilience, cybersecurity, safeguards against excessive risk taking and application of AML-CFT measures with a clear objective of getting off the FATF (Financial Action Task Force) grey list. Given the legacies of the past, Serbia will also need to monitor very carefully (open and hidden) contingent liabilities and balance sheet mismatches.

Missing institutional reforms. Unfortunately, the status of most institutional reforms necessary for efficient operation of market democracy and free flow of goods, people, and capital is not satisfactory. Institutional weaknesses go beyond the already mentioned financial sector and include the general rule of law (including judicial independence and legal efficiency), protection of property and creditor rights, the quality of public and private sector governance systems, the presence of nontransparent and corrupt practices, etc. Based on the World Economic Forum's (WEF) Global Competitiveness Report 2018 [10], the combined rank across these critical institutional dimensions (106th out of 140 countries) will continue to be a strong deterrent for large institutional investors who require a transparent, stable and efficient legal environment to enter and comfortably operate in Serbia. And a higher level of FDI is a sine qua non for convergence that hinges on efficient infrastructure and sustained productivity growth anchored in innovations.

Availability of infrastructure. A recent IMF staff assessment concluded that, despite strong investment efforts, Serbia and the whole Western Balkan region still face significant public infrastructure gaps which effectively constrain economic growth, private sector development, and continued integration into European supply chains. This conclusion equally applies to inadequate transportation networks (both in coverage and quality), insufficient and unreliable provision of utilities (water, power, district heating, etc.), underdeveloped communication networks, and underinvestment in human capital and innovation capacity for sustained long-term growth.

Despite the fact that, based on [10], Serbia ranks better (71st out of 140 countries) than the rest of the WB region (96th out of 140 countries) in critical aspects of physical infrastructure (transport and utilities), closing the infrastructure financing gap may indeed prove challenging under the conditions of limited fiscal space, constrained access to external financing, and weak domestic private sources. The routine recommendations from the IMF and other IFIs (to mobilize additional domestic revenues, contain domestic spending, and improve the quality of public investment management, especially in the selection and implementation of public and PPP projects) are welcome, but fall significantly short of the infrastructure needs. This is clearly one area where a concerted EU effort in the WB region, along with substantial private sector participation, will be needed to overcome this legacy of the past and an overriding obstacle to growth and EU integration process.

Quality of human capital and innovations for productivity growth. The size of investment in human capital and innovations to close the gap with comparator countries may appear more modest, but the actual task may be even more difficult to design and implement as it requires a change in the value system, work ethic, and corporate culture. Presently (again based on WEF [10]), Serbia ranks much better in terms of education and productive labor skills (72nd place out of 140 countries) than the WB region (92nd position in labor skills), but it lags behind the region in labor market performance (where the WB region holds the 100th position and Serbia ranks 111th). This clearly shows that Serbia continues to value education and skills, but has inherited a strong resistance

towards the very concept of labor market and labor force mobility, even in relation to comparator countries in the WB region.

Finally, although Serbia ranks better than the region in innovation capacity (90th versus 103rd position), this is not a very comfortable position to address the likely challenges posed by the Fourth Industrial Revolution (4IR). Tangible improvements in educational achievements, labor-employer relations, and reliance on professional management will be needed to convince foreign investors and managers that productivity gains in Serbia and the WB region can be achieved and sustained for large investments to be profitable in the longer run.

The quality of state, public sector and private sector governance. Serbia presently lags significantly behind the EU countries (both the core 15 members and new accession countries) in terms of income, quality of life, as well as institutions and infrastructure. Convergence prospects for Serbia and other WB countries are of paramount importance and they, first and foremost, critically depend on their own capacity to mobilize domestic and attract foreign resources, spend them efficiently on priority infrastructure and pro-growth human capital and innovation projects, while targeting expenditures to quality social services and poverty reduction within a sustainable fiscal position. External assistance is necessary to close the infrastructure gap and integrate the WB region into the EU value chains. But the whole process hinges on the quality of governance, in the state, public and private sector.

We yearn to understand what underpins the recent shift in the global economic and development paradigm. How would prevailing answers impact the long-run GDP growth and the well-being of citizens? What policy challenges await Serbia once fiscal consolidation is finally over? Are we ready to embrace new business normality established after the global economic crisis? Have we made progress in creating environmentally friendly economy that can generate sustainable and inclusive growth and ensure convergence to EU income levels?

Growth has become primarily a political issue as GDP represents a good proxy for new jobs and increasing welfare, where more is always better. In a world burdened

with future consequences of past social expenditure commitments, high public debt and a dire need to respond to technological changes, it is easier and wiser to look for ways to enhance smart growth than to resort to austerity measures.

The political need for robust growth signals government commitment to service the outstanding debt, secure social inclusion and support the idea of intergenerational equity. This is particularly relevant for countries like Serbia where current generations are expected to honor the commitments of turbulent yesteryears. Moreover, the benefits of economic growth have been unequally distributed across different social and skill groups due to slower dynamics of real labor incomes in older-style routine and repetitive jobs caused by rapid technological change and growing global competition. Additional reason for robust growth and faster job creation is rapid deterioration of competences after years of waiting for the first job (the lost generation). Finally, higher economic growth provides a greater cushion to address the potential postcrisis deflation threat, clean up banks from nonperforming loans, and restructure debt-ridden publicly-owned companies.

The long-run response to weak economic growth requires a new strategy based on smart investment sensitive to key structural imbalances and new business normality. The strategy must account for possible external shocks, including adverse spillovers from cross-border capital flows. At the national level, smart (intelligent) investments will be able to play a paramount role only in the continued presence of sound macroeconomic (macroprudential, monetary and fiscal) policies that unblock demand-creating transmission channels and allow rational economic decisions at all levels. Additionally, new industrial policies (related to both manufacturing and modern services) are expected to provide businesses with clear longer-term signals where to invest and how to restructure successfully. Their primary focus is to increase the potential of tradable sectors in the fast changing global economy.

In this context, it is crucial to know the starting point, i.e., the status of the Serbian economy today, the effectiveness of past policies and reforms, and options (constraints and challenges) for going forward.

The remainder of this paper will be devoted to the legacy of Serbia's institutional and governance problems (section two), the likely challenges posed by the 4IR (section three) and the proposed policy and reform responses (section four). Section five concludes.

Institutional constraints to faster growth

The roots of Serbia's current economic and institutional problems can be traced back 50 years, to the turning point in the evolution of macroeconomic and microeconomic management.

Collapse of utopian self-management institutions

Complete collapse of microeconomic and macroeconomic management (including the implosion of the communist party in January 1990) and abysmal economic performance during the 1980's were the key factors leading to the disintegration of the country [11] and the start of wars that lasted from July 1991 till June 1999.

In modern terminology, we observed a generalized governance crisis that evolved from consistent application of self-management and the labor theory of value at all levels of economic organization, while ignoring the role of other factors of production (capital, management, land and natural resources), the concept of scarcity and the existence of binding hard budget constraint.¹

The institutional meltdown first disabled the state governance system (first and foremost at the federal state level which was deprived of its macroeconomic, security, and diplomatic functions). The broadly defined public sector governance, which included all public services (healthcare, education, utilities, etc.), followed next. Finally, the governance of banks, state-owned enterprises, as well as the strategic segments of the socially-owned enterprise sector, completed the process. The jungle of entities legally and commercially connected through a maze of self-management agreements and social compacts could not be untangled, reorganized or restructured. Even the interest-based companies in profitable export trade,

¹ See Županov [13] for elaboration of self-management institutional utopia.

financial services and transport sectors could not be isolated from the devastating annihilation of basic economic rules which sit at the core of the modern concept of institutions. The ability of the economic and social system to fight the onslaught of problems was reduced to zero, just like when a weak immune system can no longer protect individuals with advanced metastatic cancer.²

Present institutional weaknesses

Furthermore, after five decades of fanatic application, a skewed and unsustainable value system became a cornerstone of many institutional problems we see today:

- (a) wrong work ethic, inadequate valuation of learning and knowledge,
- (b) essential disregard of (or lack of respect for) the rules of law and social norms,
- (c) refusal to accept competition, meritocracy, and market outcomes in favor of discretionary government decisions and state intervention (i.e., preference for visible hand over invisible hand of the market),
- (d) wrong perception of transparency in valuing performance and achieved results,
- (e) reluctance to accept (or even refusal of) key institutions of market democracy, especially:
 - the rule of law,
 - ownership rights, including creditor rights, and
 - the legally defined role of managers, workers and labor unions,
- (f) refusal to accept some of the widely accepted basic economic results, dating back to Adam Smith and David Ricardo, regarding the benefits/efficiency of markets and trade, on the one hand, and the modern concepts such as corporate social responsibility, on the other.

As a result, we observed the emergence of deep tectonic fault lines regarding some fundamental issues faced by modern market democracies, such as:

- lack of a clear social contract (in Rawls's sense),

- lack of consensus on the essence of democracy (as opposed to partocracy) and political freedom,
- unclear interpretation of essential rules on the separation of (legislative, executive, and judicial) powers,
- lack of clear (and proper) understanding of the role of markets in reaching efficient outcomes as opposed to state intervention (to correct rather than distort market failure),
- conditional (weak) acceptance of the freedom of speech and free media.

This subset of problems currently affects Serbia and many other countries in the Western Balkans and around the World as analyzed by Sanfey [4]. They are well-documented in multiple sources as analyzed by Vujović [7].

The challenge posed by the Fourth Industrial Revolution

The Fourth Industrial Revolution is in full swing now. It brings the following major developments and challenges, as analyzed by Bianchi [1]:

- *New and efficient technologies* which increasingly enable the reversal of recent massive offshoring of production and related services to China, India, and other emerging economies. To continue to attract FDI, emerging economies will have to be more efficient overall rather than just offer cheap labor. Successful countries will need to provide competitive infrastructure and logistical services, top quality management, and efficient institutional and administrative environment. This will create space for shared prosperity through higher real wages and job security and, thus, reverse past trends of compensating inefficient government and institutional setup through lower wages.
- *Hyperconnectivity* which allows different organization of production, research and marketing functions, and substantially lowers the volumes of shipment demands (ranging from printed documents to spare parts). Financial crisis stopped the exponential growth of global trade due to global recession. Postcrisis revival is increasingly based on data flows: digital

² For a review of economic performance see Schrenk et al. [5]. Uvalić [6] provided a detailed overview of the rise and fall of market socialism in Yugoslavia.

- globalization proceeds at an extremely rapid pace utilizing the evolution of ICTs into hyperconnected systems. The Internet has become omnipresent in work, leisure and social relations of billions of people.
- *Profound impact on the structure and dynamics of industries.* The term industry has acquired a broader meaning. It indicates a capacity to organize production of goods and services so as to respond to market needs irrespective of the sector, from agricultural to manufacturing and services. Primary sectors (such as agriculture) are now seamlessly integrated with the processing industry and saturated with innovation and knowledge. Likewise, high value-added manufacturing goods are intersecting with services and are often bundled with them.
 - *Need for a new industrial policy.* Predictably, this will trigger deep transformations which, based on experience, require a new type of comprehensive industrial strategy and policy. The depth and complexity of ensuing structural changes will require the inclusion of institutions (rules and regulations), social and education policies, and broader citizen participation at the regional and national levels. Consistently with the broader definition of industry, industrial policy represents a set of actions aimed at enabling and facilitating structural changes and steering industrial development in desired directions. Industrial policy looks at innovations, trade, intellectual property rights and antitrust laws, as well as human capital. Human capital in turn requires consideration of social policies, education and training.
 - *Digital globalization,* which entails a complex transformation of economy, society and culture, has been based on major scientific and technological developments in high power computing, artificial intelligence, robotics, new materials, genomics and nanotechnologies. In addition to having a profound impact on individual scientific fields, it allows developments across multiple fields that can converge to create completely new products and production processes.
 - *Changing roles of training and education, as well as geography and governance.* The entire education, training

and learning systems will need to be rethought and adapted to changing circumstances brought about by the ensuing technological revolution. Comprehensive treatment of geography and the linkages to global ecosystem must gain primary importance in order to secure comprehensive competitiveness and long-run sustainability.

The main challenge for emerging economies will be to create sufficient internal capacity to design and implement an appropriate new industrial policy that would enable timely institutional and policy changes to keep their economies competitive despite the likely disruptive changes across practically all industries.

The accelerated creation of new solutions, new products and new processes, albeit impressive, does not represent a distinctive feature of the Fourth Industrial Revolution compared to previous revolutions. Many leading authors in the field have identified similar periods of sustained technological changes, as well as convergence of different fields in the production process, as seen, for example, in the automotive industry. Likewise, each of the previous industrial revolutions introduced new technologies with a profound impact on the manufacturing regimes. The progression goes from the factory system brought by the first revolution, to mass production systems (assembly lines) introduced by the second and flexible production systems enabled by the third to mass customization to meet the demand which will dominate the world of the Fourth Industrial Revolution. They also created unique interactions between economic, social and political conditions.

For example, the mass production system of the Second Industrial Revolution was based on the division of production process into elementary tasks performed by well-trained and relatively low-skilled workers under time constraint. This had predictable consequences on educational requirements, income levels, social structure, organization of the labor force (unions), structure and style of management, as well as the main characteristics of the urban-rural divide and the nature of the polity.

The Third Industrial Revolution in tandem with globalization introduced massive changes in the global division of labor towards emerging market economies.

Starting from 1990's, globalization promoted unprecedented growth of world trade and foreign direct investments in a world characterized by trade liberalization, massive transition from plan to market and birth of emerging market economies. Industrial policy played a major role in facilitating deep structural transformation of the economy. Good examples include China, Slovakia, the Czech Republic, and Slovenia. By contrast, the lack of appropriate industrial policy and the dominance of chaotic and ill-conceived privatizations have been apparent in countries that experienced chronic difficulties during the transition process.

In addition to posing substantial challenges, the Fourth Industrial Revolution offers a great opportunity to resolve the current global societal issues, such as demographic trends of population growth and population ageing, rapid and wide urbanization, as well as preservation of ecosystems and climate change. This opportunity will be realized only if scientific, technical, and economic changes are accompanied by appropriate ethical, cultural, and social changes. To succeed it is critical to develop awareness, build resilience and promote sustainability in policy-making at the national and global levels. In doing that, it is essential to respect and properly address the complexity of deeply related (intertwined) issues. To be successful in facing the sweeping changes likely to come with the Fourth Industrial Revolution, societies will need to enable true ethical, cultural and social metamorphosis.

Therefore, the new industrial policy must be comprehensive and favor adaptation and adaptability, by promoting innovation and adoption of new technologies, adjustment in human capital, and provision of appropriate infrastructure. Information has become the main raw material (input) and output. New technologies allow hyperconnection on a global scale between people, people and machines, and between machines (the so-called IoT – Internet of Things). Global data flows are growing exponentially giving a small number of firms huge market power based on enormous amounts of data. This raises serious privacy and antitrust issues that require new legal solutions and enforcement mechanisms.

The volume of exports and imports in the world has not changed much since 2007, but the share of

Asia has increased. China became the leader in global manufacturing value added, both in terms of levels and dynamics. Furthermore, Asian countries are well-positioned to respond to the challenges of the Fourth Industrial Revolution. Based on their strong investment in R&D and skills, they are likely to further strengthen their position in global trade and manufacturing value added.

New globalization is likely to generate exponentially growing data flows and stagnant trade of goods. Leading private companies (CISCO) estimate that mobile data traffic has increased 18-fold during the 2011-2016 period and is likely to experience another 7-fold increase in the future to 49 exabytes per month. Again, the fastest growth is expected in Asia which will account for half of global data traffic by 2021.

Expectedly, smartphones are projected to be the main source of data traffic (43 percent) in 2021 followed by Machine-to-Machine data exchange (over 30 percent) without the involvement of humans. M2M data traffic is in fact the Internet-of-Things (IoT), which is at the core of the Fourth Industrial Revolution. Examples include GPS systems in cars, medical applications, patient health records and citizen data records, home and office security and automation systems, as well as the industrial Internet. In short, while the flows of physical goods and capital have come to a halt in the last decade following the global crisis, globalization has not stopped but has become digital, including substantial portion of huge financial flows which have become digital too.

A more detailed view reveals the supply side changes, as well as deep transformation of the demand side of markets. The revolution in the interaction between consumers and producers has already happened and will continue to evolve based on online platforms. Obvious examples are new businesses, such as Uber and Airbnb, which have deep implications for the operation of markets and position of incumbent firms in the existing industries. Interaction between producers and consumers is also changing, as well as the nature of products and services. Many manufacturers and companies in general claim that they now sell solutions rather than products. Competition intensifies due to low cost of entry through new platforms and ability to customize products and

services to specific needs. This also raises issues of competition policy.

New data platforms are able to create enormous bases of personal information without consumers' consent or awareness, especially information revealed through the use of online markets and applications. This raises issues of product and services regulation, as well as privacy, market and political power. Firms such as Google, Amazon, Facebook and Apple have acquired monopolistic dominance that dwarfs the historical examples of Standard Oil.

Possible policy and institutional responses

In short, the Fourth Industrial Revolution has already had a deep and lasting impact on all industries, on both the supply and the demand side of goods and services. To enable the economy to efficiently and effectively respond to past and forthcoming challenges, adequate macroeconomic and industrial policy will have to be accompanied with a significantly improved public and private investment effort. Presently, the size is too small, the structure is not aligned with likely infrastructure and human capital (knowledge) gaps, the efficiency is too low, and the efficacy in achieving stated objectives is inadequate.

Major improvements are needed in public investment planning, from identification to preparation, appraisal and implementation. Obvious areas for plausible interventions include building capacity for critical stages of selecting investment priorities, doing quality project preparation, competitive financing and implementation. In terms of structure, public investment will be expected to devote an increasing share to human capital development, ICT and connectivity, science, R&D and innovations, while meeting the highest international standards. Finally, public investment must be smart and focused on enabling and crowding in private investment aligned with the demands of the global economy.

In addition, a strong effort will be needed to design and implement a transparent incentive system for efficient private investment that would successfully apply the most recent technological changes and respond to challenges posed by the Fourth Industrial Revolution.

In this context, the main challenge will be to create sufficient internal capacity to design and implement an appropriate new industrial policy that would enable timely institutional and policy changes to keep the Serbian economy competitive. Breakthroughs in science and technology, which rest at the core of the Fourth Industrial Revolution, have introduced disruptive changes across practically all industries.

Future growth-enhancing policies will have to take place in an increasingly complex world characterized by continued globalization and the overpowering impact of the changes brought about by the Fourth Industrial Revolution.

Although postcrisis globalization has slowed down in its initial domain (trade of physical goods and services), it has triggered deep structural changes in companies and industries. It changed the behavior of firms in the areas of R&D and innovations. Rational behavior prevailed over competition and generated cooperation among fierce competitors in searching new solutions. This is particularly obvious in the areas where digital technologies enable not only new forms of market interactions (continuous/online contact with consumers) and efficient search for market equilibria, but also allow better design of market regulation and government interventions in general.

There are four possible long-run growth scenarios.

The first scenario assumes that the growth rate achieved in 2018 (4.5-5 percent) can be sustained over the long term based on the existing set of policies and partial structural reforms coupled with sustained effort aimed at attracting FDI and promoting investments and exports.

The second scenario assumes significantly faster long-run growth rates (5-7 percent) based on much more robust investment growth, without much change in the policies or the speed of structural reforms. This scenario assumes that additional financing will be attracted from both domestic and external (bilateral) sources through extraordinary investment promotion and political commitment to faster development. Securing fiscal space for debt-financed robust investment growth will be the main challenge under this scenario as large borrowing commitments may lead to

unsustainable debt levels in case of implementation delays or unfavorable external developments.

The third scenario also assumes faster GDP growth rates (5-7 percent annually) enabled by greater investment from large western investors attracted by faster and effective implementation of the necessary structural and institutional reforms aligned with the EU standards and regulations. Its main risk is the unpredictability of the speed of the EU integration process and the response of western investors.

The fourth scenario aims to achieve higher growth rates (again 5-7 percent or more) by attracting significant levels of foreign investment based on the elimination of all structural imbalances and the full implementation of institutional reforms. These reforms will be supplemented by a smart industrial policy that would enable transformations necessitated by the ensuing global changes and disruptions triggered by the Fourth Industrial Revolution. These include the changes in the way industrial processes are organized and connected with educational and social systems in the digital economy of the future.

Albeit the most demanding and ambitious, the fourth scenario offers a realistic framework to address present institutional and structural weaknesses and promote smart growth that would enable Serbia not only to survive, but to actively address the coming global challenges and prosper in the long run.

This would require an extraordinary effort to overcome the legacy of the past which creates resistance and outright opposition to social and economic change and institutional reforms indispensable for more efficient policy responses needed to compete in the world driven by the Fourth Industrial Revolution and close the income and quality of life gaps with the core EU countries.

Conclusion

Serbia must address a complex set of challenges as it prepares for accession and seeks convergence with the EU in incomes and quality of life within a reasonable timeframe.

After numerous failed attempts at institutional reforms, it is now clear that the country must first address the heavy institutional legacy of the past and present

institutional weaknesses which now stand in the way of introducing modern, efficient and transparent governance systems in the state, public and private sectors.

The legacy includes:

- tangible reluctance to accept key institutions of market democracy and, especially, the rule of law, ownership rights, including creditor rights, and the legally defined role of managers, workers and labor unions; and
- weak acceptance of competition, meritocracy, and market outcomes in favor of discretionary government decisions and state intervention (i.e., preference for visible hand over invisible hand of the market). One often has wrong perception of transparency in valuing performance and achieved results. In addition, weak work ethic and low valuation of learning and knowledge seem to prevail, along with the lack of respect for social norms.

Interestingly enough, there is a widespread refusal of some widely accepted basic economic results, dating back to Adam Smith and David Ricardo, regarding the benefits/efficiency of markets and trade, on the one hand, and the modern concepts such as corporate social responsibility, on the other.

As a result, we observe deep institutional tectonic fault lines and the lack of:

- clear social contract (in Rawls's sense),
- consensus on the essence of democracy and political freedom, essential rules on the separation of (legislative, executive, and judicial) powers,
- clear (and proper) understanding of the role of markets in reaching efficient outcomes and the role of state intervention (to correct market failure), and
- the freedom of speech and free media.

Once an understanding has been reached on these key institutional premises of market democracy, the country can devote its full attention to closing the institutional, infrastructure and income gaps with core EU countries, while, at the same time, responding to likely pressures from the Fourth Industrial Revolution requiring profound social, industrial and organizational changes.

Out of four possible growth scenarios, the only institutional and policy scenario that supports a sustainable

growth path compatible with clear institutional and governance commitments is the fourth scenario. It may be more demanding than other scenarios, but it offers relatively fast convergence based on a smart industrial policy and deep structural changes of economic organization, education and social systems.

The new social consensus underlying this scenario may not be easy to reach, but it will be well worth it if it offers a base to fend off future governance risks and ensure prosperity in the challenging new digital world.

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Dušan Vujović

Professor of Economics at FEFA (Faculty of Economics, Finance and Administration), Belgrade, and a World Bank consultant in the areas of fiscal and macroeconomic policy, public sector and governance reform, and R&D for innovation. Prof. Vujovic was Minister of Finance of the Republic of Serbia from August 2014 till May 2018, as well as Minister of Economy from the appointment of new Government in April 2014 through July 2014. He was a research fellow at CASE Institute, Warsaw; affiliate MOC faculty member of the Institute for Strategy and Competitiveness of the Harvard Business School, USA, and USAID consultant on budget and fiscal reform. Prof. Vujovic past career includes various positions at the World Bank, such as Country Manager for Ukraine, and Co-Director of the Joint Vienna Comprehensive program for government officials from the transition economies, Lead Economist in the World Bank ECA region and in the Independent Evaluation Group. Before joining the World Bank in 1979 and during the 1983-1992 period he was a professor at the Department of Economics, University of Belgrade; the Director of the Macro-modeling project for the Federal Government of Former Yugoslavia, and a visiting scholar and researcher at the Department of Agriculture and Resource Economics at UC Berkeley, USA. During his 45 year long career Prof. Vujovic authored and co-authored a large number of publications on macroeconomic policy, development, institutional reforms and key transition issues published as papers in international and domestic journals, and independent chapters in books published by The World Bank, Oxford University Press, North Holland, Edward Elgar, etc.