

Dragan Đuričin

University of Belgrade
Faculty of Economics
Department of Business Economics and
Management

Iva Vuksanović Herceg

University of Belgrade
Faculty of Economics
Department of Business Economics and
Management

THE GREAT RESET OF SERBIA'S ECONOMY DURING AND AFTER THE COVID-19 CRISIS

Veliko resetovanje ekonomije Srbije tokom i posle kovid 19 krize

Abstract

Since 2020 the modern world has been witnessing a complex crisis, which is essentially a medical crisis (the COVID-19 pandemic) within a structural economic crisis. In addition to the current nexus of risk stressors, such as anthropogenic climate crisis, biodiversity loss, financialization and income inequality, all global and cross-cutting by their very nature, in the last period biorisk has been growing dramatically. The COVID-19 pandemic is a devastating and tragic moment which is rapidly becoming a matter of primary public concern. Social distancing, as the most effective anti-pandemic measure, has pushed the economy into sleep mode. Hibernation provokes a truly systemic economic downturn. The current crisis is particularly deepening structural imbalances of the neoliberal model of capitalism. Core policies responses, such as liquidity infusion and fiscal stimulus, are massive and permanent. Increasing moral hazard and irrational exuberance, such policies are destroying capital markets, as a brain of the market economy. But every crisis is also a chance to change. By tackling the neoliberal capitalism' fault lines in a more effective way, it may actually accelerate the pace to the future we had in mind. A quick restart (or recovery) of the economy and a later rebound require systemic and concerted action in order to mitigate the negative effects of both medical and economic crisis. In managing a complex crisis such as this one, guided by the vision of a sustainable, inclusive and prosperous economy, governments all around the world should take radical reform steps. It means, at least, two things at once. First, dealing with the pandemic as a macroeconomic variable. Second, implementing core economic policies (monetary and fiscal) in a structural way. To do so, the transition from shareholder capitalism to stakeholder capitalism is imminent. An emerging system will combine two institutional choices, the "visible hand" of state (impact investments based on structural or

industrial policies) and the "invisible hand" of market forces. It's time to give the government a stronger voice in the economy. To create value instead of redistributing value, the major part of impact investments will be in circular and regenerative economy, health care, infrastructure (physical and conceptual), science, and education. The objective of this paper is twofold. First, to fill the present conceptual vacuum created by the neoliberal doctrine economics rules with the aim of identifying key components of Serbia's economy revival based on its macroeconomic specifics and catalytic impact of new economics rules during and after the COVID-19 pandemic. Second, to highlight the relevance of key components of stakeholder capitalism, including the regenerative and circular model of growth and heterodox economic policy platform for the Great Reset, or recovery and rebound respectively.

Keywords: *COVID-19 pandemic, Serbia, Industry 4.0, circular economy, heterodox economic policy platform, manufacturing sector*

Sažetak

Od 2020. godine savremeni svet je svedok složene krize, medicinske krize (pandemija kovida 19) unutar strukturne ekonomske krize. Pored postojećih faktora rizika kao što su antropogena klimatska kriza, gubitak biodiversifikacije, finansijalizacija i ekonomska nejednakost, svi globalnog i prožimajućeg karaktera, u poslednjem periodu došlo je do naglog skoka biološkog rizika. Pojava pandemije kovida 19 je tragičan i urušavajući trenutak koji ubrzano dobija najveći značaj u javnosti. Socijalno distanciranje, kao primarni način borbe protiv pandemije, gura ekonomiju u stanje sna. Hibernacija izaziva potpuni pad sistema. Nova kriza je produbila strukturne neravnoteže neoliberalnog modela kapitalizma.

Infuzija likvidnosti i stimulansi kao glavni odgovori ekonomskih politika su obilni i kontinuelni. Takve nekonvencionalne politike urušile su tržište kapitala i povećale moralni hazard. Ipak, poslednja kriza predstavlja šansu za promene. Ona ubrzava pojavu budućnosti koju imamo na umu kada razmišljamo o saniranju strukturnih neravnoteža neoliberalnog kapitalizma na efektivniji način. Brz restart (ili obnova) ekonomije i kasniji uspon zahtevaju sprovođenje aktivnosti na sistematičan i sinhronizovan način, kako bi se sanirale negativne medicinske i ekonomske posledice krize. Upravljajući složenom krizom kao što je poslednja kriza sa vizijom da ekonomija postane održiva, inkluzivna i prosperitetna, vlade širom sveta preduzimaju radikalne reformske korake. To znači najmanje dve stvari istovremeno. Prvo, tretman pandemije kao makroekonomskog faktora. Drugo, opredeljenje da se ključne makroekonomske politike vode na strukturni način. Da bi se prethodno ostvarilo, neophodna je transformacija „kapitalizma akcionara“ u „kapitalizam interesnih grupa“. Sistem koji nastaje kombinuje dva institucionalna izbora, „vidljivu ruku“ države (impakt investicije zasnovane na strukturnim ili industrijskim politikama) i „nevidljivu ruku“ tržišta. Vreme je da se industrijskim politikama u ekonomiji da veći značaj. Stvaranjem umesto redistribucijom vrednosti, najveći deo impakt investicija će biti u uloženi u cirkularnu i regenerativnu ekonomiju, zdravstvo, infrastrukturu (fizičku i konceptijsku), nauku i obrazovanje. Ovaj rad ima dva cilja. Prvo, da popuni trenutni konceptijski vakum koji je posledica pravila neoliberalne doktrine, sa ciljem da se identifikuju ključne komponente programa restrukturiranja u Srbiji koji bazira na njenim makroekonomskim specifičnostima i katalitičkom dejstvu novih ekonomskih pravila koja su korisna za restart i uspon ekonomije tokom i posle pandemije kovida 19. Drugo, da se osvetli legitimitet kapitalizma interesnih grupa i njegovih ključnih komponentata kao što su regenerativan i cirkularan model rasta i heterodoksna platforma za vođenje ekonomskih politika za „Veliko resetovanje“, odnosno obnovu i uspon.

Ključne reči: *COVID-19 pandemija, Srbija, Industrija 4.0, cirkularna ekonomija, heterodoksna platforma za vođenje ekonomskih politika, industrijski sektor*

The collapse of market fundamentalism

Economics is not an exact science. It is a social science, the science about the context or the nexus of social conventions framing and directing the behavior of economic agents and their interactions. Put simply, the economy is mainly a man-made non-linear system, an aggregation of the different forms of behavior (or heuristics) of players of competitive game, regulators and institutions.

Contrary to the previous logic of reasoning, the neoliberal doctrine in Economics (or market fundamentalism), as the most extreme version of free market capitalism, understood Economics as an exact science and the economy as a linear system, actually as

a context with diminished role of the state. Maybe that is the reason why Economics ignored the laws of nature. Frequent and even worse economic crises, along with the disruption of nature and biodiversity loss, have exposed the fault lines in this way of reasoning. Such a theory has made unsustainable the global economy and exposed to existential risk the planet Earth as a whole.

The COVID-19 pandemic is closely linked with the structural imbalances we have already identified in relation with market fundamentalism, such as financialization (and deindustrialization), sputtering productivity, rising income inequality, slowing growth, and unsustainable debt levels. This is an age of entropy, an era of drastic, frequent and contradictory changes. If you go back to the period before the COVID-19 crisis, you can see everywhere, in core and emerging economies, structural imbalances due to the neoliberal economic theory's fault lines and inconsistencies in the related economic policies.

The neoliberal boom during the 1980s and 1990s, with the aim of promoting market fundamentalism, was largely geared by liberalization, deregulation, and privatization. The key ideological components of the freedom-loving state were individualism and free market or free (or private) enterprise. Given that an even smaller part of the population benefited from economic growth and even more harm was done to the planet Earth to achieve it, such growth was unsustainable, both socially and physically. After the neoliberal boom plateaued in the core world economies at the beginning of the new century, environmental, economic and social issues came to the surface. The period of 5-6 percent growth rate was over. The economy cannot continue to rely on the system driven exclusively by a selfish mindset based on short-termism of profit maximization and systemic tax avoidance. A system which externalizes environmental and social harm cannot take care of humanity and the planet Earth as a whole.

After the core world economies had entered a structural crisis, the rescue plan to save neoliberal capitalism was launched. Paradoxically, the dominance of unconventional policy measures as panacea for the mitigation of structural crises fundamentally deteriorated the free market and free enterprise context. On the ruins of Dot Com Crisis of 2001 and the Great Recession of 2008,

the fourth industrial revolution began. Thanks to a new technology push, a new growth episode has emerged, this time in a shorter cycle. As always, technology is an enabler. However, sustainability of the growth trajectory depends primarily on the context.

The most effective indicator of inefficiency of the neoliberal model of growth is the rise of global debt. According to the IMF data [9], in the wake of COVID-19 pandemic sovereign debt in core economies reached more than 120 percent of GDP and in emerging economies over 60 percent of GDP. In 2020, the global sovereign debt surged by USD 24 trillion. An additional indicator of the system's vulnerability is growing popularity of cryptocurrencies. Cryptocurrency is neither a new class of financial assets nor a cash surrogate. It is a store of value (or "digital gold") when the dominant narrative is "a fear of fear". In the middle of April 2021, the market capitalization of cryptocurrencies was about USD 2T. Interestingly, the cryptocurrency market is extremely volatile. After a one-year period in which value was quadrupled, in the period of only two months, from the middle of February, when prices hit record highs, to the middle of April this year the prices of cryptocurrencies tumbled 70 percent.

Scientific understanding of modern economic reality requires the objective evaluation of basic economics rules and evidence-based estimations. When it comes to the basic neoliberal economics rules, at least three of them collided in a way that broke down the economic system.

First, well-being as the first derivative of egoism. By affirming that the economy is an aggregation of people whose dominant characteristic is egoism, almost all schools in Economics taught that a system which maximizes value for the so-called "homo economicus" is a natural habitat for sustainable growth. The extreme version of this line of reasoning is "shareholders capitalism", being used to maximize shareholder value [8]. Unfortunately, the basics of such a theory are fundamentally wrong. D. Kahneman [12], eloquently and empirically confirmed that, in the real world, economic agents are not just so-called "homo economicus", as many of them simply behave like "humans", which means that they also engage in altruistic acts. In the age of climate crisis, anyone who seeks to maximize personal benefits in a way that leads to

the increase in greenhouse gas emissions could be labelled as "ugly sociopath".

Also, behavioral economists empirically proved that people are not rational and consistent in expressing their choices as well as that the symmetry between risk and reward does not lie behind investors' habits. Irrational exuberance as the dominant mindset of investors before the bubbles burst is an example of irrational, inconsistent and asymmetric behavior of economic players. The climate and medical crises particularly encouraged the emergence of conceptual alternatives to shareholder capitalism such as "stakeholder capitalism" [19], "entrepreneurial capitalism" [14], and "progressive capitalism" [21]. All concepts advocate a greater role of governments in ensuring well-being, often represented by the seventeen sustainable development goals (the 17 SDGs) defined by the UN [24].

Second, the model of growth or, practically, the model of capitalism, largely ignored the laws of nature. In neoliberal capitalism, as the last version of free market capitalism, the relationship between the economy and nature is poorly defined. Namely, this model ignores the rules and operating principles of physical system and biosphere. It does not take into account negative externalities and prices of public goods, nor the depletion of natural resources. By advocating such a model of growth, economic theory, along with the structural imbalances of economic system, contributes to the anthropogenic climate crisis, biodiversity loss, and even microbe mutations. Through its impact on the destruction of physical system and biosphere, a linear model of growth separates people from nature. Wealth concentration separates people from people. The loss of confidence and trust separates followers from leaders and breaks down social cohesion.

This model of growth is not sustainable, particularly in the case of late developers. Late developers do not have financial, organizational and human capital to deploy natural capital in the process of industrialization. Neoliberal opinion makers have argued that the role of the government, in the case of late developers, is to create a free-market setting and, by doing so, to attract foreign direct investment (FDI) to close capital gaps. So, technology transfer was prescribed as a blueprint for industrialization. Unfortunately, such a way of industrialization is not effective

in maintaining macro balances. Due to a growing debt burden, late developers, sooner or later, enter the middle-income trap [6, pp. 19-24]. Namely, an economy cannot finance the future growth, or structural adjustments, based on the internal earnings power or credit potentials. According to R. Rajan [18], the most effective way to overcome this problem is the development of in-house technology based on industrial policies for tradable sectors. This alternative approach, known as “managed capitalism” or “development state”, was adopted by the late developers from Asia in the early 1960s.

Third, dual economic policy platform. In neoliberal capitalism, the platform for economic policies is based on market forces as a primary coordination mechanism, globalization as a framework for competition, and inflation targeting as an almost exclusive policy tool to maintain macroeconomic stability. The problem with this policy platform is its inconsistency during the business cycle, namely one set of policies for the “good times”, based on market fundamentalism both internally and externally, and another set of policies for the “bad times”, following Keynesian deficit financing and related unconventional policy measures. Unconventional monetary policies, such as “too big to fail”, quantitative easing (QE), near-zero or even negative interest rates or fiscal policies, such as subsidies, furlough schemes or simply fiscal easing to essential sectors, have no limitations. For example, the magnitude of the money printing of reserve currencies during 2020 has not been seen since the 1980s, when neoliberalism started to flourish. For example, about 20 percent of all US dollars in circulation were printed in 2020.

All policy measures in the neoliberal model are a consequence of two theoretical assumptions, the linearity of economic system and pattern matching behavior. Apart from difficulties with the calibration of unconventional policy measures, a key problem of this policy platform is related to the fact that there is no exit strategy. Money printing and fiscal stimulus inhibit creative destruction of the market and force dependent agents to act impurely. Such policies have called into question the market efficiency hypothesis, stating that when the number of start-ups goes down, then the relative number of dependent companies goes up.

Despite the unintended consequences of fault lines, during the current crisis central banks and treasuries all around the developed world have proposed additional stimulus schemes based on these fault lines. Due to near-zero or negative interest rates, prices of equity and bonds are significantly overvalued, practically not correlated with economic fundamentals. When signals from capital markets are wrong, the result is a misallocation of resources due to the divergence of forecasts. By now, legitimate prospects about the days ahead, such as inflation, reflation (recession + inflation) and deflation, are quite divergent. All these views could provide a platform for (re)interpretations and/or creative interpretation of the basics by interested stakeholders with power and impact, or simply by ideologically motivated scholars. Governance without the government, or an increasing impact of international financial organizations, has triggered a wider change in the opinions of economics scholars about the universality of market fundamentalism. The previous fact provokes some critics to qualify neoliberal economics as an ideology, or the “dismal science”, a toy in the hands of politicians. Some expressions of the loyalty to neoliberal theory seem very grotesque, especially heard from some scholars from the late developers such as Serbia. Due to ideological predilections, those proponents are not able to evaluate fact sheet and get to the bottom of the truth.

Frequent and even deeper economic crises indicate that dominant economics rules are the causes of the fractures of the system. The repercussions are not encouraging. This system is producing, reproducing and deepening structural imbalances. The global economy, full of structural imbalances, unconventional policies and their unintended consequences on economic value and nature disruption, cannot recover by itself and make the planet Earth sustainable. Not only to thrive, but to survive, the economic system requires multiple changes, practically the Great Reset. The need for the Great Reset has become of the utmost importance, particularly during the COVID-19 pandemic. The virus mutations, as a “black swan”, are intertwined with many other issues.

The Great Reset does not mean changing everything, but changing what needs to be changed. The first in line for undergoing changes is the economic system that should

be oriented toward global commons (or the SDGs). A sustainable, inclusive and prosperous economic system should be built by analogy with circular processes and adaptive evolution in nature.

The COVID-19 pandemic accelerated the trends towards change. It reiterates the emergence of the vision of global commons based on circular and regenerative growth model, heterodox economic policy platform, universal medical system and digital democracy as the future we want. This could be a platform for the Great Reset in Serbia, too [5].

How do the core world economies respond to the COVID-19 crisis?

In the COVID-19 crisis, the rise of Keynesianism is an explanatory parallel of how the core economies had recovered after the Spanish Flu after the end of the Great War. In the current crisis, a part of stimuli is going to essential sectors (medical equipment, pharmacy, biotech, food, energy, logistics, etc.), as well as to highly socially sensitive companies (“too big to fail”) and the most vulnerable groups (“helicopter money”). In contrast to the Spanish Flu crisis, where deficit financing was exclusively allocated to the real economy, in the COVID-19 crisis constant stimuli have been used in the financial sector, again for a very long time and in a very aggressive manner. Such behavior is pushing capital markets investors out of reasonable risk spectrum.

In the monetary sphere, massive liquidity pumping through bailouts of creditors, capital injections through QE as well as near-zero or negative interest rates are new variations of the role of the central bank as a “lender of last resort”. The balance sheet expansion and emergency purchase of government and corporate bonds through the conversion of government bonds into long-term debt and hybrid equity classes, tell us that in the meantime the central bank is going to be a “buyer of last resort”. The sad reality is that the central bank is continuously monetizing treasury losses.

After a massive and long monetary relaxation, the monetary policy is much more limited than it was in the recent past. Inflation risk is very much effective. Inflation

bets in 2021 are at multi-year highs. Moreover, permanent stimulus made dependent sectors of the economy act impurely. In the US approximately 20 percent of companies in 2020 are the so-called “Zombie Companies” or the companies dependent on stimuli. In the 1980s, at the start of neoliberalism, the same indicator was 2 percent. Consequently, when the impact of creative destruction of market on incumbents does not exist anymore, productivity and growth stagnate and the economy goes into structural recession.

Another negative consequence of such anti-crisis policy mindset is a growing inflationary pressure. Anti-crisis program for the Great Recession of 2008 and particularly for the COVID-19 pandemic showed that stimulus postpones market check and constantly encourages the investors’ hysteria. By provoking the animal spirit of equity investors, the central bank and treasury duo actually creates regulatory bubbles. A belief in the capital markets efficiency with such massive money printing is totally unreasonable. The question without answer is: How to restore investors’ enthusiasm in the stage of hysteria? This bubble of epic proportion will influence yields inflation. Such capital markets are going to end up, sooner or later. Nobody can explain what happens when regulatory bubbles burst and capital markets crack. The previous imbalances create secular vulnerability. A new buzzword is “reflation”. Namely, due to the previously mentioned side effects of unconventional policies, a threat of reflation is a very powerful narrative. An immense rise in commodity and material prices is a pervasive lead indicator of reflation. When industrial output stagnates or decreases, yields rise is a better measure of inflation than consumer price inflation or core inflation. Due to reflation, the world economy is at risk of double-dip (or W-shape) recovery.

A key problem of unconventional policies set is limited fiscal space of the government. Fiscal unbalance is contributing to debt increase.

We must reconsider the regular way of thinking in economics because the planet Earth is less habitable than ever before and people have lost confidence and trust in leaders. The circular model of growth and heterodox economic policy platform clarify the philosophy of new economics rules.

When it comes to the model of growth, the way to recovery is to invest in the economy that is increasing instead of redistributing the output. Also, the heterodox economic policy platform “keeps some powder dry” for structural changes with a catalytic role of Industry 4.0 solutions. Tesla’s 15 thousand percent capital gain since its formation is a colorful example of how the reinvention in mature industry from a cumbersome engine to a powerful chip could be economically and environmentally viable.

In the current crisis, the pandemic outweighs other worries. But economics scholars must not forget the urgency of the regenerative and circular economy build-up. Actually, the COVID-19 pandemic is going to be a catalyst for the climate crisis awareness. Moreover, improvements in medical system and climate actions together are seen as historic opportunities for the economy to reset (and rebound). Definitely, someone who understands anti-establishment appeals cannot continue with the implementation of neoliberal rules. The keyword is intelligent industrialization.

How did Serbia’s economy look like at the start of the COVID-19 crisis?

Serbia is a small economy, practically a late developer¹ situated on the periphery of the world economy. Before the dissolution of Yugoslavia, the country was geopolitically

1 According to the IMF World Economic Outlook [10], in 2020 GDP p.c. in current prices was USD 7,635. According to the authors’ calculations in steady USD this is a smaller level of income in comparison with the GDP level from pre-transitional 1990 (steady USD 6,000).

“stuck in the middle” between progressive free market economies and stagnating socialist economies, for a long time suffering from the “middle income trap”. After the breakup of the former state in the early 1990s, Serbia was excommunicated from Europe’s mainstream. So, over a long period of time the economy was impotent and out of tune. The turnaround started to take hold after the program of fiscal consolidation 2014-18. Serbia made a remarkable progress in macroeconomic performance which was a prerequisite for the rebound in 2019.

Before we make quick takes on macroeconomics in the last year of analysis, let’s take a tour through data points in previous years. Table 1 portrays basic macroeconomic indicators during the period of fiscal consolidation, rebound and the COVID-19 crisis. The COVID-19 crisis has strongly affected the performance in 2020 and chances for the Great Reset.

In terms of laying the groundwork for macroeconomic stability, job creation and growth, the fiscal consolidation program 2014-18 truly delivered a rebound. However, an unprecedented complex crisis caused by the COVID-19 pandemic provoked an upheaval. The government’s greater involvement in the economy led to fiscal deficit of 8 percent. However, thanks to massive stimulus, macroeconomic fundamentals remained in relatively good conditions, with the only exception of increased level of debt. This especially refers to price and currency stability and unemployment rate which even decreased in the crisis year (from 10.4 to 9.0 percent), the result that could hardly be repeated in the region, even in Europe. Also, the level of NPL ratio

Table 1: Trends in macroeconomic indicators: period 2014-20

Macroeconomic data	Fiscal consolidation program					Rebound	Covid-19
	2014	2015	2016	2017	2018	2019	2020
Consolidated fiscal result as % of GDP	-6.2	-3.5	-1.2	1.1	0.6	-0.2	-8.0
Current account as % of GDP	-5.6	-3.5	-2.9	-5.2	-4.8	-6.9	-4.3
CPI (% relative to the same month a year earlier)	1.7	1.5	1.6	3.0	2.0	1.9	1.3
Unemployment rate (%)	19.2	17.7	15.3	13.5	12.7	10.4	9.0
Real GDP growth (%)	-1.6	1.8	3.3	2.1	4.5	4.2	-1.0
Public debt as % of GDP	66.2	70.0	67.8	57.9	53.7	52.0	56.8
NPL ratio (share in total loans)	21.5	21.6	17.0	9.8	5.7	4.1	3.7
RSD/EUR exchange rate (period average)	117.31	120.73	123.12	121.34	118.27	117.85	117.58
External debt as % GDP	72.4	73.4	72.0	65.1	62.2	61.5	66.3
FDI net (mil EUR)	1,236	1,804	1,899	2,418	3,157	3,551	2,902

decreased from 4.1 to 3.7 percent, which tells us that the economic burden of the crisis was taken by sovereign debt, not by the economy.

The increase of medical costs was 1.6 p.p. of GDP. So, the share of health care in GDP formation reached 6.0 percent at the end of 2020. That is the price of keeping the medical system going. Stimulus is another price of keeping the economic system going. Stimuli participate in GDP formation with 14 percent. The great means for a great purpose. The following period will demonstrate whether the price to be paid is even greater, and whether the economy is capable of paying such transaction costs increase in a sustainable way. The rise in budget deficit is logically followed by public and external debt increase (from 52 in 2019 to 56.8 and from 61.5 to 66.3 percent of GDP in 2020, respectively). FDI is at a lower, but still satisfactory level (about EUR 3 billion), maintaining a positive trend and considerably higher figures since 2014.

Despite a remarkable rebound after the period of fiscal consolidation, the previously rooted vulnerabilities have deepened during the COVID-19 crisis. Serbia made

some progress in macroeconomic indicators, but if you look at vulnerability indicators, the results indicate a growing complexity of risk exposure (see Table 2).

However, debt increase is not depressing, rather cautionary bearing in mind that credit rating is stable and still at an acceptable level and is even improving. S&P and Fitch affirm Serbia at BB+/stable. Moody's has increased rating from Ba3/stable to Ba2/stable. Fiscal capacity has been decreasing, but it is also manageable under some conditions. To summarize, short-term debt is sustainable, but long-term debt is not under control, even for as-is scenario.

The competitiveness of Serbia's economy was not its strongest card at the beginning of the COVID-19 crisis. Competitiveness has not deteriorated during pandemic, but a "buffer" for bouncing back once the crisis is over still doesn't exist. However, the share of export (without services) in GDP formation remained at a similar, and unsatisfactory, level as in the previous years (34.5 percent). Competitiveness, seen through the eyes of the WEF, is pretty much the same, mainly due to a large share of agriculture,

Table 2: Vulnerability indicators in 2020

Financial vulnerability indicators			Operational vulnerability indicators		
Indicators	Value	Reference value	Indicators	Value	Reference value
Indebtedness			Transitional output gap	20%	0%
• Public debt***/GDP	56.8%	<45%	Okun index	10.3%	<12%
• External debt/GDP	66.3%	<45%	(inflation + unemployment)		
• External debt/Export	138.8%	<220%	Gini coefficient*	33.3%	<30%
Credit rating			Current account as % GDP	-4.3%	<5%
• S&P	BB+/stable	rank > BB+	Consolidated fiscal result as % GDP	-8.0%	>-3%
• Fitch	BB+/stable	rank > BB+	Dependency ratio	0.52	>1
Fiscal capacity			Youth unemployment**	32.4%	<20%
• Tax revenue as % GDP	37%	<34%			
• Shadow economy as % GDP	34%	<31%			

Competitiveness vulnerability indicators		
Indicators	Value	Reference value
Export (goods)/GDP	34.5%	>50%
Currency change (Dec 2020/Dec 2019)		
• Nominal change	/	<5%
• Real appreciation	1.6%	<0%
Global Competitiveness Index	72 of 141	65- SEE average
Corruption Perception Index	94 of 179	59-SEE average
Ease of Doing Business	44 of 190	60-SEE average
Economic Freedom Index	54 of 178	62-SEE average

*Gini coefficient of equalised disposable income - EU-SILC survey 2019, Eurostat

**The share of young people who are not in employment, education or training (NEET) is 17.6%

*** Central Government

commodities and low value-added industrial products in GDP formation. The WB's Ease of Doing Business and Economic Freedom Index have been maintained on a good scale for the purpose of keeping the level of FDI. The national currency appreciated in real terms, but we would actually like to raise the discussion on whether this was unfavorable for the national economy since the decoupling of global value chains and border closures led to a significant increase in commodity, materials and other inputs prices.

The Okun index and Gini coefficient are around the tolerable corridor. However, they need to be monitored. Stimulus has not been targeted and distributed so far, but the following period might call for more prudent measures to keep the most vulnerable social layers groups from slipping below the poverty line. As expected, the crisis period has not brought many job opportunities for the youngsters. The young unemployment is still on a high 32 percent level and, together with demography which is not impressive and pan-European vulnerability of having a population much too old (0.52 dependency ratio), leads us to the alarming question whether such a system could be truly sustainable from the perspective of the most potent part of workforce.

Finally, the root cause behind Serbia's inability to keep up with other Central and Eastern Europe economies is transitional output gap. In contrast to peer economies, which in 2020 recorded a surplus of more than 40 percent, Serbia's transitional output gap is on 20 percent level in steady USD benchmarked against the pre-transitional 1990. In the last two decades, the main reason for that is slow reindustrialization.

In each prosperous national economy industrial output is a key driver of the sustainable growth trajectory. In pandemic 2020, China's economy remained healthy and achieved the growth of 4 percent. The share of industrial output in GDP formation was about 40 percent. The economy is still growing and in 1Q 2021 record growth since 1992 was fueled by the industrial output jump of 18.2 percent.

Industrial production is particularly important when the threat of recession is real, due to the pause in demand and supply as well as the global supply chains decoupling. A complex crisis, such as the current one, exacerbates the

role of industrial production in ensuring the continuity of economic activities as well as the surveillance of medical system.

How has Serbia responded to the COVID-19 crisis?

It is practically impossible to deal with a complex crisis, actually a medical crisis within an economic crisis, without an anti-crisis program. The purpose of the program is twofold. First, flattening the pandemic curve with the aim of saving human lives and avoiding the medical system overload. Second, steepening the J-shaped recession curve with the aim of preventing economic freefall and making recovery and rebound as soon as possible.

The synchronization of medical and economic policy measures is a challenging task. Double-dip (or W-shape) crisis is a realistic scenario if inadequate medical response contributes to virus mutations, lockdown and economic downturn and/or if premature easing of lockdown strictly for economic reasons triggers virus rebound. Both groups of anti-crisis measures must be taken in a systematic and synchronized way to ensure that short-term solutions do not create long-lasting problems.

In the economic part of anti-crisis program, the main priority was a rescue plan of socially sensitive companies, along with stimulus for the real economy. By using core economic policies (monetary and fiscal), the government and monetary authority gather momentum for stimulus release with the aim of boosting a general level of economic activities. Serbia has never seen such massive stimulus program, amounting in the first year of the pandemic to 14 percent of GDP. The treasury has recently extended the economic support program for 2021 with EUR 2 billion for stimulus and EUR 0.5 billion for guaranteed scheme. The central bank backed up indirectly the real economy by proposing credit moratorium, three times so far. Also, it demonstrated the efficacy in dealing with inflationary pressures and maintaining stability of the financial system. FX auctions helped stabilize exchange rate. The treasury furloughed wages and postponed taxes in the private sector. The equity investors' behavior was not strongly impacted by the threat of the economy entering

hibernation. Infrastructure and construction are picking up mainly owing to capital investments. Unfortunately, the pandemic has halted growth in services, non-essential industrial production, and real estate (particularly commercial part).

In the medical part of anti-crisis program the main priorities were: capacity building in medical system, technology revamp (including digitalization), and vaccination. Within a short time two new Covid hospitals were built and started to operate.

Figure 1 portrays economic and medical results of the anti-crisis program in a synchronized way. Economic results are presented by growth rate, quarter-on-quarter. A critical medical result is the number of infections per million people, quarter-on-quarter.

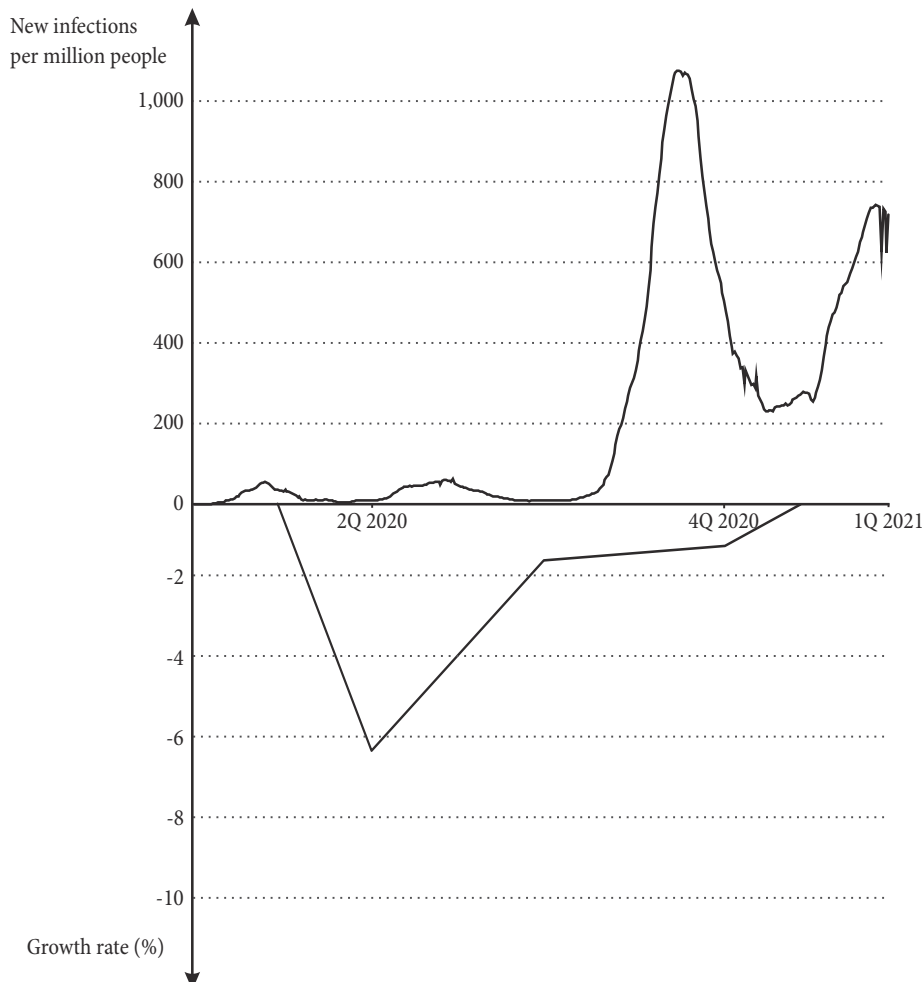
Serbia's economy entered 1Q 2020 with a positive growth rate of 4.6 percent. It was an echo effect of the

growth push from 2019 rebound. Unfortunately, the COVID-19 pandemic turned the growth curve into negative territory. We see from Figure 1 that in 2Q 2020 growth rate was -6.4 percent. Economy reacted positively (factory orders rose significantly) to the treasury-central bank rescue program at the end of March 2020. In 3Q and 4Q the government started to finalize the recovery with complementary measures. So, a negative growth rate eased at the end of 2020. The key result of anti-crisis program is a minimal drop in GDP of -1 percent.

Empirical J-curve is a very good indicator of what is going on with the economy during the crisis. According to growth rate, the economic part of anti-crisis program could be qualified as: so far so good, reasonably good.

When it comes to the medical part of rescue plan, the situation was relatively under control until 4Q 2020. The second wave of infection reached its peak in December

Figure 1: Anti-crisis program: Key economic and medical results



Note: Daily new confirmed COVID-19 cases per million people are shown based on rolling 7-day average
 Source: Johns Hopkins University CSSE COVID-19 Data (collated by Our World in Data)

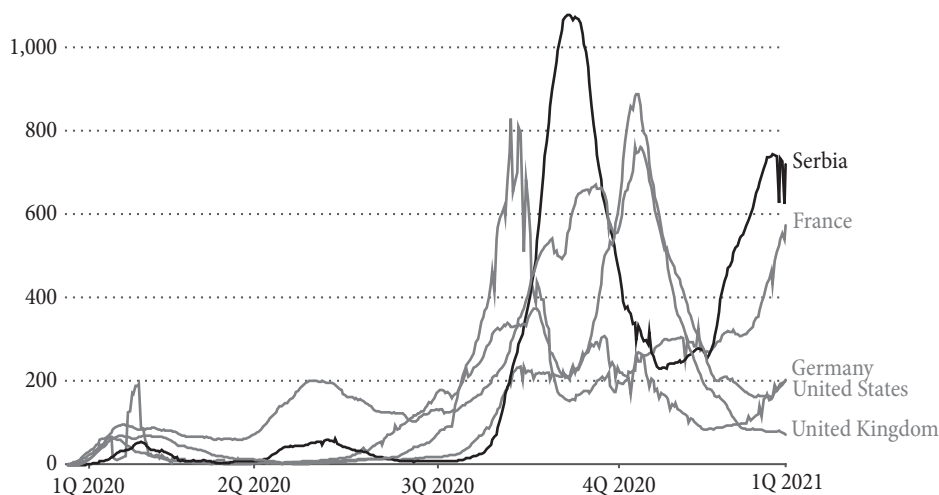
2020 and was immediately succeeded by the third wave in 1Q 2021. The infection curve steepened again amid new virus mutations. Comparative data about the level of infection are not encouraging, particularly for 1Q 2021 (see Figure 2). Mutations are making virus more contagious and severe. So, the pandemic is reinforcing stress for the economy again.

When it comes to the main achievements of the medical component of anti-crisis program, vaccination is on the top of the list. Figure 3 presents comparative data on the world’s leaders in vaccine rollout. The way in which Serbia has been managing the vaccination campaign is

truly remarkable. Economic activities have worsened, but the intensification of vaccine rollout has been fueling economic revival. Growth rate of 1.2 percent in 1Q 2021 indicates that the economy is on the road to recovery.

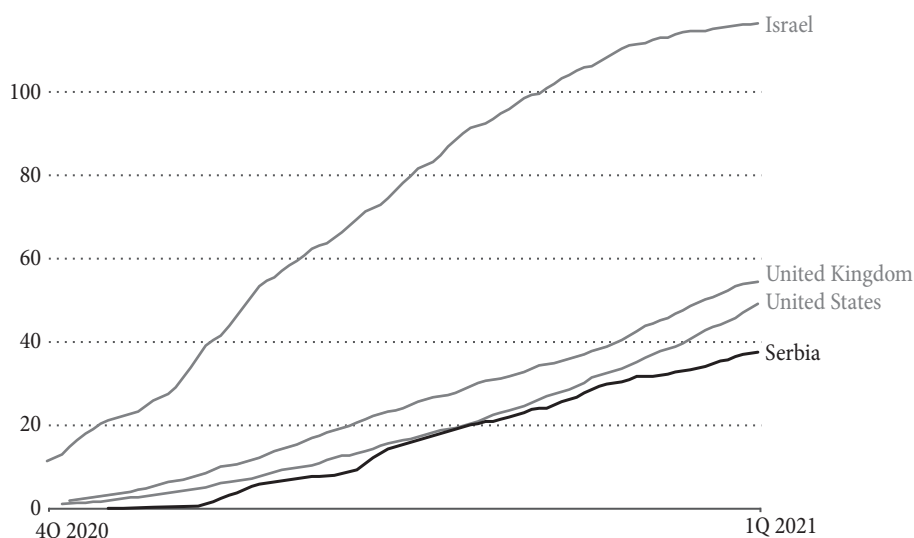
Putting all facts together, we can see that the secret of the revival in a complex crisis such as the COVID-19 crisis is really about impact investments. It is very difficult to generate systemic demand in downturn without impact investments. The main concern is fiscal cliff because fiscal measures should be more conservative in Serbia than in the countries with reserve currency. Massive stimulus, along with a substantial increase in medical costs, has

Figure 2: Daily confirmed cases per million people, rolling 7-day average



Source: Johns Hopkins University CSSE COVID-19 Data (collated by Our World in Data)

Figure 3: Vaccine rollout: comparative data



Note: COVID-19 vaccine doses administered per 100 people. The total number of vaccination doses administered per 100 people in the total population. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses)
 Source: Official data collated by Our World in Data

breached the debt threshold of 60 percent of GDP. Current fiscal deficit is partially sustainable thanks to FDI influx and credit capacity. To keep short-term debt sustainable, the government needs to increase borrowing. The only sustainable way to keep long-term debt under control is to increase output through impact investments.

Both components of impact investments, public investment and FDI have played a critical role on the road to recovery. In 2020 the pandemic marginally slowed down the previous growth progress in the segment of public investments with some absolute decrease in the segment of FDI and a ramp-up in infrastructure (see Figure 4).

Economic stimulus and massive vaccination, along with capacity building in the medical sector, are helping to keep up the enthusiasm of foreign direct investors. Serbia cannot get an easy access to capital markets, so public investment in infrastructure should remain the key leverage to keep the role of impact investments in preserving fiscal balance.

Impact investments are closely associated with two questions: where to invest in the future and how. The common denominator for both answers is industrial output.

Serbia's industrial output: From industrialization to deindustrialization and back

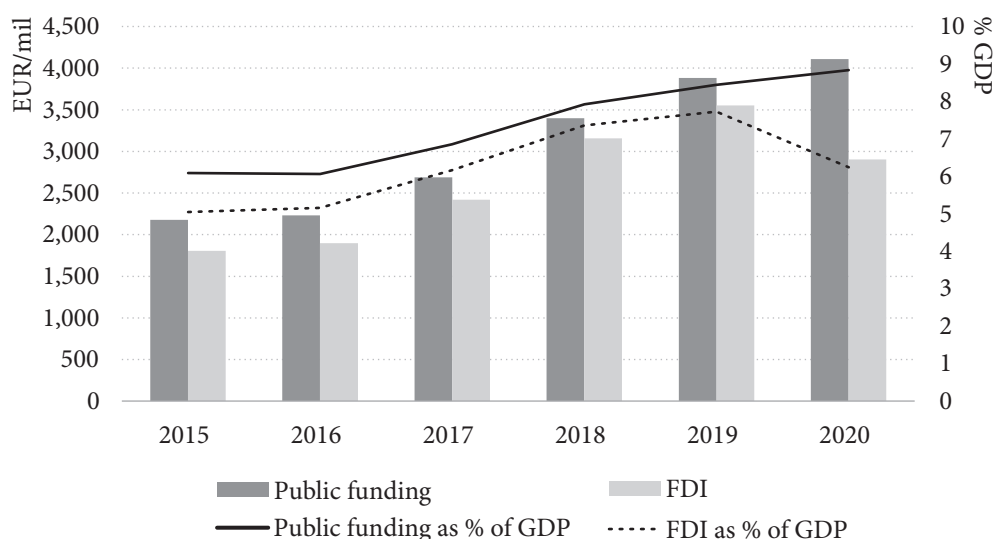
To understand how Serbia ended up with such a level of industrialization and how it could improve the quantity

and structure of industrial output, we must analyze some development milestones. So, let's give a very short background from economic history. The analysis of the growth model puts the problem of industrialization at the epicenter.

Serbia, as a republic in the federal state of Yugoslavia, had entered the second industrial revolution in early 1960s with the level of GDP p.c. of approximately 2,000 steady USD. The development strategy was based on technology transfer as a blueprint for the industrialization of late developers. Transfer of technology was a way for industrial output expansion, either through export expansion or through import substitution. At the end of this period in 1990, industrial production contributed with 27 percent to GDP formation and GDP p.c. reached approximately 6,000 steady USD.

Unfortunately, the idea that technology transfer alone is able to create sustainable growth was false. Despite the industrial output expansion, macro deficits were constantly increasing throughout the entire period of rapid industrialization. Current account deficit emerged as a consequence of foreign technology purchase, terms of trade and market liberalization. Deficit in capital balance was primarily a result of debt financing of technology purchase. Under the pressure of two macro deficits, the government almost regularly failed to maintain fiscal balance. So, macro deficits increased new borrowing and debt burden, constantly decreasing the speed of growth.

Figure 4: Impact investments in Serbia: period 2015-2020



In the middle 1980s, despite the continuous transfer of technology, Serbia entered the “middle income trap”. Debt servicing cost contributed to the slipping of industrial output and productivity stagnation (or even decrease). With secular output gap, the progress toward growth was halted.

Burdened by structural imbalances from the past, Serbia entered the systemic transition from socialism to capitalism in the early 1990s. Moreover, the first decade of systemic transition coincided with the geopolitical cataclysm (the breakup of Yugoslavia, serial civil wars for the former country heritage, economic sanctions, etc.). As a consequence, at the beginning of systemic transition industrial production dropped by almost 60 percent. These shocking statistics signaled the beginning of deindustrialization. Isolated economy with a tremendous industrial output gap didn't manage to maintain macro balance. Hyperinflation was unescapable. So, the economy turned out to be not only impotent, but also out of tune. A new buzzword explaining blowout macroeconomic data was “reflation”.

The period of reflation ended in 2000, actually after the consolidation of geopolitical position of the country. The recovery was triggered by the lifting of economic sanctions, privatization restart and financial sector rebuilding. Maintaining macro stability, the government started almost from nothing. In the absence of industrial policies, liberalization and financialization contributed strongly to the continuation of deindustrialization. The share of industrial production in GDP formation was constantly decreasing and reached a historic low of 20 percent of GDP in 2014. Increase in output came from very low base, and the effects of the recovery went to the financial sector and services, not to the real economy. Under such circumstances fiscal deficit was constantly growing, along with inflationary pressures. The economy continued to be impotent and out of tune. So, the ultimate goal for the subsequent development period was to end stagflation.

The third period of development is the period of fiscal consolidation and rebound (2014-2019). A dramatic deterioration of macroeconomic performance in 2013 was a “wake up call in the middle of the night”. Fiscal

balance was achieved by taking draconian measures such as cuts in pensions and public sectors wages. That was a prerequisite for credit rating improvement, increase in investors' expectations, and growth. In terms of growth, after the program of fiscal consolidation successfully ended in 2018, in months years happened.

The main operational vulnerability of Serbia's economy is industrial output (level and structure). Let us discuss data points about industrialization during sub-development periods (see Figure 5). Performance is explained by the number of industrial workers, the share of industrial production in GDP formation, and the index of industrial production.

The previous remarkable statistics point to rising concerns about the downfall of industrial production during the whole period, i.e. from the start of systemic transition to these days. Despite the fact that fiscal balance was achieved in 2018, industrial output rebound did not happen. Right now, the contribution of industrial output to GDP formation is below 20 percent. No doubt, the law of gravitation is functioning. Namely, the height of industrial output level can easily be lost, while it is extremely difficult to recover.

Structure of industrial production is also an operational vulnerability. Low-value added products dominate in the manufacturing portfolio. Mainly linear model of industrial production and carbon-intensive energy production, based primarily on coal use, are also operational vulnerabilities. FDI as an important driver of growth in the last period has served as a healthy ingredient to solve capital balance problem, but it has not contributed substantially to the sustainable growth trajectory. The structure of FDI indicates a lack of industrial policies as well as a lack of coordination in core economic policies regarding industrialization issue. By breaking the stalemate in industrialization from the previous period, industrial policies based on industry 4.0 solutions for tradable sectors of the economy could accelerate the recovery.

An economy poised for sustainable growth, capable of keeping alone inflation under control ($CPI < 2$ percent), should maintain fiscal balance. Both macro requirements create the ultimate advantage which opens up new opportunities for investments. But the foregoing is only

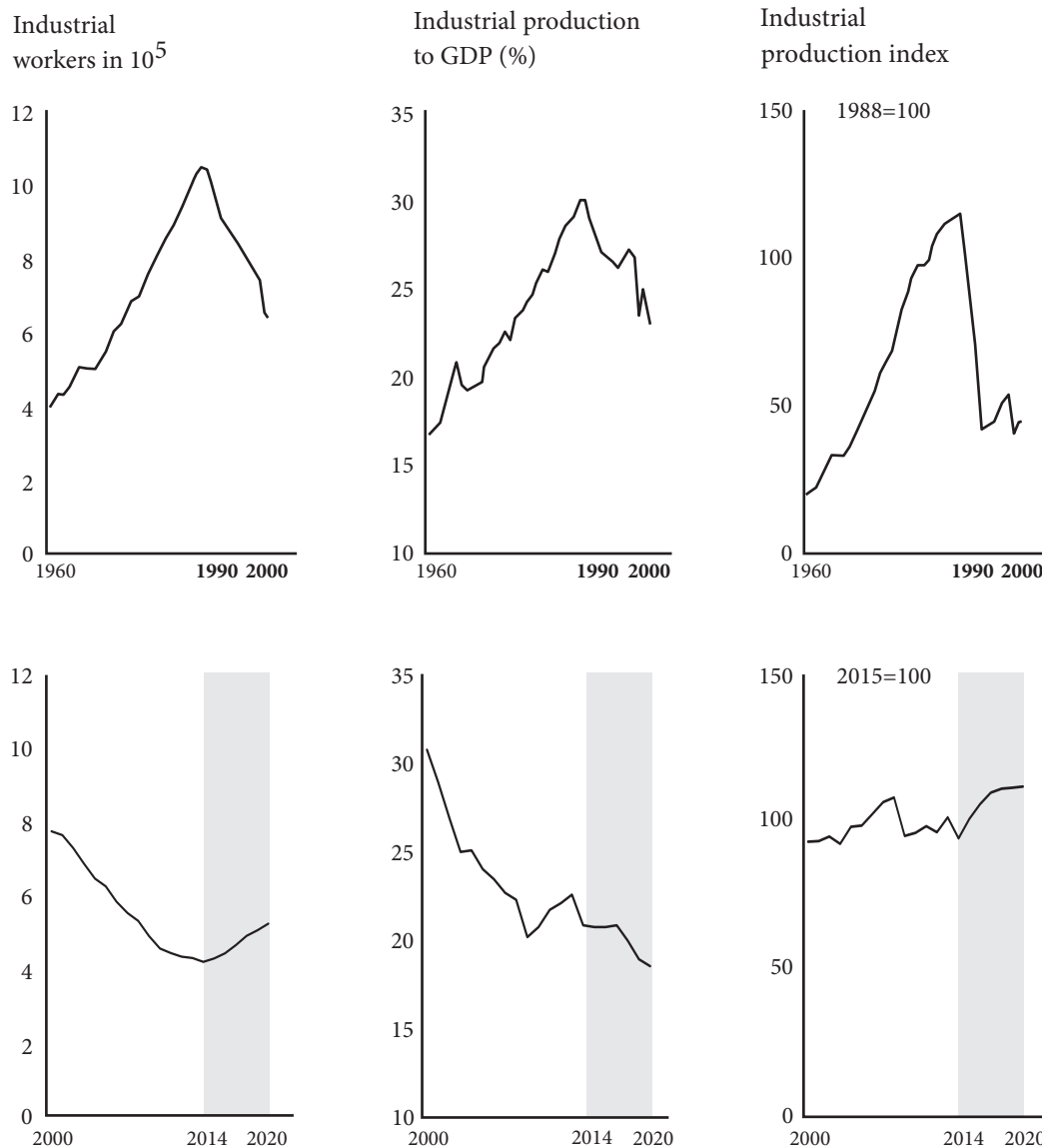
a necessary condition. A sufficient condition comes from the structural perspective, based on a consistent set of industrial policies, both horizontal and vertical.

Without structural responses or a set of vertical industrial policies for tradable sectors and essential products, along with horizontal (or support) industrial policies such as research and development, education and health care, Serbia cannot balance the increase in medical expenses and stimulus during the COVID-19 pandemic, mitigate climate crisis, and preserve energy and food security. Also, at least for geopolitical reasons, Serbia must embark on decarbonization path in the future energy production and new industrialization.

Where is Serbia's economy going in the middle of COVID-19 crisis?

With a delay of one quarter, the downfall amid the COVID-19 pandemic started in 2Q 2020. During the first year of the pandemic Serbia's economy performed better than expected and kept going based on the public sector as a stable core of economic activity as well as the private sector in infrastructure, construction, agriculture, energy, ICT, food processing, financial services, e-commerce and digital logistics. These sectors are doing well in contrast to the sectors largely dependent on stimulus, particularly micro, small and medium-sized companies.

Figure 5: Industrialization in Serbia: period 1960-2020



A dynamic window of opportunities became limited again after virus cases hit weekly record high in December 2020. The pandemic remains a systemic risk at a high level. Amid virus mutations, a full recovery will not take place in the immediate, but in the distant future (W-shape recovery). But a new radical economic downfall is highly unlikely after the serious lessons have been learned in the previous stage of crisis.

So far, the economy has been at a precarious point. An inflection point from downfall to recovery has not happened yet. Macroeconomic fundamentals are not so robust to indicate the start of recovery. The appearance of the inflection point requires the Great Reset or a radical change in economic system and way of its functioning.

The Great Reset means, first and foremost, shifting from shareholder capitalism to stakeholder capitalism (or managed capitalism or progressive capitalism or entrepreneurial capitalism). This shift does not require us to conceive of ourselves as typical representatives of homo economicus, but as humans. In a new approach the regenerative and circular model of growth and heterodox economic policy platform are required. Both changes are preconditions for recovery in the short term and for rebound in the longer term, which means following a sustainable and inclusive growth pattern in the post-crisis period. We discussed the related conceptual framework extensively in our previous work, for example in [2] and [4]. A core idea is the harmonization of industrial policies through impact investments and macroeconomic automatic stabilizers from core economic policies, both monetary and fiscal.

The new normal is marked by microbe mutations and hyper-infections as macroeconomic factors. So, decarbonization technologies and medical technologies will be the twin engines of recovery and rebound. Being brave in an economic downturn means being innovative. Artificial intelligence (AI) solutions play a catalytic role in both technologies. The new generation of vaccines was developed primarily by using AI solutions. The mRNA platform does not only go beyond conventional vaccines, but it also helps to develop combinatorial innovations that will transform health care.

In the new policy platform, industrial policies as leverage and the government's coordination skills as hedge

play a critical role. Industrial policies are being used for the internalization of positive external effects of impact investments in infrastructure (physical and digital) and acceleration of technology change in tradable sectors with the aim of breaking the industrialization stalemate in the implementation of the Industry 4.0 solutions. The coordination role of the government in technology development is growing. Nobody can predict the future exactly because of a lateral character of frontier technologies, both physical and virtual. Horizontal industrial policies such as research and development and education should concentrate on keeping up with the pace of innovation in frontier technologies and implementation efforts.

The role of industrial policy has to be to encourage impact investment for sustainable and inclusive growth, along with the reduction of carbon footprint and medical security enhancement. A great opportunity for the new economy comes from the fourth industrial revolution. The Industry 4.0 has turned the world into a better-connected place. For the first time in the history of humanity universal connectivity is a free good. We are witnessing an extra rapid development of the Industry 4.0 solutions based on amalgams of virtual and physical innovations. It opens up endless possibilities for emergence of combinatorial innovations. Intelligent technologies (and products) offer more functionality and flexibility. They reflect in a reduction in the autonomy of economic players in an increasingly interconnected world. These days, humans can live simultaneously in physical reality and virtual reality. The Industry 4.0 solutions based on the amalgams of virtual and physical world have an important role to play in the transformation toward an economy committed to the SDGs implementation.

Technology, as an enabler, has an ambivalent character, acting as both opportunity and threat. Big tech is related to big social and economic challenges. These days, business leaders are extremely ambitious and agile. They are regularly trying to predict the prospects and future patterns of behavior of basic economic players (competitors, clients, regulators and workforce). By using the lateral technological opportunities of AI and robotics, sometimes they are trying to reinvent the behavior of human beings. So, technology change is being more

controversial than ever. The government's coordination role instead of the market coordination mechanisms is inescapable, again.

More than ever, the responsible use of new technological opportunities comes to the surface. There are three specific questions explaining how to use frontier technologies ethically. First, how do we use the Industry 4.0 solutions without further degradation of nature? Second, how do we use emerging business platforms as a new ecosystem of competition to avoid digital autocracy ("winners take all")? Third, how do we use the Industry 4.0 solutions without taking away the right to privacy and economic, medical and social status of people?

The new platform is based on the key assumption that the economic system is a man-made and highly non-linear system. Consequently, Economics is not a natural science like Physics. The explanatory power of heuristics, trial-and-error and feed-back loops in Economics is more than targeting based on *ceteris paribus* hypothesis from the optimization modelling.

Thanks to the fourth industrial revolution, there is the dominance of non-linear systems not only in Economics, but also in natural sciences and engineering. In a new context, the strategy of business leaders is based on combinatorial innovations, which are disruptive by nature. Business platform, instead of industry or value chain, is an ecosystem of new competitive dynamics. Each business within the business platform is, in principle, a non-linear system. In short, non-linear systems prevail in all economic levels.

Climate and medical crises are not the issues of tomorrow, they are the issues of today. The Great Reset in the post-COVID-19 era means to be "greener" and "more pro people". A greener economy means having the capability to mitigate negative external effects of the previous linear growth model by using core economic policies in a structural and transformative way. To be "pro people" means to impose the SDGs as limitations when defining growth pattern. To implement the regenerative and circular model of growth, each national economy must follow a set of the SDGs.

Accountability of the government in terms of the responsible social management toward the development

of a new economic system could be treated as the 18th SDG. The concept runs following a simple logic of circular processes.

The establishment of the industry structure capable of delivering a rapid decarbonization process and sustainable and inclusive growth, as well as the medical system capable of mitigating microbe mutations, superinfections and new chronic diseases (e.g. "long COVID") will be a promising roadmap toward intelligent industrialization. The fulfilment of such targets is an opportunity for many conventional industries to rejuvenate.

In the new context, the introduction of intelligent production systems (and products) based on the Industry 4.0 solutions and zero-carbon emissions is a way to increase the share of industrial output in GDP formation. Serbia may be able to achieve the share of intelligent industrial production in GDP formation of 35-40 percent by 2030. Since new technologies are more conducive to social distancing and contingent operations, they are capable of bolstering structural changes, such as non-contact manufacturing, work-at-home, hybrid work, etc.

Serbia does not manufacture almost anything from the Industry 4.0. To make a big shift, there are at least three big ideas.

First, in-house development of ICT components of intelligent production systems and products as a priority of the industrial policy. In the new industrialization, ICT has a catalytic role to play. Intelligent technologies and products include physical (or hardware) and virtual (or software) parts.

Second, the implementation of technologies with zero carbon emissions, primarily based on hydrogen. The energy sector is a tradable sector and its reform is part of the climate credibility in the EU accession process. In this regard, the exploration for new materials (e.g. lithium) and components of battery could help.

The third big idea is related to the development of manufacturing hub for health care providers (bioengineering, pharmacy, vaccine development and production, health tech, medical diagnostic equipment, etc.)

All the previous big ideas will strongly contribute to the strengthening of the physical part of conventional production systems that constitute tradable sectors and

their shifting onto a sustainable and inclusive growth trajectory. When it comes to tradable sectors, each national economy has its own priority list. There is no automatic pilot. In the case of Serbia, besides the mentioned big priorities, the priority list may include the following industries: infrastructure, construction, decarbonization and regeneration technologies, confectionary and dairy based on organic agriculture, and auto.

Conventional manufacturing sectors cannot significantly contribute to economic rebound without a digital transformation. Before the digital transformation and technology revamp based on the Industry 4.0 solutions take place, these sectors desperately need rightsizing (capital, assets, and number of employees) and strategic partnerships with global leaders. FDI in the future should be based on such restructuring efforts, on the one hand, and digitalization, on the other. It is particularly important given that the massive stimulus from the previous period has changed the parameters of fiscal policy.

Service sectors of the economy (hospitality industry, air transport, retail, etc.), where it is more difficult to practice social distancing, have plunged into freefall. The only exception to this rule is health tourism. After a positive experience with the COVID-19 pandemic mitigation, Serbia has to become a regional hub of health tourism.

In the context in which microbe mutations, superinfections and new chronic diseases are explanatory elements of the new normal, a new economy will need a quantum leap in impact investments, exactly a shift from billion to trillion. Financing the green transformation is critical for recovery.

The ideal source of financing of impact investments is long-term bond issuance. The so-called “green bond”, “digital bond”, “blue bonds”, “nature bond”, or the like, are hybrid securities necessary for attracting a critical mass of savings to finance impact investments. It is a very attractive asset class. For example, in 2020 green bond issuance on global capital markets reached more than USD 500 billion. On the buy-side, pension funds and life-long insurance companies could be important players.

Another source of financing involves “green credits”. It is a supplementary channel to finance impact investments

aimed at digitalization, carbon-free industrialization as well as enhanced medical security. A better quantification of risk exposure for certain green credits requires matching some ecological standards with cost of capital and/or provisions. Also, stress-tests and criteria such as the contribution of investments to the climate and medical crisis mitigation could be of help in the selection process within credit institutions.

A soft variant of green credits is an intentional variation of quantitative easing toward carbon-neutral production or a “green QE” [1]. By making the monetary policy fairer, instead of stimulating speculative investments on capital markets, the green QE should reward value creation in sectors with high positive external effects. Simplifying to the extreme, it is “money printing” for the purpose of digitalization, reduction in carbon footprint and improvement in medical system. This big move could enable the switch from fossil fuel subsidies to clean energy production. This model of financing is available only in the economies with reserve currencies. For the economies in the EU accession process, there is a possibility of using the branches of credit institutions from the Eurozone to play a mediation role when impact investments contribute to the EU development priorities.

A good example of the change in way of thinking about core policies is a structural approach to tax policy. In the post pandemic world, a tax hike is imminent. Regressive taxation is a fault line of neoliberalism. High earners have the biggest responsibility for balanced budgets and recovery. In post Trump era, the narrative of minimum tax rates on a global level gains momentum. Along with carbon tax, in the tax policy of developed economies (G-20 at least), medical tax, corporate tax, digital tax and, maybe, value-added tax, all on a global and minimum level, will play the role of automatic stabilizers.

The answers to the previous questions will trace the reset of economic system during the pandemic and its reinvention in the post pandemic world in a sustainable and inclusive way by respecting the interests of both people and nature. Again, coordination role of the government is unavoidable. There are many domains and sub-domains of science. Somebody must coordinate progress in fertile research trajectories.

Nota Bene

Now let us come to the final remarks about the required trajectory of Serbia's economy "during" and "after" the COVID-19 pandemic. Or, to the answers about the current problems in the light of the future we want, and Serbia we need.

A dangerous divergence of neoliberal capitalism is unlikely to disappear without a change of the related model of growth and economic policy platform. The Great Reset to happen, an emphasis needs to be shifted towards a new model of capitalism and a more complex model of growth and heterodox economic policy platform.

The Great Reset cannot be based on the market fundamentalism mantra which for almost half a century has been producing, reproducing and deepening structural imbalances, both in developed and developing world. In the case of Serbia, a systemic demand squeeze due to the combined effects of transitional and current output gaps cannot be solved if the government stays out of the economy. Such a withdrawal is counterproductive, particularly when a "black swan" operates. A system characterized by the dominance of unconventional economic policies and their unintended consequences on economic value and nature disruptions, cannot recover by itself and make the planet Earth sustainable.

The old doctrine is particularly not relevant in the case of Serbia because "pro" or "counter" cyclical fiscal policies and expansionary monetary policies from the standard neoliberal package are not effective in case of output gap. In a system with structural imbalances, industrial output is in sliding mode despite the intention toward FDI and public investments. To close the output gap, solutions will come from the structural side of growth equation, not macroeconomic side. With paradigm change both in Economics and Business Economics [3], everything is possible because nothing is certain.

Another big challenge of our time is the complexity of the current crisis, a medical crisis within an economic crisis. The pandemic is single issue which cuts off many other issues. So, the effects of anti-crisis policy measures are mainly contraindicated. On the one side, virus rebound is cost of keeping the economy going. If the economy

keeps going, the chances for the medical system survival and economic rebound are increasing. On the other side, lockdown, as the most effective way to slow down the spread of the pandemic, is actually a way of putting the economy into sleep mode. So, medical and economic anti-crisis measures must be taken in systematic and synchronized way to ensure that short-term solutions do not create long-lasting problems.

In 2020, the share of medical costs in Serbia's GDP formation was increased by 1.6 p.p. Also, massive stimuli participate with 14 percent in GDP formation. No doubt, the government needs to increase borrowing to escape transactional costs hit due to the mitigation of negative effects of the pandemic. Unfortunately, new borrowing is breaching the safety threshold of 60 percent of GDP, but under current circumstances short-term debt could be sustainable. But long-term debt is definitely unsustainable even for as-is scenario which, by the way, is not realistic. To made long-term debt sustainable, in the next five years Serbia will need the compound average growth rate (CAGR) of minimum 2.8 percent.²

In very unusual times, marked by enormous difficulties and opportunities, unlike paranoid optimists, cautious optimists are constantly questioning their optimism. The adverse consequences of not doing enough are more dangerous than agility followed by trials and errors. So, agility is a solution for changing problems.

In the middle of 2021, the reform momentum for the Great Reset is very strong. Being optimist about the reform momentum requires a systemic and synchronized approach combined with enormous agility and coordinated efforts. It is almost impossible to control cash outflows due to the pandemic mitigation and income lost due to the dangerous divergence of market fundamentalism without a radical change of the economic system and a way of its functioning. The first step is a paradigm change.

The new economy is not only responsible for shareholders, but also, and almost ultimately, for the great priorities of society such as prosperity (economic

² $CAGR = \sqrt[N]{1 + M} - 1$, or
 $0.028 = \sqrt[5]{1 + 0.156} - 1$, where
 CAGR – compound average growth rate
 N – number of years
 M – COVID-19 mitigation costs as % of GDP in year zero

and social) and the mitigation of climate and medical crises. The regenerative and circular model of growth and heterodox economic policy platform are key pillars of a new way of thinking. Impact investments and automatic macroeconomic stabilizers (in monetary and fiscal spheres) have a critical role to play in the harmonization of core economic policies with structural policies. Both components of the new economy contribute to the inclusive and sustainable growth pattern as well as the prosperity of humankind, without harming nature. Policy makers at national economy level must build consensus on the path to recovery related to tradable sectors and different variants of core economic policies under the previously mentioned general framework.

Serbia is not going back to the pre-pandemic economy. “During” and “after” the pandemic, we are creating a different economy. These days, all industries from the real economy to services are impacted by the Industry 4.0 solutions, or universal connectivity and innovative amalgams from virtual and physical world. So, new economics rules should create, at least, an equitable access to universal connectivity and frontier technologies such as AI for all. Also, new economics rules have to give impetus to entrepreneurship and better health care, again for all.

The Great Reset means recovery and rebound. This does not come easily. Recovery is typical in times of crisis. Rebound dominates in the post-crisis period. Due to structural imbalances and unintended consequences of unconventional policies, there will be many bottlenecks during the recovery. Key question is: recovery of what? Our view is the recovery, along with rejuvenation, of industrial production, actually “new industrialization”. The previous analysis pointed out that in the period of three decades the rebound of industrial production in Serbia actually did not happen. In the strategic audit of Serbia’s economy deindustrialization is not only a hard piece of evidence and main legacy of the conceptual fault lines from the past, but also an input for “not-to-do” list.

The COVID-19 crisis has deepened structural imbalances and increased the public awareness toward the new economy. It is time to turn innovative ideas into economic impact and to transform threats into opportunities.

Tough times call for substantial measures to do so. During the first COVID-19 year, Serbia did a lot on its own. But architects of the recovery program should not be guided exclusively by short-term achievements. They should be familiar with the rebound based on a longer-term vision of future development. It means that short-term solutions must not be in contradiction to the long-term vision. The time for detailed recovery programs is over. The vision for reinventing the economy we have described is a feasible way for recovery and rebound.

To stop using the linear model of growth is not easy when we know that our ecological footprint is greater than ever. Two-thirds of the world’s GDP depend, highly or moderately, on natural resources and this share is greater in the case of less developed economies such as Serbia. For more than fifty years, which roughly coincided with the neoliberalism era, the world economy used up more than 1.75 times the natural resources than the planet Earth can replenish [19, p. 19]. So, to stop using fossil fuels is not just brainwashing for strategists and policymakers in Serbia when we know that only coal contributes with 66 percent to energy supply. Serbia must start reducing coal consumption and set up the target of carbon neutrality. Recently, the US has announced the cutting of greenhouse gas emissions in half by 2030, compared to their 2005 levels. The EU reached a provisional deal of 55 percent greenhouse gas emissions cut by 2030. The EU wants to create the first climate-neutral continent by 2050. To energize the EU accession process, Serbia should build its climate credibility. Last but not least, Serbia currently does not manufacture almost anything by using the Industry 4.0 solutions. To overcome economic, environmental and medical crisis, the Industry 4.0 solutions are the imperative of our time. The fights against climate crises and medical crisis, as key determinants of the future normal, will be the twin engines of recovery and rebound.

For the new economic model to prosper, leverage, on the one side, and hedge, on the other, must be transparent. Do we have leverage and hedge for the new economy? Probably, we do. The new model of growth and related economic policy platform play the role of leverage. The world is changing and we have to change Serbia’s economy very quickly. Through industrial policies every late developer

defines the way to attract public investments and FDI in tradable sectors and, by doing this, rejuvenate conventional manufacturing. Industrial policies, both horizontal and vertical, could coordinate the development of digital components of intelligent production systems and products, carbon neutral technologies and products, and health care technologies and products. The Competence Center for Industry 4.0 under the jurisdiction of the Ministry of Digitalization and Green Transformation could be a key hedge factor for the Great Reset, maybe.

Transition is not easy, but we do not have alternative. First and foremost, we cannot solve the problem of industrial output gap, shift the economy onto sustainable growth trajectory and improve medical, economic, energy, food and social security of people, if we do not understand what new economics rules do for progress, people and nature. With industrial policies in the epicenter of the new policy platform harmonized with core policies by automatic macroeconomic stabilizers, we can effectively reject the prejudice that investing in Serbia is just gambling.

What we have talked about in this paper are actually two things, the “trends of tomorrow” defining the “future normal” and the role of new economics rules in the “Great Reset” in an economically productive way. Stakeholder capitalism, circular (and regenerative) model of growth, heterodox economic policy platform with industrial policies and automatic stabilizers from monetary and fiscal spheres at the center, as well as “green” financing instruments, should be considered not only as a reform narrative, but also as the seeds of the Great Reset.

References

1. Brunnhuber, S., & Jacobs, G. (2020). Innovative financial engineering to fund the SDGs: A WAAS initiative. *Cadmus*, 4(2-II), 141-148.
2. Đuričin, D., & Lončar, D. (2020). Shaping the future of Serbia's economy: The new growth model and related economic policy platform. *Ekonomika preduzeća*, 68(1-2), 1-21.
3. Djuricin, D., & Vuksanovic Herceg, I. (2020). Double paradigm change and new economics rules: Industry 4.0 perspective. In Y. Uygun (Ed.) *Industry 4.0: Principles, Effects and Challenges* (Chapter 4). Hauppauge, NY: Nova Science Publishers.
4. Đuričin, D., & Vuksanović Herceg I. (2019). Illuminating an economy of the future: How to win the transition to industry 4.0 with new economic rules. In L. Monostori, V. D. Majstorovic, S. J. Hu, & D. Djurdjanovic (Eds.), *Proceedings of the 4th International Conference of the Industry 4.0 Model for Advanced Manufacturing* (pp. 100-112). Berlin and Heidelberg: Springer.
5. Đuričin, D., & Vuksanović Herceg, I. (2019). Three things an economy needs in the era of the fourth industrial revolution. *Ekonomika preduzeća*, 67(1-2), 1-15.
6. Đuričin, D. (2018). *Escape from Transitionism: What Serbia Has Learned From Past Failures and Recommendations for the Future*. Belgrade: Faculty of Economics, University of Belgrade, CID.
7. EEF The Manufacturers' Organisation & Oracle. (2018). *The 4th Industrial Revolution: A Primer for Manufacturers*. Retrieved from <https://www.oracle.com/a/ocom/docs/industries/4ir-report.pdf>
8. Friedman, M. (1963). *Capitalism and Freedom*. Chicago: University of Chicago.
9. International Monetary Fund. (2020). *Fiscal Monitor – April 2020*. Washington, DC: IMF. Retrieved from <https://www.imf.org/en/Publications/FM/Issues/2020/04/06/fiscal-monitor-april-2020>
10. International Monetary Fund. (2021). *World Economic Outlook 2020 - IMF Datamapper*. [Data file] Retrieved from <https://www.imf.org/external/datamapper/profile/SRB>
11. Kagermann, H., Wahlster, W., & Helbig, J. (2013). Recommendations for implementing the strategic initiative INDUSTRIE 4.0, Securing the future of German manufacturing industry. Final report of the Industrie 4.0 Working Group. Retrieved from https://www.din.de/blob/76902/e8cac883f42bf28536e7_e8165993f1fd/recommendations-for-implementing-industry-4-0-data.pdf
12. Kahneman, D. (2011). *Thinking Fast and Slow*. London: Penguin Books.
13. Majstorović, V. D., Mitrović, R. M., & Mišković, Ž. Z. (2020). Assessing industry 4.0 readiness in manufacturing companies from Serbia. In *Proceedings of 5th International Conference on the Industry 4.0 Model for Advanced Manufacturing* (pp. 69-79). Springer International Publishing.
14. Mazzucato, M., Cimoli, M., Dosi, G., Stiglitz, J. E., Landesmann, M. A., Pianta, M., ... & Page, T. (2015). Which industrial policy does Europe need? *Intereconomics*, 50(3), 120-155.
15. National Bank of Serbia. *Data and statistics*. Retrieved from <https://nbs.rs/en/drugi-nivo-navigacije/statistika/>
16. Our World in Data (2021). *Daily confirmed COVID-19 cases*. [Data file] Retrieved from <https://ourworldindata.org/grapher/rate-of-daily-new-confirmed-cases-of-covid-19-positive-rate>
17. Our World in Data (2021). *COVID-19 vaccine doses administered per 100 people*. [Data file] Retrieved from <https://ourworldindata.org/grapher/covid-vaccination-doses-per-capita>
18. Rajan, R. G. (2011). *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton, NJ: Princeton University Press.
19. Schwab, K. (2021). *Stakeholder Capitalism: A Global Economy that Works for Progress, People and Planet*. New Jersey: John Wiley & Sons.
20. Statistical Office of the Republic of Serbia. *Data and statistics*. Retrieved from <https://www.stat.gov.rs/>
21. Stiglitz, J. E. (2019). *People, Power, and Profits: Progressive Capitalism for an Age of Discontent*. New York, NY: W. W. Norton & Company.

22. Technologie-Initiative SmartFactory KL e.V. (2018). *SmartFactory KL Pioneer of Industrie 4.0*. Retrieved from https://smartfactory.de/wp-content/uploads/2018/04/SF_BR_WegbereiterVonIndustrie40_A5_EN_XS.pdf
23. Tiftik, E., & Mahmood, K. (2020). Sharp spike in debt ratios. In S. Gibbs (Ed.) *Global Debt Monitor*. Washington, DC: Institute of International finance. Retrieved from https://www.iif.com/Portals/0/Files/content/Research/Global%20Debt%20Monitor_July2020.pdf
24. United Nations. (2020). *The Sustainable Development Goals Report 2020*. New York, NY: United Nations Publications. Retrieved from <https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf>



Dragan Đuričin

is a fellow of the World Academy of Art and Science as well as a founder and board member of the Serbian Chapter of the Club of Rome. He is a professor of Strategic Management, Project Management, Enterprise Risk Management, Economics of Strategy, and Strategic Financial Management at the University of Belgrade, Faculty of Economics. He is editor in chief of the Serbian scientific journal *Ekonomika preduzeća – Journal of Business Economics and Management*. He is president of the Serbian Association of Corporate Directors. He wrote dozens of books in the fields of strategic management, project management, systemic transition, and risk management. He was a visiting professor at the University of Venice as well as a fellow of the Fulbright Foundation. He was a member of corporate governance bodies in dozen multinationals and reputable Serbian corporations, including Tarkett, Molson Coors, Danube Foods Group, Addiko Bank. He worked at Deloitte for 24 years, occupying C-level positions, including the chairman of Deloitte Pannon Adria and chairman of Deloitte Serbia. He served as chairperson of the Supervisory board of Dedinje Cardiovascular Institute. Currently, he is a member of corporate governance bodies of Metalac, Messer Tehnogas and Komercijalna banka – NLB Group. He was a founder and executive chairman of Kopaonik Business Forum. He was president of the Serbian Association of Economists for fifteen years. He was a member of the Economic Council of the Government of the Republic of Serbia. He was engaged in the preparation of several transitional laws, particularly the privatization law as well as the fiscal consolidation program known as “Avramovich’s Program”. His constant preoccupation is economics of transition. His current interests include a paradigm shift in Economics and Industry 4.0 impact on financing of the “net-zero” transition and circular and regenerative economy.



Iva Vuksanović Herceg

is an Associate Professor at the Faculty of Economics, University of Belgrade. She teaches undergraduate courses Strategic Management and Risk management, graduate course Strategic Finance, and PhD course Economics of Strategy. She received her PhD degree from the Faculty of Economics, University of Belgrade. Her primary fields of interests refer to enterprise risk management, value-based management, Industry 4.0, industrial policy and economics of transition, in general. She wrote more than 60 papers related to the previous topics. Iva Vuksanović Herceg managed both domestic research project dealing with new economic policy platform and competitiveness of the real sector in Serbia funded by the Ministry of Education, Science and Technological Development as well as EU funded international research project on building capacity and skills for managing social and technological innovation project in the youth population. She is Visiting Scholar at the Faculty of Economics and Business University in Zagreb. She is a member of the Supervisory board of the Foundation of Young Talents of the City of Belgrade.