INTRODUCTORY PAPER
UDK: 330.342.22(497.11)"2014/2021"
DOI: 10.5937/EKOPRE2202001D
Date of Receipt: December 20, 2021

Dragan Đuričin
World Academy of Art and Science

Iva Vuksanović Herceg
University of Belgrade
Faculty of Economics
Department of Business Economics and Management

ENVISIONING A NEW ECONOMIC SYSTEM AFTER THE TRANSITION FROM PANDEMIC TO ENDEMIC: SERBIA'S PERSPECTIVE

Vizija novog ekonomskog sistema posle prelaska pandemije u endemiju iz perspektive Srbije

Abstract

In the last two and a half centuries, industrialization, propelled by a catalytic impact of free-market capitalism, has been contributing to prosperity and breaking the limits beyond all imagination that during the history inhibited the development of human potential. Unfortunately, neoliberal capitalism, as the last and most extreme variant of free-market capitalism, has shown some hidden fractures. After the Great Recession of 2008, the problems due to inbuilt fault lines and misconceptions erupted to the surface. Over the last two years, marked by the COVID-19 pandemic, the world economy has been passing through a complex crisis, a crisis within the spectrum of crises. Again, the flip side of a major success proved to be a major failure. The new virus simply magnified and accelerated doom and gloom in the economic system. The major strategic shifts such as climate crisis, structural crisis of capitalism, microbe mutations and superinfections, and, particularly, the Fourth Industrial Revolution, have contributed jointly to the disruption of incumbents in business, regulatory settings and society as a whole. Exponential change is the New Normal. The economic system is simply surrounded with exponentiality. Neoliberal capitalism has definitely hurt sustainability, along with renewability and inclusivity, of the global economic system and the entire planet. In a time of the explosion of systemic, climate and biological risks, a delicate and subtle issue has emerged as to how to adjust the existing system to exponential change conceptually, financially and operationally. In fact, the current economic system is not able to adequately respond to exponential challenges by transforming threats into opportunities. In times of the climate crisis, the pandemic is just the tip of the iceberg which, by the way, is melting away. The COVID-19 is not a perpetual virus. Someday the pandemic will end. In fact, the transition from pandemic to endemic is imminent. Accordingly, in the post-pandemic world key performance will be the capacity of a new economic system to respond positively to ever-increasing old challenges, in particular to the climate emergency and related issues. So, the green transition is an imperative of modern Economics. At the start of the pandemic, most governments relied on expansionary monetary and fiscal policies with the aim of relaxing the "fear of fear" (unspent savings and pent-up demand). During the crisis money pumping was about US$ 13 trillion on a global level. The continuation of this policy has pushed the world economy into an unstable mode because it leads to an increase in aggregate demand that largely exceeds the supply level, drives wage-price spirals and deepens other structural imbalances. In the context of extremely low or even negative interest rates, economic agents take an extra high credit risk and the state takes an unmanageable sovereign risk. Consequently, today's debt in many core economies is substantially higher than in any previous stagflation episode. When the inflation risk premium pushes interest rate hikes, public and private agents with an increasing debt burden and lower earnings face insolvency threat due to such a hawkish turn. Among many negative scenarios, overheating and stagflation followed by growing indebtedness are the most dangerous outcomes. Given today's ultra-loose and even costly anti-crisis core economic policies, the confidence in the "invisible hand" of the market and unconventional and experimental economic policies, praised by mainstream economists as a panacea for all imbalances, has definitely disappeared and may be easily turned into a pipe dream everywhere. There is not much time to respond to the New Normal. Humanity has less than a decade left until climate change becomes irreversible. The response should be prompt, comprehensive and compatible with exponential change. So, mitigation of a complex crisis requires the consideration of more radical ideas. Without a paradigm change, the economy will not be able to resolve the current crisis and work in a sustainable and inclusive way for the sake of people and nature in a rapidly changing context of the New Normal. Every crisis is a catalyst for change. To reimagine the economy, apart from the shift

to the circular model of growth and heterodox economic policy platform, public governance must change, too. Moreover, to take advantage of the leading trends, the economic system must follow substantially different economics rules in many fundamental aspects. In an emerging system, the government and basic economic agents will work symbiotically with the aim of serving nature and human needs through industrial policies and impact investments, devoting concerted efforts to coordination and fostering experimentation on all levels. Automatic macroeconomic stabilizers will play the role of a liaison between structural and core economic policies by maintaining a sustainable balance between private and public sectors. In Industry 4.0, governance should also respect the sustainable development goals, as well as environmental, social and governance metrics arising from mission-oriented governance or Governance 4.0. The aforementioned does not mean that after the paradigm change we will have a new precisely defined blueprint that will tell us in detail what to do. Economics is not big science, but a social or contextual science. In the age of Industry 4.0 characterized by endless innovative amalgams arising from the intersection of breakthroughs in AI, robotics, and life science, Economics can treat the economic system only as a nonlinear one. So, what the paradigm shift brings to the emerging contours of new Economics is not a new theory, but the nexus of new rules we can follow in the context of exponential change. The purpose of this paper is not to endorse, but to discuss the subject from the title with a special focus on Serbia. Our intention is just to provide the overview of emerging intellectual trajectories relevant to the current crisis mitigation and to sketch out the nexus of economics rules that will pave the way for a resilient, sustainable and inclusive economy. A common concern is related to the circular economy growth model and heterodox economic policy platform because both elements are able to address the key pressing issues in times of exponential change. Bearing in mind that Serbia does not have a significant fiscal space or fully convertible currency, on the one hand, and the lack of retained earnings in the private sector and value-subtracted public sector, on the other, the key issue for Serbia's future strategy is going to be fixing the green transition finance. The paper is structured in four parts, except Introduction and Conclusion. In the first part we review the neoliberal economics rules and associated policies as well as the unconventional policies that were intended to address the challenges brought by the Great Recession of 2008. In the second part we point to the fallacies and contradictions of the experimental policies measures implemented during the COVID-19 crisis and call for a turnaround in the economic system. The contours of a new economic system based on a completely different nexus of economics rules and policies arising from the circular economy growth model and heterodox economic policy platform are described in the third part. Finally, in the fourth part we portray the key macroeconomic trends in Serbia's economy in 2021 and identify the areas that need restructuring in order to be ready for a transition toward a climate-minded and health-minded economy.

Keywords: *Serbia, exponentiality, COVID-19 crisis, economic crisis, climate crisis, biological crisis, green transition, industrial policies, impact investments, automatic macroeconomic stabilizers*

Sažetak

U poslednja dva i po veka industrijalizacija, podržana katalizatorskim dejstvom tržišnog kapitalizma, kontinuirano je doprinosila prosperitetu koji je omogućio da se prevaziđu ograničenja koja su u prethodnoj istoriji sputavala razvoj ljudskih potencijala. Nažalost, neoliberalni kapitalizam, kao poslednja i ekstremna varijanta tržišnog kapitalizma, ispoljio je određene skrivene pukotine. Posle Velike recesije iz 2008, problemi sistema zbog imanentnih previda i pogrešnih koncepcija eruptirali su na površinu. U poslednje dve godine, označene kao pandemija kovida 19, svetska ekonomija prolazi kroz kompleksnu krizu, krizu u spektru kriza. Ponovo se pokazalo da lice velikog uspeha može biti naličje velikog neuspeha. Novi virus je jednostavno uvećao i ubrzao propadanje i uništavanje ekonomskog sistema. Glavne strategijske promene u sadejstvu kao što su klimatska kriza, strukturna kriza kapitalizma, mutacije mikroba i superinfekcije, a posebno četvrta industrijska revolucija, doprinose disrupciji postojećih subjekata u biznisu, regulatornog okvira i društva u celini. Eksponencijalna promena je nova normalnost. Eksponencijalnost okružuje ekonomski sistem. Neoliberalni kapitalizam je definitivno doprineo uništenju održivosti, obnovljivosti i inkluzivnosti globalnog ekonomskog sistema i planete u celini. U periodu povećanja sistemskog, klimatskog i biološkog rizika, pojavljuju se delikatni i osetljivi problemi u vezi sa tim kako prilagoditi postojeći sistem eksponencijalnim promenama koncepcijski, finansijski i operativno. Činjenica je da postojeći sistem nije u stanju da adekvatno odgovori na izazove eksponencijalnosti pretvaranjem pretnji u mogućnosti. U vreme klimatske krize, pandemija je samo vrh ledenog brega koji je, uzgred budi rečeno, izložen procesu otopljavanja. Kovid 19 nije večni virus. Jednog dana pandemija će prestati. Naime, prelazak pandemije u endemiju je neminovan. Posledično, u svetu posle pandemije ključna performansa će biti kapacitet novog ekonomskog sistema da pozitivno odgovori na stare izazove koji su se u međuvremenu intenzivirali, a posebno na klimatske promene i povezana pitanja. Dakle, transformacija prema zelenoj ekonomiji je imperativ moderne ekonomske teorije. Na startu pandemije većina vlada je bazirala svoj odgovor na ekspanzivnim monetarnim i fiskalnim politikama sa ciljem da umanje „strah od straha" (neupotrebljena štednja i odložena tražnja). Tokom krize upumpani novac u sistem dostigao je oko USD 13 hiljada milijardi na globalnom nivou. Ponavljanje takve politike gurnulo je globalnu ekonomiju u nestabilnost, kroz rast agregatne tražnje koji značajno prevazilazi nivo ponude, ubrzava spiralu plate/cene i produbljuje druge strukturne neravnoteže. U kontekstu ekstremno niskih, čak i negativnih, kamatnih stopa, ekonomski subjekti preuzimaju nestandardno visok kreditni rizik, a država preuzima rizik suverenog duga koji se teško može kontrolisati. Posledično, danas je dug u većini ključnih svetskih privreda bitno veći nego u bilo kojoj prethodnoj stagflacionoj epizodi. Kada monetarna politika postane restriktivnija zbog toga što premija za rizik inflacije gura rast kamatnih stopa, javna i privatna preduzeća sa rastućim teretom duga i umanjenim prinosnim potencijalom lako podležu riziku nesolventnosti. Između mogućih negativnih scenarija, pregrejavanje i stagflacija u kombinaciji sa rastom duga su verovatno najopasniji ishodi. Usled današnjih loših i još važnije skupih ključnih antikrizih ekonomskih politika, poverenje u „nevidljivu ruku" tržišta i nekonvencionalne i eksperimentalne ekonomske politike, od strane mejnstrim ekonomista prepisivanih skoro kao univerzalni lek

za sve neravnoteže, svuda je definitivno nestalo i pretvorilo se u zabludu. Nema puno vremena da se odgovori na nove normalnosti. Čovečanstvo ima manje od dekade da odreaguje dok klimatske promene ne postanu ireverzibilne. Odgovor mora biti brz, sveobuhvatan i mora računati sa eksponencijalnim karakterom promena. Dakle, rešenje kompleksne krize zahteva uvođenje radikalnih ideja. Bez promene paradigme, ekonomija neće biti u stanju da reši postojeću krizu i radi na održiv i inkluzivan način za dobrobit ljudi i prirode u brzo promenljivom kontekstu novih normalnosti. Svaka kriza je katalizator promena. Da bi se ponovo osmislio ekonomski sistem, pored uvođenja cirkularnog modela rasta i heterodoksne platforme za vođenje ekonomskih politika, javno upravljanje se takođe mora promeniti. Štaviše, da bi se iskoristila prednost vodećih trendova razvoja, ekonomski sistem mora funkcionisati na sasvim drugačijim osnovama u većini fundamentalnih aspekata. U sistemu koji nastaje vlada i osnovni ekonomski subjekti radiće simbiotski sa idejom da doprinesu očuvanju prirode i potrebama ljudi pomoću industrijskih politika i namenskih investicija sa koordiniranim naporom i uz nastojanje da se ohrabri eksperimentisanje na svim nivoima. Automatski makroekonomski stabilizatori igraju ulogu veze između strukturnih i ključnih makroekonomskih politika, održavajući dinamičku ravnotežu između privatnog i javnog sektora. U Industriji 4.0 upravljanje mora biti vođeno misijom u smislu respektovanja ciljeva održivog razvoja kao i pokazatelja koji opisuju okruženje, društvene odnose i opšte upravljanje (Upravljanje 4.0). Prethodno ne znači da ćemo posle promene paradigme već imati precizno definisani okvir koji omogućava uvid u detalje koje treba da primenimo. Ekonomska teorija nije prirodna nauka, već društvena nauka ili nauka o kontekstu. U eri Industrije 4.0 koju karakteriše neograničeni broj inovativnih amalgama koji nastaju u preseku prodora iz oblasti AI, robotike i prirodnih nauka, ekonomska teorija tretira ekonomski sistem kao nelinearni sistem. Dakle, ono što promena paradigme donosi nastajućim konturama nove ekonomije nije nova teorija sa stalnom paradigmom, već skup pravila koja treba slediti u uslovima eksponencijalnih promena. Svrha ovog članka nije da potvrdi, već da diskutuje izazov iz naslova rada, sa posebnim fokusom na Srbiju. Namera je da se da pregled nastajućih intelektualnih putanja razmišljanja koje su relevantne za razrešenje sadašnje krize i skicira skup ekonomskih pravila koja treba da dovedu do elastične, održive i inkluzivne ekonomije. Glavna pažnja je usmerena na cirkularni model rasta i heterodoksnu platformu za vođenje ekonomskih politika zbog njihove sposobnosti da daju odgovore na glavne probleme vremena eksponencijalnih promena. Imajući u vidu da Srbija nema odgovarajući fiskalni prostor niti konvertibilnu valutu, s jedne strane, kao i nedovoljnu akumulaciju u privatnom sektoru i dominaciju preduzeća koja generišu gubitke u javnom sektoru, s druge strane, ključni problem Srbije je pronalaženje modela finansiranja zelene transformacije. Rad je strukturiran u četiri dela, pored uvoda i zaključka. U prvom delu razmatramo pravila neoliberalne ekonomije i povezane politike, kao i nekonvencionalne politike koje su kreirane kao odgovor na izazove koje je donela Velika recesija iz 2008. godine. U drugom delu ukazujemo na zablude i kontradiktornosti eksperimentalnih politika i mera primenjenih tokom krize izazvane pandemijom kovida 19 i ukazujemo na potrebu za zaokretom u ekonomskom sistemu. Konture novog ekonomskog sistema zasnovanog na potpuno drugačijem sklopu ekonomskih pravila i politika, koji proizilazi iz cirkularnog modela rasta i heterodoksne platforme za vođenje ekonomskih politika, opisane su u trećem delu. Konačno, u četvrtom delu prezentujemo ključne makroekonomske trendove koji su karakterisali privredu Srbije u 2021. godini i identifikujemo oblasti koje zahtevaju restrukturiranje kako bi spremno dočekale tranziciju ka ekonomiji u kojoj će biti uspostavljena svest o značaju klimatskih promena i njihovom uticaju na ljudsko zdravlje.

Ključne reči: *Srbija, eksponencijalnost, kovid 19 kriza, ekonomska kriza, klimatska kriza, biološka kriza, zelena transformacija, industrijske politike, investicije sa svrhom, automatski makroekonomski stabilizatori*

Introduction

These days humanity is a victim of overarching structural changes, sometimes called the New Normal, and the inability of the economic system and society to use them for progress. The cumulative effect of exponential change is an unprecedented crisis, precisely, a crisis within the spectrum of crises. Ordinary people, not only luminaries and scientists, understand the mess we are in. Economic agents on a variety of levels are overwhelmed by exponentiality. Accordingly, economic growth is stuck amid the "fear of fear" as the prevailing perception of reality.

The time we live in is marked by black swan phenomena. The COVID-19 pandemic and the impact of geopolitics on the economy are new macroeconomic variables. There is a growing recognition that the economic system is incapable of responding to an interconnected nature of the leading trends it faces. Managing changes in an emerging conundrum when the same leading trend affects other leading trends positively, negatively or both simultaneously is difficult. In times of universal polarization, pull and push factors are holistically creating the change imperative for everyone. The key pull factors with negative effects in a causal and chronological order are as follows: economic crisis, climate crisis, health crisis, energy crisis, and (geo)political crisis. The key push factor with an ambivalent effect is technological change within Industry 4.0. Namely, the last industrial revolution is partially positive and partially negative factor. Despite the fact that there are endless opportunities for the capitalization based on universal connectivity brought by Industry 4.0 solutions, the implementation of innovative amalgams is often associated with the disruption of incumbents and structural changes in both economy and society. All these

factors triggering a historic change are anthropogenic, which means that they are, in the last instance, manageable. So, the previous conclusion seems encouraging.

The latest complex crisis is a result of human choices. Anthropogenic root cause of the climate crisis is a colorful example. The manifestations of hectic weather, such as an extremely hot and dry summer season as well as unpredictable and extreme precipitation events during the whole year, are direct consequences of global warming, triggered by the linear model of production and our modern way of life, particularly urbanization, transport and tourism. Accordingly, human activities are pushing the planet away from the Anthropocene epoch, started with industrialization, to the "Firecene" epoch, which is further intensified due to the ignorance of negative externalities and public goods as well as the abuse of natural monopolies.

In such a mess, the logical question is going to be: What would be the major concern for the future, economic crisis, climate crisis, biological crisis, energy security, geopolitical crisis, or any? A simple answer is: holistic interference between them. For example, superyachts and space tourism, as typical examples of investment habits of the "top 1 percent" of the super-rich, have the highest carbon footprint of all assets.

A particular problem is coming from the fact that the current economic system is facing the exponential change full of the structural imbalances embedded in neoliberal economics rules. Neoliberal capitalism economics rules have been largely endorsed by academic circles, high politics, and policymakers. More than four decades ago some of the most influential economists such as monetarists from the Chicago School, mainstream economists from multilateral financial organizations (IMF/WB), and US Treasury established the new doctrine and elevated them almost to a new ideology. The key pillars of this approach are market fundamentalism, inflation targeting, and degressive taxation, all in the name of economic growth and prosperity for all. The most influential politicians promoting the same ideas in politics, such as *R. Regan* and *M. Thatcher*, actually increased the popularity of new ideology in the Western Hemisphere, Latin America as well as in transition economies, particularly from East and Central Europe. Policymakers, inspired by such ideas, made the last contribution to the popularity of the related nexus of economics rules and policy platform through their implementation in real policies, tools and measures.

The standpoint that the government needs to take a back seat in the economy and intervene only when major problems arise proved to be Achilles' heel of this concept. Fault lines in setting economics rules as well as misconceptions and, particularly, inconsistencies in their implementation are the causes of structural imbalances of modern capitalism such as financialization, deindustrialization, and concentration of income and wealth. Mega trends such as Industry 4.0 are only deepening inbuilt structural imbalances. More recently, the COVID-19 pandemic magnified and massively accelerated structural imbalances the economy had been exposed to. The pandemic-induced lockdown broke up global supply chains, unmasked the medical system dysfunctionalities due to privatization and outsourcing, shed light on the lack of strategic flexibility necessary for the green transition and revealed a disproportionate impact of the crisis on different social groups. Since the start of the pandemic, according to OXFRAM [18], the world's 10 richest persons doubled their personal wealth, from US$ 700 billion to US$ 1.5 trillion. In the same period, about 160 million of people around the world fell into poverty. In December 2021, when CPI reached 6.5% Y/Y, the US government ran deficit of US$ 3.1 trillion and increased debt to US$ 28 trillion. Adding that in the next decade tax gap will be US$ 7 trillion, we can see that the world's biggest economy and champion of market fundamentalism is faced with serious threats to sustainability.

Great Recession of 2008: Reconsideration of neoliberal economics rules

In the period 1980-2019, which coincided with the last stage of neoliberal capitalism, the global GDP increased more than fourfold, actually from US$ 20 trillion to US$ 87 trillion [25, p. 6]. Despite respectable rates of GDP growth, there were some weaknesses in this model of capitalism. The Great Recession of 2008 showed that the accumulated problems erupted from hidden fractures. Again, the flip side of a major success turned out to be a major failure.

Economic history does not repeat itself, but it rhymes. Every crisis is a critical period in human history because it fuels overall instability. Also, crisis is a catalyst for change. Guided by these views, architects of the system and policymakers started reconsidering the conventional economics rules in the aftermath of the Great Recession of 2008.

In market fundamentalism, the "invisible hand" of the market is embodied in economics rules and affects interactions and institutional settings. Egoism as the first derivative of well-being, maximization of shareholder value as an ultimate goal, market forces as an almost exclusive coordination mechanism as well as a way of value recognition and distribution to shareholders, have caused deep fractures in the system of shareholder capitalism. This variant of capitalism left out the majority of humankind from experiencing the effects of growth.

The main defects of market fundamentalism are: financialization, deindustrialization and concentration of income and wealth. Financialization has two aspects. First, the financial sector has largely been financing itself. Most fund flows go back into FIRE (Finance, Insurance, Real Estate). A debt-driven system with high moral hazard creates speculative bubbles. Second, the real economy itself has been highly financialized, too. Shareholder return has priority over longer term investments. Dividend payments and share buybacks are used to boost short-term games rather than to finance CAPEX. So, deindustrialization is the flip side of financialization. The previous two deficiencies of the system are directly related to the problem of income and wealth concentration. Namely, the effects of economic activities were concentrated on the "top 1 percent" of the super-rich. Due to global financialization, one of the major beneficiaries of income distribution and unprecedented wealth concentration is the financial sector. In this sector, an extraordinary profitability level has almost nothing to do with ingenuity and risk appetite in allocation of credits and generation of risk-adjusted return based on endless securitization. On the contrary, it is rather a consequence of information asymmetry and market cornering. Since 2009, earnings in the US capital markets increased more than six times.

Such a model, in itself, poses an existential threat to both the planet and economic system because growth has been achieved by applying the concepts and tools that neglect negative external effects and public goods and abuse natural monopolies. Such a system accelerates climate change, depletion of natural resources, along with a massive degradation of the ecosystem. So, in the linear model of growth, economic agents take resources from the earth almost for free. Through industrialization, they make things out of them for use. And then, they throw away whatever is left. The price is paid not only in environmental degradation and depletion of natural resources, but also through greenhouse gas emissions. In fact, the mentioned dysfunctions of the system derail or even undo the economic system from a sustainable and inclusive growth trajectory.

To put it in a nutshell, in this model economic agents have been optimizing their behavior by using the linear growth model, while policymakers have been targeting inflation. But this simplification of reality is not effective at all. Shifting the economy toward circularity, which means toward sustainable and inclusive growth, calls for major changes in the nexus of economics rules.

After the Great Recession of 2008, architects of the economic system and policymakers were searching for a new conceptual platform able to provide the wholesale solutions base for the problems that went beyond the linear model of growth, neoliberalism, market fundamentalism, Washington Consensus, shareholder capitalism, or call it whatever you want, because these concepts unfortunately proved to be a great disappointment. Also, the perception of the universality of neoliberal economics rules, such as liberalization, deregulation, privatization and outsourcing, has been partially revised. The anti-crisis measures such as austerity and related right-sizing of capital, assets and people that were implemented in the real economy are not consistent with government bailouts following the new rule "too big to fail" in the financial sector.

Policymakers are actually living in a dual world of austerity and money printing, independently of output, in terms of level, structure, and dynamic. Bailouts in the financial sector tend to replace the conventional rules such as hard budget constraints, both macro and micro. By ignoring hard budget constraints, new policy measures have directly downplayed price stability. Moreover, to

avoid costly side effects of bankruptcies in the financial sector, policymakers constantly delay imposing a hawkish monetary turn with monetary brakes such as tapering and interest rate hikes. Low, or even negative, interest rates policy jeopardizes a fundamental concept in business finance, net present value, contributing to further deindustrialization.

Experience with a partial revision of the conventional neoliberal economics rules confirms that all possible outcomes are coming from an empty set. The new policy mix can only "buy us some time", but with tremendous costs. Radical and systemic changes in economics rules are necessary. Without the growth model change and adoption of the related economic policy platform, over the medium term, or maybe earlier, a variety of ongoing structural imbalances may push the economy from today's mild stagflation into more severe conditions in the future: reflation, overheating, stagflation, or recession.

Reflation is the first possible scenario of the overall impact of unconventional policy measures. Despite the constant striving for CPI moderation according to 2% target, reflation becomes a possible alternative because growth initially fueled by money supply, may produce the escalation of inflationary pressures, particularly when the policy rate exceeds the natural interest rate. Avoiding the risk of capital market crash by reducing the real value of fixed nominal rate on debt, the monetary power could choose a second-best solution, to accommodate inflation, rather than to keep it in line with 2% target. Such a policy change will be followed by monetary tightening. To avoid a significant impact of monetary undertightening on stocks and bonds profitability, the central bank may provide a hawkish turn. Typical measures of a hawkish turn are tapering of the central bank balance sheet through long-end bonds withdrawal and interest rate hike. Unfortunately, such monetary policy shift may lead to the stocks rotation from a bull to a bear market territory as well as from defensive to cyclical stocks. The previous implies the beginning of a new inflation cycle or reflation.

Overheating of capital markets and related spillover is the second possible scenario. Despite growing unspent savings and pent-up demand, the continuation of money supply and fiscal stimulus could boost demand in some sectors, such as tech, construction, real estate, etc., contributing to the inflationary spiraling. Without output growth, inflation would remain on a high or even higher level and contribute to overheating.

The third scenario would be stagflation. It is characterized by high inflation and much slower or even stagnating growth. In this scenario, debt, both macro and micro, is soaring. So, the central bank would struggle to decrease interest rates with the aim of de-anchoring inflation expectations and avoiding the financial market crash. Unfortunately, output gap in the real economy decreases overall growth, pushing costs up and contributing to the cost inflation hike. In this case, nominal bond yields would rise much higher as the stock market enters a bear territory with a sharp reduction in the price level, all typical of stagflation.

The last scenario would be the most radical, recession, financial panic or depression, maybe. With an exclusive focus on monetary measures and in the absence of structural policies, the slowdown in aggregate demand would prevail. Slower growth outlook would lead to deflation, affecting a virtuous cycle of output gap increase and further downside in capital markets. A spiral of negative effects might escalate to the extremes such as financial panic or depression.

The general conclusion that can be drawn based on the revision of neoliberal economics rules is that all possible policies have failed to fulfill their purpose. Namely, an economy can never solve the biggest challenges it faces by relying exclusively on the "invisible hand" of the market and monetary measures as almost exclusive policy tools for inflation control. In particular, in an economy with output gap and growing debt burden, expansionary core policies (monetary and fiscal) without structural policies can only lead to wage-price spiral, along with negative and/or cancerous growth.

COVID-19 crisis: Experiments that definitely depart from neoliberal economics rules

During the whole period of market fundamentalism, nature, adversely affected by anthropogenic fractures of the system, was sending a lot of warnings. After the climate emergency, the latest disruptive trend is a biological

crisis due to microbe mutations and superinfections. By exacerbating the "fear of fear" from the previous crisis, the COVID-19 pandemic has actually pushed the economic system into pause. The global supply chains crash are everywhere, commodities are in a supercycle (price escalation plus volatility), soaring yields in capital markets create super bubbles, shortages and volatilities in energy supply are obvious, and geopolitics is gaining supremacy over economic reasoning in trade and investments.

In every complex crisis as the current one, the key victim is economic growth. Output gap is associated with unemployment, debt increase, as well as over-proportional growth in capital markets. Growing popularity of cryptocurrencies as a "limited issuance of nothing", is an example of massive confidence loss. In comparison with crypto currencies, official currencies and even reserve currencies are going to be exponentially weak. Or, the fact that government bonds yields tumble, while speculative equity yields surge, is another indication that financial markets respond to signals over-proportionally. In such bewildering times, marked by plenty of contradictions and conflicting signals, the economy cannot escape a downside scenario autonomously.

When imposing the so-called experimental economic policies during the COVID-19 crisis, policymakers feel free to violate not only the neoliberal economics rules, but also the unconventional economics rules implemented during the Great Recession of 2008. During a negative demand shock provoked by the lockdown, they started to implement hyper-strong expansionary monetary and fiscal policies. The ultimate irony was that governments that previously practiced austerity, hammered under the twin blows of output gap and demand crunch, have switched to the opposite mission statement "whatever it takes" to keep their economies alive.

By doing so, they tend to overlook many details. Despite massive liquidity injection and employment growth, economic growth and productivity improvement remained weak. Without structural policies and impact investment, money supply is neither capable of ensuring sustainable growth, nor keeping macro balances under control. When it comes to inflation, such an approach in policy making is counterproductive. That becomes particularly evident in case of output gap, given that expansionary monetary and fiscal policies provoke yields spike in capital markets, at first, and, after that, core inflation surges as a result of growing inflationary pressures in commodities and energy sources. During the COVID-19 crisis the prices of tech stocks deviated 2-3 sigma from trend line and, consequently, they inflated a super bubble in capital markets. On the other hand, when the prices of commodities and energy sources escalate significantly, the economic system loses inflation hedge factors which affect core inflation directly and consumer price inflation indirectly. So, with super bubbles in capital markets and without anti-inflation anchors in commercial markets, the global economy gravitates toward a "risk-on" mood and, consequently, price-cost spiraling. So, for a small, open and low-income economy, the import of global inflation seems imminent.

One of the problems in the period of the reconsideration of conventional economics rules was an inconsistent implementation of policy rules: Friedmanite market fundamentalism in "good" times and Keynesian deficit financing in "bad" times. Moreover, during the COVID-19 crisis, with the experimental economic policy platform, policymakers have fallen into a new trap, ruling out both Friedmanite conservatism and new- Keynesian unconventionalities. The policy tools such as massive quantitative easing, almost zero or even negative interest rates, wages furlough, massive stimulus packages released to the private sector, helicopter money, etc. are only deepening the imbalances to which the economic system has been previously exposed. The turnarounds in the policy mix, dominated by experimental measures, are frequent. For example, after a long quantitative easing in monetary policy, tapering as quantitative tightening follows. These policy zigzags pose a puzzle for economic agents. So, bubble bursts and overall instability are inevitable. Such an economy fluctuates from crisis to crisis, unable not only to capitalize on structural changes, but also to mitigate the lasting problems as the climate emergency and restructure itself in a rational way.

The central problem is mismanagement of different risk classes, encompassing not only the nexus of risks

related to the economic system such as system, inflation, credit and technology risks, but also the nexus of risks pertaining to global commons including climate, biological, social and (geo)political risks. As a consequence, in the New Normal the current economic rules are not fit for the relationship between purpose and value.

Peripheral economies should draw one more lesson from core economies. Namely, the assumptions about universal applicability of the neoliberal policies mix proved to be false in case of diverse macroeconomic fundamentals. The paradigm shift in Economics also matters. In addition to the clear contours of circular growth model, along with industrial policies and impact investments, we need automatic macroeconomic stabilizers as a liaison between core (monetary, fiscal, labor, etc.) and industrial policies and impact investments.

A special problem for an emerging economic system is going to be the annulment of geopolitical impact. When the economy is in retreat, geopolitical influence is growing. Each crisis provides fertile ground for the supremacy of geopolitics over economic calculus in trade and investments. This impact depends on political cycle and is highly unpredictable. For example, former US President *D. Trump*, in order to promote protectionism and local economic interests, imposed tariffs on China and pulled out the US from COP 25, regardless of the fact that they are the world's second biggest polluter. His successor *J. Biden* is not only keeping China tariffs in place but also expanding the protectionism basket by adding new forms such as Nord Stream sanctions, while he is getting the US back into the COP 26 agreement. The impact of geopolitics may become an unsolvable problem in small, open and low-income economies, particularly bearing in mind that sometimes policymakers may come in their positions without insight into a global picture and more indoctrinated by local neoliberal fanatics. National economies with the delay in economic development cannot decouple from China as the biggest and ever-growing manufacturing hub and the world's leader in Industry 4.0 solutions, as well as from the Russian Federation as one of the leaders in oil and gas supply. But in the New Normal geopolitics could play a catalytic role in solving the global problems such as climate change and growing biological risk. Amid such dramatic changes, agile local leaders must find the ways to keep the country's interests intact without jeopardizing global commons.

The paradigm change in Economics has conceptual and technical aspects. The development of conceptual aspect is climate-minded and health-minded. Highly recognizable key elements of the technical aspect are the circular economy model of growth and heterodox economic policy platform, see [6], [7], [8]. So, a new approach should be able to resolve the existing economic problems and simultaneously balance the requirements of global environmental, economic and social justice.

To survive and prosper, the contours of all post-crisis economies should look similar, independently of their macroeconomic fundamentals. If the system architects decide to follow a sustainable and inclusive growth trajectory, they must be prepared not only for the challenges of the last complex crisis *per se*, but also for the challenges arising from mega trends in a post-carbon, post-Covid and post-industrial era ahead. Also, this should be a turning point which will catalyze further changes across the economy and society as a whole.

Embracing a more responsible model of capitalism means that the transformation of shareholder capitalism in terms of *M. Friedman* [9], to stakeholder capitalism in terms of *K. Schwab* [21], is imminent. In this process, universal connectivity as a legacy of Industry 4.0 is playing the role of a driving force in increasing the awareness of global issues among basic economic agents, governments and institutions. Governments and institutions are increasingly recognizing the need for the policies which keep all stakeholders engaged in achieving the sustainable development goals (SDGs), defined by the United Nations [27]. The 17 SDGs and 169 targets call for innovative amalgams of different technological fields. For example, SDG 7, Affordable and Clean Energy, has three targets to reach by 2030, double rate improvement in energy efficiency, substantial increase of the share of renewable energy in energy mix, and universal access to lead edge energy technologies. Moreover, business leaders across all industries should recognize that a profit-making, climate-friendly and diseases-resilient business model also contributes to more successful business performance

measured by environmental, social and governance (ESG) metrics.

During the last pandemic, mainstream economists have provided the explanation that inflation is a "transitory" phenomenon. A new version of inflation heresies is coming from the following reasoning. Inflationary pressure is driven by the pandemic-related temporary factors such as supply chain disruptions, supply-side squeeze, reallocation of spending from services and goods to real estates and securities. Moreover, boosted income and extraordinary money supply intended to "keep the economy going" are also temporary factors. But we cannot forget that "transitory" inflation could be an acceptable explanation only under a rare set of conditions such as: sectoral adjustments are driven by the changes in demand pattern, monetary stimulus does not impede profitability increase in the sectors that require rightsizing and the existence of stable wage levels. These conditions are difficult to attain everywhere, particularly in open, small and emerging economies without fiscal space and heavily indebted, first of all, because a significant share of the informal economy strongly affects the flexibility of labor market, and also because the expansion of new sectors depends primarily on supply side and energy constraints.

The experiments that depart from the conventional economics rules in the great majority of cases at best are able to buy time, even in a costly way. They are not able to rebuild the economy in a sustainable and inclusive manner. To save the economic system from major disruptions, the neoliberal model needs to undergo a radical transformation. To escape from the crisis, a new economy requires monetary tightening which has to start immediately in the existing sectors of economy. Tapering and successive interest rates hikes should replace the expansionary monetary policy measures. The new sectors (primarily, carbon-neutral) require a quite different monetary (and fiscal) regime.

As for new tax policy, fiscal tightening should start right now and continue in the middle term, at least. Massive tax exemptions and tacit acquiescence in the global race to the bottom rate are stale policy alternatives. Establishing progressive taxation, solidarity tax, a global minimum tax rate are fresh policy alternatives. Automatic fiscal stabilizers are needed in new sectors.

Indeed, the list of changes goes on. Whereas in the neoliberal labor policy the buzzword was the "labor market flexibility", normally based on deregulation, now the focus has shifted to Industry 4.0 related sectors with new skill sets, viable jobs and unionization of employees with the aim of strengthening their bargaining power. Also, a new trade policy will be complementary with a new labor policy. Instead of the global division of labor, a new focus is on safeguarding domestic production due to the COVID-19-induced supply chain bottlenecks. Also, tech giants and platform companies, mostly practicing a "winner takes all" strategy, in the new trade policy will be treated as the examples of monopolistic behavior, which means that they need to be regulated and/or broken up into smaller pieces.

When the pieces of an economy do not fit together due to conceptual fault lines and incompatibility with requirements of leading trends and, particularly, are not in harmony with the laws of nature, deepening of the old fractures of the system and emergence of the new ones become inevitable. Without a paradigm change and radical turnaround in the system, what we may expect in the near future is a series of super bubbles. They dampen optimism and agility for reforms.

Although the journey of change is at an early stage, it is clear that a quite dramatic wave of changes is ahead of us. The momentum of change and trajectory hold promise for sustainability and inclusivity, both toward the people and the planet as a whole. So, it seems reasonable to ask the elite to adjust its role to new requirements and to implement the new nexus of economics rules for the future we want. So, there is hope that the elite should get the job done.

New economics rules: Leading through restructuring

Neoliberal capitalism has definitely hurt renewability, sustainability and inclusivity not only of the economic system *per se*, but also the planet as a whole. The global average temperature has already risen to 1.5°C above the pre-industrial level, and if "as-is" scenario continues, it may increase to 5°C by the end of the century. Global

warming has already dramatically squeezed biodiversity (>50%), reduced the areas for human habitation and triggered climate-induced migration. Humanity has less than a decade left to stop irreversible damage from climate change [10]. Accordingly, humanity is going through an extremely delicate period. Implementing a carbon-neutral economic model of growth and aligning greenhouse gas emissions with the net-zero framework represent a complex and uncertain endeavor conceptually, operationally, and financially.

The research regarding the development of new economics rules has been intensified after the disappointing results of both unconventional and experimental policies trying to save neoliberal capitalism from itself. The relevant experts have expressed numerous concerns, even doubts. They agree that without a new purpose-value relationship, it is impossible to put the economy on a green transition path. Industrial policies combined with impact investments could contribute to sustainable economic growth and a carbon-neutral economy. "Going green" standards in investment, financing, production and consumption are crucial to providing maximum support to a carbon-neutral future and minimizing the possibility of so-called "carbon washing".

Despite the cloud of controversies surrounding the two reconsiderations of neoliberal economics rules since the Great Recession of 2008, a completely new concept was born recently. It is based on two pillars: the circular model of growth and the heterodox economic policy platform. Paradoxically, the credit for the popularization of the new approach primarily goes to the old timers of market fundamentalism such as [14], [19], [23], [24], who have demonstrated evolutionary competence and readiness to reformulate the old rules and endorse the most important conceptual innovations. Industrial policies and impact investments have been consistently promoted by economics visionaries such as *D. Rodrik* [20] and *D. Acemoglu* [1], while *O. Blanchard* [3] concentrated on automatic macroeconomic stabilizers. The previous novelties are compatible with some breakthrough ideas coming from *M. Mazzucato* [15] regarding a mission economy and *S. Brunnhuber* [4] about green financing.

The new economy platform has offered sustainable solutions for structural imbalances the economy has been exposed to, as well as the solutions that are able to capitalize on mega trends and promote a new vision of economic prosperity, this time in balance with nature. In search of direction, the key question is: What is a sustainable economy all about? A simple answer is: an economy capable of mitigating key risk stressors from the past and achieving the sustainable development goals (SDGs) in the future. The UN via the nexus of SDGs has established the goals and targets for building a sustainable, inclusive, green and healthy economy for all. This is a goal-setting framework for every economic agent in all jurisdictions.

The last crisis is mainly the result of structural imbalances of neoliberal capitalism. Reducing greenhouse gas emissions to a tolerable level and setting up carbon-neutral industrialization conceptually, financially and operationally are complex tasks. The new economy platform can give fresh impetus to these processes. The government should carry out a transition process to the new economy. To give the economic system a new direction, the government must structure economics rules by respecting the current planetary boundaries. Fundamentally, it is a litmus test of its ability to respond to overall exponentiality.

Apart from a focus on shareholder value, the new paradigm takes into consideration three additional perspectives: environment, society and governance (ESG). So, ESG metrics are regarded as a necessary requirement in the definition of a new performance measurement system. In this way, along with value creation, the economic system should also demonstrate compassion toward all stakeholders, not only shareholders. Actually, the new approach introduces three categories of rules contributing to three purposes: "leading for good", "doing good", and "being good".

To be honest, besides some important conceptual anchors, the new platform is an unchartered territory in many aspects. A typical example is the development of consistent metrics for assessing the different stakeholders' accountabilities.

New economics rules actually help leading through restructuring. To promote the new approach, the responsible government should create a virtuous cycle of competition ("invisible hand" of the market) and coordination ("visible

hand" of the state) by imposing adequate industrial policies and impact investments with the aim of driving a systemic change in the economy and society necessary for achieving the SDGs.

Such an approach calls for a radical and systemic change. It cannot be implemented through the improvements based on the reconsideration of neoliberal rules and/or trial-and-error experimentation with ad hoc rules. The new economics rules help create a new mindset of economic agents, including consumers (decide not to buy products and services that harm the environment and increase waste), but also investors or debt holders (choose as partners the economic agents that use carbon-neutral and sustainable methods of production). Simplifying to the extreme, to impose the new rules, along with the adoption of baseline standards and ESG metrics aimed at reaching the SDGs, every national economy needs more regulations than deregulations and a new balance between the state and the market.

"Just transition" from the old system to the new one is a global process. As the modern world is universally interconnected, no one is safe until everyone is safe. Divergence in approaches must be absolutely avoided. Normally, the nexus of rules should be open. The great challenge is: How to integrate small, open and low-income economies in the process of implementation of emerging baseline rules, standards and metrics? And, more importantly: How to balance the financial consequences of impact investments at a local level with negative external effects of global environmental degradation? Recognition of non-material assets could not cover all negative externalities. So, in the capital allocation process an exclusive focus on negative external effects is not enough. Some additional measures are needed, e.g. "shadow prices".

The first step in the development of new economics rules implies the revision of conventional understanding of basic human cognition in Economics, the relationship between purpose and value. After a great many of empirical studies in the field of behavioral economics, neuropsychology and neurophysiology, a nexus of new economic rules arrived. As behaviorists like *D. Kahneman* [12] has eloquently shown, humans (instead of "homo economicus") are not exclusively rational and consistent. Also, well-being is not the first derivative of egoism. In fact, global commons are a reality economic agents could and should follow. Moreover, there is no symmetry between risk and return [13], and economic agents do not optimally react to some incentives and orient themselves toward satisfactory instead of maximized profit. Actually, when it comes to investment decisions, the fear of loss is greater than the satisfaction based on greater return due to greater risk taking. The previous rules are framing a circular growth model and the heterodox economic policy platform based on industrial policies, impact investment and automatic macroeconomic stabilizers in monetary, fiscal, education and labor policies, at least [8]. By choosing industrial policies for tradable sectors and undertaking impact investments, the public sector actually crowds in private-sector investment and increases the multiplier effect.

According to the neoliberal line of reasoning, the state's main role is the creation of a level playing field and fixing market failures. A shift toward the new economy requires a mission-oriented approach. New economics rules are promoting the coordination between "visible hand" of the state and "invisible hand" of the market. The previous affects the interactions between economic agents and institutional setting. Both governments and markets are co-creators and co-shapers of a new level playing field [15, pp. 138-139]. Prioritization is almost everything when you seek to trigger a turnaround. Currently, the main priorities in the development of a carbon-neutral economy, in causal and chronological order, are as follows:

a. Climate risk mitigation
b. Financing the green transition
c. Strategic restructuring of the system

Interestingly, Industry 4.0 solutions run through all previous priorities. It is almost a panacea for key problems.

a. Climate risk mitigation. In the last couple of decades Mother Nature sent us a lot of messages caused by the negligence of external negative effects, disregard for common goods, and abuse of natural monopolies by private companies and individuals. The acceleration of disruption in all three layers of the planet, physical system, biodiversity and socio-economic system, is evident. The current economic system has become a major force inflicting the climate emergency. Climate risk, along with biological

risk, is an existential threat. Humanity should not take for granted energy production and related industries based on fossil fuels. In the future renewables will be the most valuable planet's resource.

The key priorities include cutting emissions of greenhouse gasses, carbon capture (and offset), and the development of new energy technologies and connected industrial technologies with net-zero emission. The green transition is not just about the substitution of fossil fuels with renewable sources. It is actually a cross-sectorial transformation of the economy with the mission to create the new economic structure based on the reversibility principle which defines how we will produce, consume, and invest in the future. The green transition also requires the reduction in material content and energy consumption in all industries as well as waste management in accordance with the 3R rule of a circular economy (Repurpose, Reuse, and Recycle). These changes cause enormous difficulties, but are manageable. Industrial policies and impact investment provide the SDGs-based framework for a green transition. Also, the rejuvenation of industrial policies in tradable sector could be beneficial to keeping macroeconomic balances under control.

The COP 26, recently held in Glasgow, was a place of the revival of global ambitions toward the climate crisis mitigation program initiated in 2015. According to this document [26], the first step is that the 20 biggest polluters responsible for more than 80% of greenhouse gas emissions should step away from a business-as-usual approach. This decade will be critical to limit global warming to well below 2.0°C by 2050. It requires, for example, that the US reduce their greenhouse gas emissions by 45% and the EU by 50% by the end of this decade.

As for the green transition, electricity production from fossil fuels, particularly from coal, must stop forever by 2050. This turnaround needs a gradual implementation. Energy security is a primary reason. Until now electricity from renewables has not been a viable substitute for heating systems. When you do not have a robust renewable alternative, the reduction in energy production based on fossil fuels leads to the overall instability in energy supply and prices soaring. A significant impact on assets prices that is likely to be produced by green technologies may have systemic effects on the market. Namely, related assets prices may jump at critical moments when markets fully internalize the reality of growing production costs. To avoid a dangerous assets repricing effect, it is necessary to adjust the pricing system in public utilities directly by implementing inflation indices or indirectly through price reversions.

Maintaining a sustainable balance between purpose and effect in economic transactions is a critical component of any conceptual platform in Economics. The neoliberal orthodoxies have wrongly hypothesized about the exogenous character of technology as something that affects resource allocation, but does not depend on it. If economic theory is not capable of recognizing the endogeneity of a new technology and its potential impact on negative external effects such as climate change and microbe pandemics, it means that it is completely detached from reality. To mitigate the problems as fundamental as these ones, there is a need for a paradigm change based on a radical reconsideration of deeply rooted economics rules. Putting the endogeneity of technology in the context will promote a mission-driven economy and reaffirm industrial policies and associated impact investments. When it comes to the energy transition, carbon-neutral energy production, carbon capture and related investment interventions are far more important than investment in energy security or optimization of energy consumption. So, according to the new approach, impact investments in connected technologies need to be directed more aggressively than they have ever been under neoliberal rules and their recent modifications. Moreover, the disregard for negative external effects, prices of public goods and natural monopolies is a strong economic argument to be made for explaining why essential public goods (earth, water, land, wild, minerals, etc.) should be evaluated in a different way than private goods. "Shadow pricing" is probably the best way to neutralize negative external effects due to market imperfections.

b. Financing the green transition. Finance has a critical role in tackling the climate emergency and other SDGs. In the past, the government as an asset allocator had a small pocket of investments in the SDGs.

But, in recent times the attitude has changed. In fact, financial intermediaries must stop providing funds for the

investments that pollute and despoil environment. Rather, they must provide the funds for the investments needed to redirect the economy toward a green transition. Also, to mitigate sustainability risk, the government should actually endogenize negative externalities. By doing this, the government related institutions and money could crowd out private investment in same direction.

Typical neoliberal measures to solve the climate emergency problem and redirect the economy toward a sustainable path are taxes, incentives and subsidies, or "carrots and sticks". For example, the government charges carbon taxes in case of negative external effects and pays subsidies in case of positive external effects. Unfortunately, the impact of these measures is limited. Moreover, carbon tax affects the competitive advantage of nations, particularly if energy production is based predominantly on fossil fuels. China is an excellent example. Serbia is not an exception to the rule. Also, the risk of a subprime carbon bubble is real. Despite a positive effect, typical neoliberal carrots such as R&D subsidies and tax incentives are not of such magnitude to finance the needed green transition.

As far as the quantum of green transition funding is concerned, this is a quantum leap from billion to trillion. It is estimated recently by the IMF [11] that the world economy requires US$ 25-30 trillion a year to achieve the SDGs. This amount is less than 12% of total financial assets of about US$ 350 trillion [27].

Despite evident space, financial intermediaries are hesitant to invest in long-term SDGs, including the green transition. The main reason is risk. In many cases, banks and insurance companies expect more incentives from regulators to embark on a green path. Also, the real economy is not able to invest massively in the green transition burdened with the profitability problem. Hence, the private sector (both in finance and in real economy) alone cannot drive a necessary shift that reflects the SDGs.

The climate emergency and related sustainability risk are not operational risks. They belong to the systemic risk nexus. So, the government should contribute to the relaxation of such level of risk through the introduction of some institutions and policy measures. After that, the private sector will follow. A magnitude of funding and long-term character of these investments require financial institutions which are willing to take the associated risks, able to mobilize a critical mass of capital and, by doing this, crowd in private investors.

In the new economy, financial intermediaries could play a catalytic role in addressing and financing the SDGs. Namely, they should redefine their purpose by showing a broader responsibility towards all stakeholders instead of an exclusive focus on shareholders.

Some extent of financing can go through credit institutions providing green credits. Credit institutions must encourage investors in renewable energy through credit conditions. They will fulfil the new purpose by imposing baseline standards for green investment and the calculation of cost of capital based on shadow prices. The central bank could take into consideration the related obligatory reserves and policy rate adjustments. The banks that have provided loans for fossil fuel production should be obliged to hold more obligatory reserves and related companies should not be effectively subsidized through the deductibility of related investments from earnings.

Debt financing of the carbon-neutral economy and global commons is feasible given the size and scale of the global financial system. Recently, the 6 largest US banks have announced that they are ready to lend US$ 1.6 trillion in the next 10 years for that purpose. Recently, the COP 26 has defined an amount of US$ 100 billion per year for financing a green transition in developing countries.

Going green could be a viable investment. Viable investments, by definition, mean that every asset you buy will double your wealth in about 17-18 years. From the previous perspective, payoff of investment in green technology may be competitive, particularly when the ESG metrics are included in calculations of effects. Impact investments are capable of delivering satisfactory return consisting of shareholder value and monetary effects that contribute to global commons. There is an increasing body of empirical evidence that this kind of investment can be economically viable. According to [25, p. 3], 10-year investment in the SDGs has delivered a 24% premium return over the financial industry benchmark.

An important role in solving the lack of funding for green technology development and implementation can

be attributed to new institutions, such as sustainability budget, green development bank, and sovereign wealth fund.

Contrary to the state budget which is cash flow based, the sustainability budget could be based on high yield state guaranteed long term bonds. Targeted buyers of such green bonds are pension funds and insurance companies. Confronting the low interest rates environment, the sustainability budget is also a way to sustainable finance, not only a sustainable real economy.

Green development bank has been created not just to provide green credits and underwrite green bonds, but also to assist in defining baseline carbon-neutral standards, as well as to guarantee that investors will be compensated if carbon price turns out to be lower than expected. Also, green development bank must take risk in the early stages of leading edge technologies and release the guarantees for the climate change adaptation projects. Sovereign wealth funds should also invest in "green bonds" as a financing tool for the most promising green technologies such as energy storage and green hydrogen.

Carbon tax and incentives, subsidies, minimum yield guarantees, green credits and green bonds could create a self-perpetuating cycle of financing green transition. By balancing purpose and effect, in both new sectors of the economy and restructured ones, government-led green quantitative easing (green QE), as a form of purpose-driven deficit financing aimed at achieving the SDGs, could be recognized as an additional way of financing [4].

When it comes to the state involvement in economic recovery and climate crisis mitigation, only investments such as Roosevelt's New Deal will match the magnitude required in a green transition. The so-called Green New Deal is actually a growth strategy which requires the largest shift finance has ever attempted. The New Green Deal with targeted, measurable and long-term goals, was already announced in the US in 2019, in the EU in 2020 and in China in 2021. The EU plans to mobilize at least EUR 1 trillion of sustainability-related investments by 2030. A half of funds will come from the EU budget. About EUR 100 billion will be provided by the European Bank for Reconstruction and Development to finance the green transition in Eastern and Central Europe.

c. Strategic restructuring of the system. The first explanatory element of modern times is exponential change. In the last 20 years humanity has changed more than in the last 300 years. Practically, we are surrounded with exponentialities. Universal connectivity, as a free good of modern times, makes possible the multiple intersections of AI, robotics, and life science. In such surroundings, the number of innovative amalgams from different fields, embodied in new products, services, business models and platforms, is practically endless. Also, the opportunities for symbioses of breakthroughs from different technological fields are unlimited. One of the possibilities is a human-machine fusion. This is not science fiction. This is a scientific fact.

Innovative amalgams are disruptive, by definition. The great majority of jobs people do as a routine and clerical are under disruption due to AI and robotics, giving rise to the social cohesion problem. Following strictly the economic reasons, at least 50% of routine jobs in industry, logistics and finance could be replaced by digital twins, thus reducing the aggregate demand and contributing to further wealth concentration. Both effects could break social and economic limits and push society into a conundrum.

The expansion of Industry 4.0 solutions requires the development of Governance 4.0 capable of redirecting research toward fertile fields, particularly to extended intelligence (EI), along with artificial intelligence (AI), and balancing between purpose and effect. A key element of the new approach is coordination between critical stakeholders. The heterodox economic policy platform is promoting industrial policies as co-creators and shapers of markets, as well as the system integrators of private and public interests. Restoring convergence through the mix of horizontal and vertical industrial policies must be regarded as a priority.

Structural policies and impact investments are simultaneously strengthening the role of science and technology and preventing political pandemic based on false concepts. In a world overflowing with disinformation, perception dominates facts. In social networks and other echo chambers, perceptions almost regularly dominate a fact-based scientific analysis and data. The previous

causes an "infodemic". It is a manifestation of the crisis of values and a festivity of irrational egoism. Infodemic is the predecessor to political pandemic that emerges when political leaders do not take prompt and adequate actions due to an overwhelming confusion resulting from fake news and unfounded analyses released by unethical opinion makers, influencers and their followers. The dominance of such trends quickly transforms progress into regression.

Serbia's macroeconomic audit for 2021

In 2014, Serbia was faced with almost shocking statistics on macroeconomics. No economy with such transitional output gap can overcome the crisis without fiscal consolidation. It was the reason behind the introduction of the fiscal consolidation program in 2014. The government took many proactive steps to make it work. After the successful implementation of fiscal consolidation program, we have witnessed a completely different economic system.

We use two sets of data to contour the strategic audit of Serbia's economy. Figure 1 portrays the trends in major macroeconomic data in three periods, fiscal consolidation (2014-2018), rebound (2019) and the COVID-19 crisis (2020-2021), respectively. Obviously, the negative impact of the COVID-19 crisis on fiscal balance in the last period could not be avoided. A sharp decline in real GDP in 1H 2020 has been mitigated until the end of 2020. However, in 2021, the government managed to get things back to normal, decreasing the gap in fiscal balance from -8.0% to -1.8%, while real GDP growth rate for 3Q 2021 looks encouraging (7.7%). Construction and ICT have been given a boost. Growth rate in construction was 25%. ICT is the largest exporter. Public and external debt require an additional caution to avoid losing financial stability.

The general conclusion is that the overall economic policy is tight, keeping most of the macroeconomic figures (unemployment, exchange rate, interest rate and current account deficit) within controlled corridors. As expected, the global pressures on commodity prices, energy resources and transportation costs led to inflation spillovers. In fact, CPI for 3Q 2021 of 5.7% Q/Q is so far so good, reasonably good.

2021 was the year of significant growth, 7.7% in 3Q, and 7.5% at the end of 2021. In 2021, credit rating agencies expressed confidence in Serbia's economy. For example, S&P has upgraded the country's outlook from "stable" to "positive", while Serbia's rating has remained BB.

As for vulnerability indicators (Figure 2), demography is a major vulnerability, maybe. Demographic situation in Serbia is an exact replica of ever aging Europe. The population pyramid in Serbia has changed dramatically from the start of geopolitical crisis more than three decades ago. Along with a population decline, Serbia has a reversed pyramid or a pyramid with generational shift. Namely, Millennials and Generation Z are not in the majority. So, we have a demographic paradox: there are far more elderly people than the young. From the previous perspective, we can evaluate unemployment data. Unemployment rate fell to 10.5%. Wage rate exceeded the forecasts. These data are extremely important because, as already mentioned, demography is one of the impactful problems Serbia faces [2]. Labor scarcities have persisted

Figure 1: Macroeconomic data, period: 2014-3Q 2021

Macroeconomic data	Fiscal consolidation program					Rebound	Covid-19	
	2014	2015	2016	2017	2018	2019	2020	Q3 2021
Consolidated fiscal result as % of GDP	-6.2	-3.5	-1.2	1.1	0.6	-0.2	-8.0	-1.8
Current account as % of GDP	-5.6	-3.5	-2.9	-5.2	-4.8	-6.9	-4.1	-5.5
CPI (%, relative to the same month a year earlier)	1.7	1.5	1.6	3.0	2.0	1.9	1.3	5.7
Unemployment rate (%)	20.6	18.9	16.4	14.5	13.7	11.2	9.7	10.5
Real GDP growth (%)	-1.6	1.8	3.3	2.1	4.5	4.2	-0.9	7.7
Public debt as % of GDP	66.2	70.0	67.7	57.8	53.6	51.9	57.0	56.5
NPL ratio (share in total loans)	21.5	21.6	17.0	9.8	5.7	4.1	3.7	3.5
RSD/EUR exchange rate (period average)	117.31	120.73	123.12	121.34	118.27	117.85	117.58	117.57
External debt as % GDP	72.4	73.4	72.0	65.1	62.2	61.4	65.8	68.8
FDI net (mil EUR)	1,236	1,804	1,899	2,418	3,157	3,551	2,938	2,747

Figure 2: Vulnerability indicators

Financial vulnerability indicators

Indicators	Value	Reference value
Indebtedness		
• Public debt*/GDP	56.5%	<60%
• External debt/GDP	68.8%	<80%
• External debt/Export	131.0%	<220%
Credit rating		
• S&P	BB+/positive	rank > BB+
• Fitch	BB+/stable	rank > BB+
• Moody's Investors Service	Ba2 /stable	rank > BB+
Fiscal capacity		
• Tax revenues as % GDP	37%	<34%
• Shadow economy as % GDP	34%	<31%

Operational vulnerability indicators

Indicators	Value	Reference value
Okun index (inflation + unemployment)	16.2%	<12%
Gini coefficient**	33.3%	<30%
Current account as % GDP	-5.5%	>-5%
Consolidated fiscal result as % GDP	-1.8%	>-3%
Total dependency ratio***	54.7%	<50%
Youth unemployment	23.1%	<20%

Competitiveness vulnerability indicators

Indicators	Value	Reference value
Export (goods)/GDP	38.9%	>50%
Currency change (Sept 2021/Sept 2020)		
• Nominal change	/	<5%
• Real appreciation	2.2%	<0%
Global Competitiveness Index****	72 of 141	65-SEE average
Corruption Perception Index	94 of 180	59-SEE average
Economic Freedom Index	54 of 169	62-SEE average

* Central Government
** Gini coefficient of equivalised disposable income - EU-SILC survey 2020, Eurostat
*** Statistical Office of the Republic of Serbia, data 2020
**** Global Competitiveness Report 2019-2020

regardless of wage growth. Workers are simply demanding more everywhere. Without a demographic bonus typical of developing economies, Serbia could not count on the growth model based on FDI forever. Industrial policies based on Industry 4.0 solutions must have a level playing field with FDI. In addition to infrastructure, one of the key priorities in structural portfolio of the economy is related to a green transition.

Aggregate demand is once again robust. Earnings dynamic is normalizing. Foreign trade is nearing to pre-pandemic level. FDI is at a record high of more than EUR 4 billion at the end of 2021, raising hopes that economic expansion will continue. Investments, both state and private, are increasing, too. Current account deficit as % of GDP is still in negative territory (- 5.5%).

Figure 2 shows the reflections of policy lessons in 2021 on key vulnerability indicators. The first worrisome sign is an increase in public debt (56.5%). Despite the increase, public debt is still out of the red zone. However, external debt may become a matter of concern (68.8%). According to the WB, a ratio external debt/GDP indicates a low level of indebtedness if it is below 45%, and a high level of indebtedness when it is over 80%. Care must be taken not to let the last figure slip into the red zone. On the other hand, competitiveness of the national economy has not been significantly deteriorated. The Corruption Perception Index is something to worry about. Although still on a "bellow the target" level, exports remained uncompromised (38.9%). Also, the government managed to regain control in the fiscal sphere by getting back to low levels of fiscal deficit (-1.8%). Overall, we could say that, from the economic vulnerability perspective, Serbia is in a delicate position of slowly but decisively improving its fiscal stability while increasing growth and not jeopardizing the level of indebtedness. The result of this "dance" will define the final outcome of the COVID-19 set of measures.

The reversed population pyramid continues to frighten (dependency ratio of 54.7%), threatening to

collapse the entire pension system. On the other side, youth unemployment is maybe the most dangerous vulnerability of the economy from the sustainability perspective. A country with already adverse demographic pyramid has too many unemployed youngsters (23.1%). Moreover, the share of young people who are not in employment, education or training (NEET) is 18.1%. A mighty thought that has to become information for action for any prudent policymaker.

The COVID-19 pandemic is still macroeconomic variable because related costs have become quite significant. After a short period of rebound in 2019, the COVID-19 crisis put the economy on pause in 2020. In the first pandemic year, the share of medical costs in GDP formation increased by 1.6 p.p., reaching 6.6% of GDP or 13.4% of the budget. Adding the pandemic related stimulus to medical costs, we can see that the overall pandemic related costs reached 15% of GDP. The COVID-19 pandemic has eaten up a significant portion of the effects of growth. To compensate lost growth and make a longer-term debt sustainable, in the 5-year period Serbia's economy will need the compound average growth rate (CAGR) of minimum 2.8% [6, p. 133]. In 2021, the share of medical costs in GDP is slightly lower. Also, there is a decrease in COVID-19 related stimulus in GDP formation. Concretely, the share of medical costs in GDP formation is 6.2% and total pandemic related costs in GDP account for 12.9%. By using the same formula[1], the appropriate CAGR for the next 5-year period that compensates for such costs is 2.46%.

The major government's initiatives in monetary and fiscal spheres during the first and second year of the pandemic have been creating commitment and accountability. Two main measures of monetary policy were moratorium on loans and the policy rate lowering. The major fiscal measures included postponement of taxes, wages furlough, subsidies to strategic sectors, helicopter money, etc. All core policy measures were a reasonable remedy for downside scenario due to the collapse in economic activities as well as the decrease in employment and living standard at the start of the pandemic. Also, structural policies measures proved effective. So, in 2H 2020 we saw a positive change going forward. At the end of 2020, the growth rate was 0.9%. Positive trend continued in 2021.

Unfortunately, inflation accelerated more than expected in 2H 2021. Inflation rate jumps most since 2014 measured by CPI, PCE, CORE PCE core inflation, or any. In December 2021 CPI Y/Y reached 7.9%. Average inflation was 4%, and core inflation was 3.5%. A logical question is: Where is Serbia in the inflation landscape?

During the COVID-19 crisis, overall scarcities have reflected in prices. Moreover, there is an unfortunate asymmetry, price increases from shortages tend to be disproportionately larger than price decreases from surpluses. So, interest rates hike will increase unemployment more than it will decrease inflation.

Despite the energy cost increase and commodities supercycle, significant internal drivers of inflation are massive overheating of the labor market fueled by soft lending in cash credits, construction and housing loans, as well as infrastructure development and its financing based on inter-state debt agreements with grace periods. Some consumer prices have been skyrocketing to 8-year high.

The NBS has declared in 3Q 2021 that inflation is "transitory". Making a judgment about whether inflation is transitory or structural in its character depends on the answer to the question: Is inflation driven by expectations or by macroeconomic fundamentals?

Based on the previous nexus of macroeconomic fundamentals presented in Figure 1 and vulnerability indicators from Figure 2, we can confirm with high certainty that the current inflation in Serbia is not chronic, so far. Namely, rising inflationary pressure is driven primarily by the pandemic-related transitory factors such as supply chain disruptions, supply-side squeeze, and reallocation of spending from services to real estate as an anti-inflation hedge. Moreover, boosted income as a result of expansionary core economic policies is also a temporary factor.

The NBS has been patient and has not overreacted by taking the direct measures such as raising interest

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

rates. Its response has been based on indirect, less robust monetary policy measures. In comparison with FED faster 2022 runoffs based on 4-5 hikes, the NBS plans to keep interest rate, more or less, stable.

The NBS has used some tools to support the labor market and ensure that inflation does not take root. Inflation-fighting strategy is based on fixed exchange rate, currency convertibility and a low and stable policy rate. As for the policy rate, energy, materials, metals, construction and ICT stocks that battered on rate hike conviction are drivers of growth. Under such circumstances, rate hikes initiated by the NBS are highly unlikely. Moreover, the NBS does not plan to trim balance sheet by introducing some forms of tapering. Anyway, monetary tightening is demand test for government bond yields.

No doubt, seizing inflation number will be healthy for the economy due to an impact on yields increase and expectations growth. The NBS expects inflation falling in 2022. To do that, the NBS needs to be more hawkish. Otherwise, inflation will keep elevating. Also, bond-buying program provided by the NBS for state-owned companies as a back stop in financial trouble can be a risky business. Policymakers have to wonder about that. Last but not least, inflation may be driven by backward indexation caused by wage-price spirals. It may become a source of system vulnerability, particularly at the time of multiple elections.

Instead of conclusion: Emerging contours of the economic system after the transition from pandemic to endemic

In the last two years, the economic outlook in every national economy was periodically disrupted by the pandemic roller coaster and changes in (geo)political winds. Recently, the IMF has cut Serbia's economic growth forecast for 2022. Growth is slowing under the impact of power shortage. From the beginning of the year, inflation fears rise amid imported inflationary pressures such as negative supply shocks, commodities supercycle and announcement of interest rates hike. In 2022, the era of low or even negative yielding debt is coming to an end. In Serbia, we cannot predict that high inflation will decrease by hawkish monetary turn. Anyhow, the impact of macroeconomic fundamentals will be stronger. All this brings us back to the point that it is unlikely to see inflation lift-off in 2022. But we hope that inflation will not sink into hyperinflation territory and will not persist in the middle term.

The risk that policymakers in a small, landlocked, open and low-income economy as Serbia may copy the policy measures from core economies without paying attention to their specifics is well elaborated. In the conditions of transitional output gap, limited fiscal space and lack of a fully convertible currency, being dependent on expansionary monetary and fiscal policies is not only extremely dangerous, but almost impossible. The deepest fault line emerges when stimulus package is financed by debt denominated in reserve currencies. When the current economic system is full of structural imbalances, the top risk is associated with the postponement of the new economy principles build-up based on the paradigm change in Economics.

A more severe problem in peripheral economies like Serbia is the model of growth based on export-oriented industrialization relying on import of technologies. Successive import of technologies from abroad has a limitation which was recognized as the "middle income trap" [5, pp. 19-24]. After some level of economic development this phenomenon is actually blocking economic growth based on more productive investment opportunities. Namely, both market and government imperfections inhibit the development and entrance of internally developed lead-edge technologies. Structural changes in the economy and the generation of an enlarging middle class require the respect for technological frontiers as they ensure well-paid productive jobs and, apart from the export, an additional focus on the home market and services, as well.

These days investment in a greener and sustainable economy based on Industry 4.0 solutions is critical. Industrial policies, as well as impact investments, are catalysts for structural changes and economic growth. By using structural policies, the economy should expand, over tradable sector and infrastructure, into renewable energy, medical equipment, ICT and related sectors. So, the green transition is embodied in economics rules.

Each optimist, or even constructive sceptic, would welcome leaders who act "out of the box", freely navigating in a largely unchartered territory of the paradigm shift in Economics and the pandemic roller coaster. Tracing the emerging contours of the circular model of growth and heterodox economic policy platform and identifying future industrial policies and impact investments in a specific national economy are typical examples of this kind of behavior. According to this line of reasoning, as for Serbia, we could predict that the year 2022 will bring, along with fears, some chances for a sustainable recovery and strategic restructuring.

To master every uncertainty is not feasible. The government must concentrate on the key ones. The Competence Center for Industry 4.0 established recently with the World Economic Forum is a step in the right direction.

Currently, the mission statement for each national economy is to transform handicaps of the "fear of fear", as a primary human perception of growing climate and biological risks, into the benefits coming from the creation of the new economic system based on a paradigm shift. Bouncing back from multiple shocks of the complex crisis and its aftermath in an economy such as Serbia, particularly due to structural imbalances from the past and mainly disruptive leading trends in external environment, implies abandoning the current model of growth and related economic policy platform and setting up a new economic system. The foregoing does not necessarily mean that the rules behind the mentioned novelty will prevail immediately. Anyhow, this concept could serve as good orientation for future policies corresponding with the view of opinion makers with excessive confidence.

This year the virus will not be eradicated, but probably altered. After the transition from pandemic to endemic, the chain of positive events may become a reality. But rebounding from the New Normal to the Better Normal needs many things to happen. First and foremost, the economic system must step away from the linear model of growth and orthodox economic policy platform almost exclusively focused on inflation targeting and adopt a new conceptual platform with industrial policies, impact investments and automatic macroeconomic stabilizers at the center. Despite the transformation of the pandemic into endemic, putting in place the new economic system to provide a simultaneous response to climate risk as a major long-term challenge must not wait.

One of the challenges in the post-pandemic period will be to get people back to productive work. A big risk is thinking that the labor participation in times of work at home, wages furlough and overall absenteeism due to the fear of virus could contribute in a sustainable way to GDP formation, recovery and more prosperous economic system. Industrial policies have the potential to resolve the problem of covid-related bubbles in the GDP formation as well as cyclical or even stagnating growth.

Globalization of the green transition is unstoppable. In the next period, the renewables will be the most valuable planet's resource. We can see structural changes in economies all over the European continent toward net-zero emission technologies, substitution of fossil fuels with renewable sources, more environmentally-friendly model of consumption, as well as the acceleration of digitalization and Industry 4.0 solutions. Serbia should follow global trends. In particular, to reach the compatibility imperative with the EU, Serbia has to demonstrate a more agile approach to a carbon-neutral future. Europe is warming faster than the global average. The EU is on the front line with a very ambitious plan to cut carbon emissions. Namely, the EU plans to reach net-zero by 2050. It is an imperative for Serbia, as a European country that goes through the EU accession process, to take part in this transition. The first step in this direction is the accreditation of Serbia's economy in line with the EU green transition rules.

In a green transition, the state should play an active role. One powerful idea would be to establish the free zone for Industry 4.0 solutions with the aim of building the machine-to-machine platform for carbon-neutral technologies. The complementarities between FDI and industrial policies could bolster the role of free zone in the green transition based on Industry 4.0 solutions.

Financing of the green transition is crucial. Despite the COVID-19 pandemic, macroeconomic fundamentals in Serbia are "fair enough" and inflation is "transitory", so far. Nevertheless, Serbia does not have enough fiscal

space to finance massive carbon-neutral investments. The private sector is not able to agglomerate a critical mass of money to participate significantly. Credit rating is fair but cannot guarantee debt financing for such a magnitude of investments. So, green QE and alternatives such as green loans, green bonds, etc. could be the ultimate sources of financing. The COP 26 [26] decided to raise US$ 100 billion per year for developing economies with the obligation to reduce carbon emissions according to recognized standards. The EU Commission will kick off the credit-based program of decarbonization in 2H 2022 with EUR 100 billion for Eastern and Central Europe economies. As a candidate country, Serbia should be agile in this respect.

The base-case scenario for Serbia restructuring should encompass infrastructure spending, construction, agriculture, and related industries as well as a green transition, all based on Industry 4.0 solutions. Namely, we can propose a two-pronged program of financing, based on lending in compliance with hard budget constraint and more innovative ways of financing including green QE. The possibility of weakening growth due to interest rates hike may produce growth shocks. So, the NBS has to implement gradual monetary tightening.

Contrary to the previous recommendations, in the analyzed period the government provided financing to the energy sector based on fossil fuels (particularly coal) and partially supported with financial aid other parts of the economy, both public and private, that are incompatible with a green transition. The main reason was energy security. Investment in fossil fuels is long-lived, which means that the exploitation of facilities takes decades. Bearing in mind that these investments cause major setbacks in the implementation of the EU plans to become carbon-neutral, they will certainly become "outdated assets" in the foreseeable future. In this case, public utilities will demand compensation with the aim of socializing downside risk. Other way around, the government will ban such investments. But, for now, this option is unfeasible for Serbia because 68% of electricity production comes from coal. Another option is to introduce carbon taxes and subsidies. Since markets are short-sighted and often fail to fully account for key risks, in order to preserve financial stability, the implementation of these tools must be overseen by the NBS.

Energy security and sustainability should be in focus. So far, Serbia has done almost nothing to reduce its dependence on coal. Also, excessive spending on fossil fuel subsidies is evident. An additional problem is operational inefficiency in coal-related line in public utility EPS, which has erupted at the end of 2021. After that, the economic growth outlook has worsened. One of the main reasons is outsourcing of non-core businesses from the structural portfolio of EPS. By causing the loss of institutional memory from the former internal market, outsourcing actually leads to inadequate and costly services. Instead of outsourcing, a better solution will be public-private partnership in the area of renewable energy sources.

To address global climate issues, the transformation of the energy sector in Serbia must be the first priority. It could be a gradual process. The energy sector should evolve, learn and adapt. There is almost no dilemma about what initiatives have to be followed. The priority for public utilities from the energy sector is to undergo a green transition through public-private partnerships. Even the biggest fossil fuel producers, e.g. Saudi Arabia, have committed themselves to net-zero carbon emissions. These days ARAMCO, a green hydrogen plant in Saudi Arabia, is the largest in the world. It could serve as a role model for public utilities such as EPS and Srbijagas.

During the COVID-19 crisis, the anti-crisis program was the first and easy step. The following steps are essential. The green transition is a historic opportunity for the economy to recover and prosper in a sustainable and inclusive way. The economic system we choose today will have effects for decades to come. We must act in a way that will lead the economy and society toward a better post-pandemic future. The transformation into a circular economy is compatible with the path to climate neutrality. All stakeholders must act together to confront the climate and biodiversity emergency.

In last two years the anti-crisis program has stabilized the economy. Strategic restructuring of the economy toward a carbon-neutral future embodied in the new economics rules we discussed in this paper will leave a legacy.

References

1. Acemoglu, D., Robinson, J. A. (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: The Crown Publishing Group.
2. Arandarenko, M., Aleksic, D., & Loncar, D. (2021). Expansion of direct investment and resilience of Serbian labour market: A regional and sectoral perspective. *Ekonomika preduzeća, 69*(3-4), 203-216.
3. Blanchard, O., & Summers, L.H. (2019). *Evolution or Revolution? Rethinking Macroeconomic Policy after the Great Recession*. Cambridge: The MIT Press.
4. Brunnhuber, S. (2021). *Financing Our Future: Unveiling a Parallel Digital Currency System to Fund the SDGs and the Common Good*. Palgrave Macmilan.
5. 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.
6. Đuričin, D., & Vuksanović-Herceg, I. (2021). The great reset of Serbia's economy during and after the COVID-19 crisis. *Ekonomika preduzeća*, *69*(3-4), 117-136.
7. Đuricin, D., & Vuksanović 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.
8. Đuricin, 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.
9. Friedman, M. (1963). *Capitalism and Freedom*. Chicago: University of Chicago.
10. Intergovernmental Panel on Climate Change. (2019). *Special Report, Global Warming 1.5 degree of Celsius*. Retrieved from https://www.ipce.ch/sr15/
11. 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
12. Kahneman, D. (2011). *Thinking Fast and Slow*. London: Penguin Books.
13. Kahneman, D., & Tverski, A. (2000). *Choices, Values, and Frames*. NY: Cambridge University Press.
14. Krugman, P. R. (1997). *Development, geography, and economic theory* (Vol. 6). MIT press.
15. Mazzucato, M. (2021). *Mission Economy: A Moonshot Guide to Changing Capitalism*. Harper Business.
16. Mazzucato, M. (2018). *The value of everything: Making and taking in the global economy*. Hachette UK.
17. 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.
18. OXFRAM. (2022). *Ten richest men double their fortunes in pandemic while incomes of 99 percent of humanity fall* [press release, 17th January]. Retrieved from https://www.oxfam.org/en/press-releases/ten-richest-men-double-their-fortunes-pandemic-while-incomes-99-percent-humanity
19. Rajan, R. G. (2011). *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton, NJ: Princeton University Press.
20. Rodrik, D. (2016). *Economics Rules: The Rights and Wrongs of the Dismal Science*. New York: W.W. Norton.
21. Schwab, K. (2021). *Stakeholder Capitalism: A Global Economy that Works for Progress, People and Planet*. New Jersey: John Wiley & Sons.
22. Statistical Office of the Republic of Serbia. *Data and statistics*. Retrieved from https://www.stat.gov.rs/
23. Stiglitz, J. E. (2019). *People, Power, and Profits: Progressive Capitalism for an Age of Discontent*. New York, NY: W. W. Norton & Company.
24. Stiglitz, J. E. (2010). *Freefall: America, Free Markets, and the Sinking of the World Economy*. New York, NY: W. W. Norton & Company.
25. The 'Force for Good' Project on the Future of Capital In Support of the UN Secretary General's Strategy and Roadmap for Financing the 2030 Agenda for Sustainable Development December. (2020). *Capital as a Force for Good: Global Finance Industry Leaders Transforming Capitalism for a Sustainable Future*. Retrieved from https://www.forcegood.org/frontend/img/pdf/Capital-as-a-Force-for-Good.pdf
26. 26. United Nations Climate Change. (2021). *COP 26:* The Glasgow Climate Pact. Retrieved from https://ukcop26.org/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf
27. 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
28. World Bank. (2020). *Poverty and Shared Prosperity 2020: Reversals of Fortune*. Washington, DC: World Bank.

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. 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.