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SHAPING THE FUTURE OF SERBIA'S ECONOMY: THE NEW GROWTH MODEL AND RELATED ECONOMIC POLICY PLATFORM

Oblikovanje buduće privrede Srbije – novi model rasta i povezana platforma za vođenje ekonomskih politika

Abstract

As Serbia's economy enters 2020, we see a high level of risk, fragile growth outlook, and increasing tensions over the evident polarization according to the future growth trajectory. Taking the pulse of Serbia's economy, we see that current challenges are significant. After the 2015-2017 fiscal consolidation program successfully ended, Serbia desperately needs a new platform for shaping the future of the economy and society. It is undeniable that the global economy is in transition. It simultaneously deals with the negative consequences of the last recession and a positive impact of Industry 4.0. Food, transport, energy production and the ways how people produce and consume industrial product/services need to undergo fundamental transformation. The aim of this paper is twofold. First, to present strategic audit of the current economic situation in Serbia. Second, based on the situation analysis, to identify desirable intervention areas and related intentional policies, in accordance to broad based trends of change and their impact on the emerging contours of the new economy. Key idea is to present a conceptual paper without calibration of concreate policy measures.

Keywords: *Serbia, Industry 4.0, circular economy, heterodox model, industrial policies.*

Sažetak

Ulazak privrede Srbije u 2020. godinu prate visoki rizici, fragilna perspektiva rasta i rastuće tenzije u vezi očigledne polarizacije oko buduće trajektorije rasta. Mereći puls privrede Srbije, dobijamo utisak da su izazovi značajni. Pošto je program fiskalne konsolidacije 2014-2018 uspešno završen, Srbiji je potrebna nova koncepcijska platforma koja će omogućiti razvoj nove ekonomije. Činjenica da je globalna privreda izložena radikalnim promenama ne može se negirati. Ona je izložena simultanom dejstvu negativnih posledica poslednje recesije i pozitivnih uticaja Industrije 4.0. Fundamentalnim promenama su izložene proizvodnja hrane i energije, transport kao i načini proizvodnje i potrošnje industrijskih proizvoda i usluga. Ovaj rad ima dvostruki cilj. Prvo, da dâ strategijsku ocenu situacije u ekonomiji Srbije. Drugo, da na bazi prethodnog, zajedno sa analizom gloobalnih trendova promena i nazirućih kontura novog modela rasta i povezanih ekonomskih politika, identifikuje zone potrebne intervencije i intencione politike. Ključna ideja je da se prezentira koncepcijski rad bez kalibriranja konkretnih politika.

Ključne reči: *Srbija, Industrija 4.0, cirkularna ekonomija, heterodoksni model, industrijske politike.*

Introduction

The last part of the former decade has signalized an opportunity for a restart of Serbia's economy, a chance to be optimistic and make decisions which are good for a sustainable and inclusive growth, but hard to swallow. The beginning of this decade has been unfolding in a complex context, and it has not even begun in earnest. It is clear that we are far from unlocking development potentials vis-à-vis toughest challenges related with structural imbalances from the past. For example, in politically fortified energy sector there is an inadequate level of substitution of production based on fossil fuel with renewable sources, despite global climate crisis and local ear pollution. The problem comes from the economic side, the low return of investment in renewable energy production.

Despite fiscal balance, Serbia's economic future is scary and uncertain due to structural imbalances from the past. But, it could be exiting under some conditions. In surrounding world powerful Industry 4.0 technologies are being massively infused. Today information and knowledge travel far faster than ever before. In the last two years more than 90 percent of the data was created empowering big data and cloud computing, 5G network is the reality in 13 countries, quantum computing is able to determine optimal carbon capture materials, artificial intelligence is able to address microbial resistance of corona virus to current antibiotics, etc. In majority of cases new technologies inspired by Industry 4.0 can serve the 17 Sustainable Development Goals (SDGs) adopted by the United Nations [17] as desirable and inevitable guide for future planet Earth development. By offering new technological opportunities, Industry 4.0 can drive sustainable and inclusive growth for all economies, developed and developing, core and peripheral. Only a fraction of this huge potential is being utilized at scale. The reason is an inadequate economic system. If transition to the new economy is not managed well, Industry 4.0 could exacerbate structural imbalances from the past.

Developed economies are already in transition. They are at the end of more than a five-decade long period of "shareholder capitalism" and a four-decade long period of "market fundamentalism" as extreme expressions of the neoliberal capitalism. Despite increasing scientific optimism, backed up by digital transformation in particular, an extreme form of economic liberalism along with deregulation and privatization redirected the model of growth and economic policy platform to an unsustainable path. The liberal model of capitalism was related with relatively egalitarian and balanced growth. The neoliberal model, of course, was not. Following more intellectually arrogant approach, the neoliberal model resulted in two major contingencies: growing wealth inequality and climate crisis. Shift from liberal growth pattern to neoliberal one caused a lot of headache, not only to political leaders and policy makers, but also to society, as a whole. It is not socially sustainable that half of all of the household wealth in the global economy be owned by just 1 percent of the rich. Youngsters like Greta Thunberg are defending the rights of future generations, particularly revolting against current economic (and political) elite because efforts to keep global warming are failing. Without radical changes in the economic system, the new technology development inspired by the last industrial revolution threatens to aggravate mentioned contingencies.

Market efficiency is one of the taken-for-granted propositions of the neoliberal model of capitalism wisdom. Competition is great where it works. Unfortunately, competition fails in emerging industries too often. The bubble burst and winner-takes-all-effects confirm that competition frequently is not meeting sustainability and inclusivity proposals in mature industries. Major fault lines of the neoliberal economic system like ignorance of negative external effects and intention policies are leading to political, social and cultural polarization.

Shareholder capitalism becomes increasingly disconnected from the real economy. Some companies benefited from shift toward the services. But, such structural change we can treat seriously. The reallocation of funds from productive investment to financial speculation is quite visible from the fact that in developed economies less than one-fifth of financial assets are being invested in the real economy. The previous is related with financialization of the economy, or concentration of the financial power. Namely, there is a disproportion between magnitude of the financial sector and its participation in value creation.

Moreover, financialization of the economic system ended with financialization of politics. Lobbying is a bypass between the economy and politics. Last but not least, in such a context, monetary policy measures are bias towards capital and energy-intensive businesses, ignoring the issue of negative external effects. The politics is in tax policy, too. Policy makers in the US continually reducing tax rate showing resistance against income and wealth concentration. By covering up negative external effects and inequality issue, politics actually galvanizes situation full of social and physical imbalances.

Financialization along with outsourcing and offshoring lead to rapid deindustrialization. Also, the workforce was pushed from the real economy to services. Another consequence of financialization is plutonomy. The root of plutonomy is financial speculation based on value release instead of value creation. Paradoxically as it is, high profitability of equity investment is not related with risk taking. Instead of carrying out, risk is being transferred to other players, including the Central Bank. Creditor's bailing out instead debtor's bailing out is typical example of such behavior of the central bank.

The Great Recession of 2008 was a logical consequence of the abovementioned fault lines. The period following the 2008 crisis was a decade of unconventional economic policies. Paradoxically, in-post-crises period almost nothing worked in line with conventional economic rules, in a predictable way and, more importantly, effectively. There were too many unknown unknowns and simulating activism of unconventional policies set including "too-big-to-fail", extremely low or negative interest rates, quantitative easing and their latest alternative, the central bank's balance sheet expansion. The global sluggish growth1 is a self-inflected development of such fault lines and inadequate remedies.

No doubt, after deindustrialization, export-driven growth is not a feasible alternative. Moreover, the shortage of industrial workforce is a real threat to any development trajectory. According to J. Lorre [6], 10 million global manufacturing jobs remain unfilled due to gaps in skills sets.

Indeed, the functionality of nonconventional economic policies is debatable. The main reasons for such skeptical view are continuous sovereign debt increase followed, almost regularly, by budget deficit, as well as low investment sentiment, mostly in the private sector. All these indicators are signaling that the growth is not on a sustainable trajectory. When the growth is almost flat, the geopolitics is situating itself on the market. Trade war, technology war, currency war and related issues are disturbing fundamentally the global trade and investments. In developing economies, along with internal structural imbalances, the external threats mostly impacted the future economic growth and slowing down structural reforms.

In this (dis)order economic goals are in conflict with ecological limits. Unregulated negative external effects lead to growing fractures of the system like pollution, resource depletion, and global warming. Global warming triggers the spiral of negative effects. For example, glacier meltdown triggers methane emission from previously frozen soil producing negative feedback loop to climate change. The shareholder capitalism is divorced from sustainable well-being and not inclusive toward the nature. Such system ignores not only economic (and social) costs of environmental degradation, but also the rules of functioning of physical system and biosphere. Without swift transformation of economic system, chances of keeping Paris Agreement "2° C warming limit" has diminished.

Existential ecological threats cannot be managed by the market mechanism. The Great Recession of 2008 and climate crisis exacerbation have reminded us that adherence to the current economic system represents a betrayal of future generations.

Facts matter, not opinion. In the new economy design we must stick to the facts, not follow ideological propositions, predilections and explanations which are not backed up in reality. The widening fracture between the neoliberal model of growth and related economic policy platform, from one side, and economic reality and human aspirations, from the other, require paradigm change toward intentional policies, from invisible hand of the market to visible hand of the state.

In economy full of fractures and fault lines the risk of new recession is more elevated. There are many

1 The IMF forecast for 2021 is 3.4 percent for global economy, along with 1.6 for advanced economies and 4.6 percent for emerging markets and developing economies

more signs of panic, for example growing sovereign debt, more tax cuts than infrastructure spending, low yield of defensive fix income bond, or continuation of extremely low (or negative) interest rates policy.

For previous reasons, shareholder capitalism, linear model of production, and related economic policy platform (recently corrected with some unconventional policies) could not be a blueprint for the new model of growth and related economic policy platform. In particular, the orthodox approach is not suitable for economies with delay in economic development like Serbia inspired by catching up of the developed world. Continuation is a prescription for regression. The conventional policy tools like Yield curve, Phillips curve and capacity utilization do not make sense in the time of digital transformation, particularly when the output gap and indebtedness are a legacy of the past fault lines. The question starts with "how" to implement new solutions, not with "if". In the era of universal connectivity and almost endless influx of combinatorial innovations, coordination is equally important as competition. Close relationships between the regulatory bodies, fiscal authority, government, private sector and state sector really matter.

Despite the constituencies of neoliberal capitalism where reaching there acme, climate crises at least signaling that their days are numbered. Climate crisis is a defining issue of the planet Earth surviving.

The alternative for the shareholder capitalism is not an authoritarian capitalism (state capitalism), but less conservative and most balanced model of capitalism, stakeholders capitalism, closely related with circular economy and heterodox economic policy platform. This fundamental ideas are able to annul consequences of the fault lines like ignorance of negative external effects. The global financial system is on the verge of fundamental reallocation of capital toward carbon-neutral technologies. We already discussed the proposals of the heterodox economic policy platform, for example in [1] and [2]. The new platform is based on the idea of reversibility (feed-back loop) as a universal principle, not only in physical system, but also in macroeconomics and microeconomics.

Industry 4.0 is opening a new chapter in the economic development. Technology is enabler. New technology roots are universal connectivity and cumulative effect of technological breakthroughs of the previous industrial revolutions in the way that build the fusion of the physical, digital and biological technologies into endless influx of combinatorial innovations. By capitalizing these structural changes, management tools like the Information Value Loop [13], actually transforming transactional data into actionable information. On the other side, connected technologies are co-evolving, driving research and development beyond new frontiers and bringing combinatorial innovations on the market place. In hyper competition the power of actionable information increases.

In addition to many ethical challenges, Industry 4.0 creates both promises and perils for the economic development. The cooperation between different fields will open new frontiers of business development. Key difference between the last wave of industrial revolution and the previous one is a growing integration of research fields due to a fusion of different technologies with a catalyst role of ICT.

Combinatorial innovations help to speed up some science fields by implementing solutions for emerging problems. For example, fusion of quantum computing and machine learning has become a booming research area, particularly important for promotion of disruptive, non-linear technological advances toward zero carbon emission world. We are on the track towards biological transformation of the manufacturing process. Integration of bioinspired principles in advanced manufacturing leads to the physical world converging with the digital world. Convergence revolution is around us. As a consequence, Industry 4.0 is full of humanoid machines.

Unfortunately, many of the new technologies being created have not been widely implemented to better control of negative external effects. The full benefit of Industry 4.0 requires a new type of the socio-economic system, along with related the growth model and economic policy platform. From socio-economic perspective, the stakeholder capitalism is a superior solution than shareholder capitalism form many reasons. Circular economy has reached sustainability proposal better than linear model of production. Heterodox policy platform better serve inclusivity proposal.

To illuminate the economy of the future, architects of the system should look beyond, not behind. Looking beyond means respect toward key drivers of change, or forces that are shaping tomorrow. They contribute to prosperity and they are able to annul problems from the past. In the new social-economic system, inclusiveness should go hand in hand with sustainability proposal. Of course, inclusiveness respects interest of both people and nature. The last stance is exactly what this paper tries to promote while respecting specifics of Serbia's economy. We start with overview of global drivers of growth. After taking the pulse of Serbia's economy, the next content will structure in the way which follows the previous line of reasoning.

Global drivers of growth

Two main forces strongly shaping the new context are: unconventional economic policies as the consequences of the Great Recession of 2008 and Industry 4.0.

The last recession and unconventional post-recession policy measures are replacing the global economy into a spiral of the lost decade. Negative evolution in global trade and investment is quite visible, from multilateralism to bilateralism and economic nationalism. With the exception of high-tech sector, global economy is functioning in an extremely low ROI environment. High-level political lobbying in international trade and investment is a manifestation of the growing power of particular interests almost exclusively connected to the financial sector, fossil fuels and capital intensive sectors. Protectionism in trade and investment almost exclusively impacts decoupling of global value chains. Despite recently signed agreement, trade war between the US and China weighs on global economy. It leads to the growing recession pressure. The threat that combination of unconventional core economic policies (monetary and fiscal) and protectionism will influence a significant contraction of global industrial output is real.

Without an adequate model of growth and economic policy platform, economic policy measures and strategies of business organizations are becoming increasingly reactive to single issues of brinkmanship. Such development has made future actions, both on a macro and micro level, less predictable. Despite the fact that 13 nations already imply solutions, the last example of unproductive rivalry is the escalation of the tech war between the US and China as the two large 5G network producing nations.

Natural catastrophes as a consequence of negative external effects were abnormally high in the last period. Most countries lost potential GDP due to global warming. The sea level rise is destroying hospitality industry potentials in some equatorial countries. Climate change is a key trigger of migration. Due to extreme weather conditions, in Asia Pacific many people flee from their homes. In Africa, people are moving for lack of water. Regarding the climate crisis, situation is extremely alarming and approaching apocalyptic consequences.

No doubt, economic goals are in conflict with ecological limits. The current linear model of production is divorced from sustainable well-being and inclusivity toward the people and nature. It ignores not only economic (and social) consequences of environmental degradation, but also natural constraints from the physical system and biosphere. As a consequence, current economic system is burdened with a twofold divorce, from well-being and ecology. Structural imbalances are maybe manageable by market mechanism. But, it is too late to manage existential ecological threats by market mechanisms. Facts matter, not opinion. The widening fracture between the neoliberal model of growth and related economic policy platform, from one side, and economic reality and urgent needs for sustainable solutions, from the other side, require paradigm change.

Now a key question is: which path we will take in future? It is not controversial one, the new paradigm will create an environment for creative management (macro and micro, both). The main legacy of the Great Recession of 2008 is a double paradigm change, paradigm change in macroeconomics (and macro management) and microeconomics (and micro management). The neoliberal exceptionalism about proficiency of the market (in particular, capital market) is finally over. It is no longer the question of whether and why to change the paradigm, but how to do that. Economists inspired by heterodox approach follow a different approach. Quality of growth, or sustainability without environmental degradation, is

a priority. Industry 4.0 is outpacing the capacity of the economic system to adapt to structural changes. As a consequence, proactivity in business development is rising. Interplay between double paradigm change, both micro and macro, and Industry 4.0 is making the rejuvenation cycle possible. But the window of opportunity won't stay open forever. Particularly keeping in mind that Industry 4.0 leads to a mixed opinion, by offering opportunities and perils simultaneously.

Combinatorial innovations as a hallmark of Industry 4.0 help to speed up some research and development efforts. For example, fusion of quantum computing and machine learning has become a booming technology area, particularly important for promotion of disruptive, non-linear technological breakthroughs toward zero carbon emission world. So, Industry 4.0 is related with disruptive technological advances. It is shifting job roles and skills sets by putting at risk great majority of current jobs. Also, under the impact of Industry 4.0, fundamental concepts of business organization and strategy as we know from M. Porter's framework are being challenged. It is also spurring collaboration instead competition, capitalizing network effects inside business platform as a new level-playing field. When different companies share resources within the same platform, a significant value can be created for all participants. As current business model and strategy are disrupted by combinatorial innovations, employment is being profoundly impacted followed simultaneously by job displacement and job creation. Workforce needs to be repurposed, across industries and with the vision of economic development to the skills sets required for the industries with fastest growing potentials. Last but not least, combinatorial innovations are outpacing regulatory framework. Without some adjustments in the growth model and economic policy platform, Industry 4.0 impact on development could be counterproductive.

The time of buying time and playing the game with unconventional policy measures is over. We are leaving in the time of systemic changes. Rational people love the world, truth and science, as well. They do not like to be manipulated with. They look for solutions. Before we define solutions for Serbia, let's make an update on the current economic situation.

Local inhibitors of growth: Taking the pulse of Serbia's economy

In 2019 the Serbia's economy was in relatively good place, primarily because the government reaffirmed its commitment to fiscal consolidation. The budget is balanced for the third consecutive year. By many indicators macroeconomic situation has been improved. Inflation is under control (below 2 percent target), employment is increasing (unemployment dropped to below the double-digit percent), and growth is in positive territory (4.0 percent). Recession risk is mainly contained and we do not see indication that economy has fallen off the cliff again. Moreover, one can note positivity of the government regarding delicate political issues amid major sources of uncertainty like economically motivated emigration.

By making debt sustainable along with improvement of credit rating (or lowering cost of capital), fiscal consolidation program lost austerity character. Moreover, without a significant inflation pressure, another benefit is that real interest rate is close to the neutral rate. To be honest, temporary factors have also contributed cost of capital to be on a historical minimum, and inflation to run soft.

Despite of previous, prospects of longer-term growth look pretty flat. A deeper analysis of the structure of the economy shows a shiny outside along with a more dangerous inside. Structural imbalances continuously challenging core economic policies and their achievements and, in some cases, making policy measures incompatible. The relationship between policy interest rate and open market operations of the National Bank of Serbia as principal tools of inflationary targeting, is a good example. When the central bank cuts policy rate, currency will be weaker. In Serbia's case, national currency is going to be stronger. This is the consequence of intensive open market operations of the central bank inspired by the aim to keep inflation under control.

In 2019 the growth was a little bit weaker in comparison with the previous year. In general, the growth remains sluggish. But, tonality is positive. So, in 2019 the government has started to use tax cut formula to spur economy toward sustainable growth. Not to be predetermined or prejudged by a pessimistic view, but fiscal policy easing in combination with FDIs expansion could push RSD toward

further appreciation, violating position of exporters and sustainability of macroeconomic balances, as well.

Vulnerability is relatively high even the economy logged in relatively high growt. Important source of vulnerability is the public sector. Data we have been getting are signalizing a painful year in the state-owned companies.

In terms of growth financing, total savings is not enough to fulfill supply of commercial banking funding. The National Bank of Serbia plays a smaller role than the proponents of the monetary theory think regarding the growth issue. When price control is primary focus, development goals are not related with monetary easing and staying behind the liquidity injection on capital market actions.

Unfortunately, macroeconomic indicators do not provide credible signs of the current economic momentum. More than macroeconomic indicators, vulnerability indicators measure economy exposure to the major risk stressors. Despite geopolitics (steel made in Kosovo issue), there are many other factors which are increasing Serbia's vulnerability (see Figure 1). Coronavirus-driven bear market in commodities (agriculture products, livestock, energy and metals) could be a new source of contingency.

Despite temporary factors, permanent factors of complacency are the output gap, composition of the output, and employment structure.

Output gap is not temporary blip on radar screen. Three decades Serbia has faced transitional output gap, which continuously challenges the fiscal balance and prospects for growth. In 3Q 2019 the transitional output gap stayed at the 19 percent level. Impotent J-curve for Serbia does not coincide with the tendency in Central and Eastern Europe (CEE) post-transition economies. Figure 2 really matters.

The structure of the output should also be on the radar. The share of industrial production to the output formation is inadequate. Also, this tendency is in contradiction with the 1960-1990 period when the economy expressed respectable level of industrialization. In this period, the industrial production grew at an average compound rate of 8 percent. Deindustrialization has followed the period after 1990. It coincided with the start of systemic transition and geopolitical crisis.

Figure 1: Vulnerability indicators, 3Q 2019

Operational vulnerability indicators

Indicators	Value	Reference value
Transitional output gap	19%	0%
Okun index (inflation + unemployment)	10.6%	<12%
Gini coefficient	35,6%*	<30%
Current account as % GDP	-5.5%	<5%
Consolidated fiscal result as % GDP	1.2%	>-3%
Dependency ratio	0.52	>1
Youth unemployment	26%	<20%

Financial vulnerability indicators

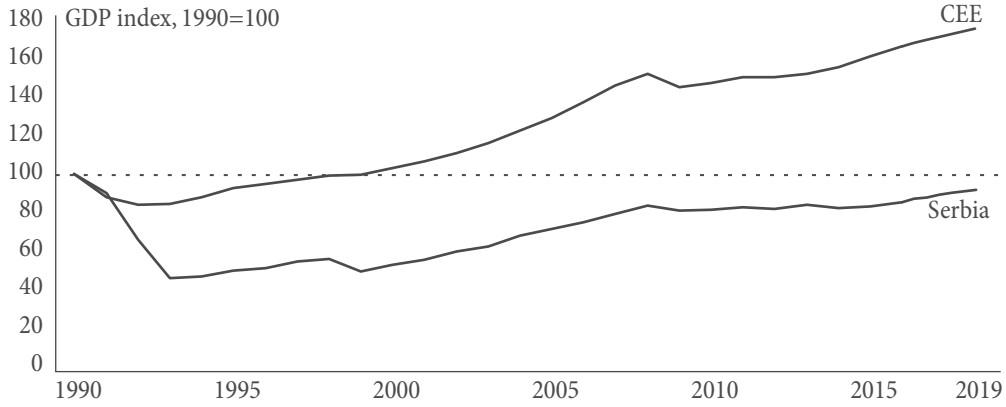
Indicators	Value	Reference value
Indebtedness		
• Public debt/GDP	52%	<45%
• External debt/GDP	63.8%	<45%
• External debt/Export	124.4%	<220%
Credit rating		
• S&P	BB+/positive	rank > BB+
• Fitch	BB+/stable	rank > BB+
Fiscal capacity		
• Tex revenue as % GDP	37%	34%
• Shadow economy as % GDP	34%	31%

Competitiveness vulnerability indicators

Indicators	Value	Reference value
Export (goods)/GDP	35.2%	>50%
Currency change (Nov2019/Nov2018)		
• Nominal appreciation	0.7%	<5%
• Real appreciation	1.2%	<0%
Global Competitiveness Index	72 of 141	65 -SEE average
Corruption Perception Index	91 of 180	59 -SEE average
Ease of Doing Business	44 of 190	60 -SEE average
Economic Freedom Index	69 of 180	62 -SEE average

Source: National Bank of Serbia
*Gini coefficient of equalized disposable income (EU-EILC survey 2018)

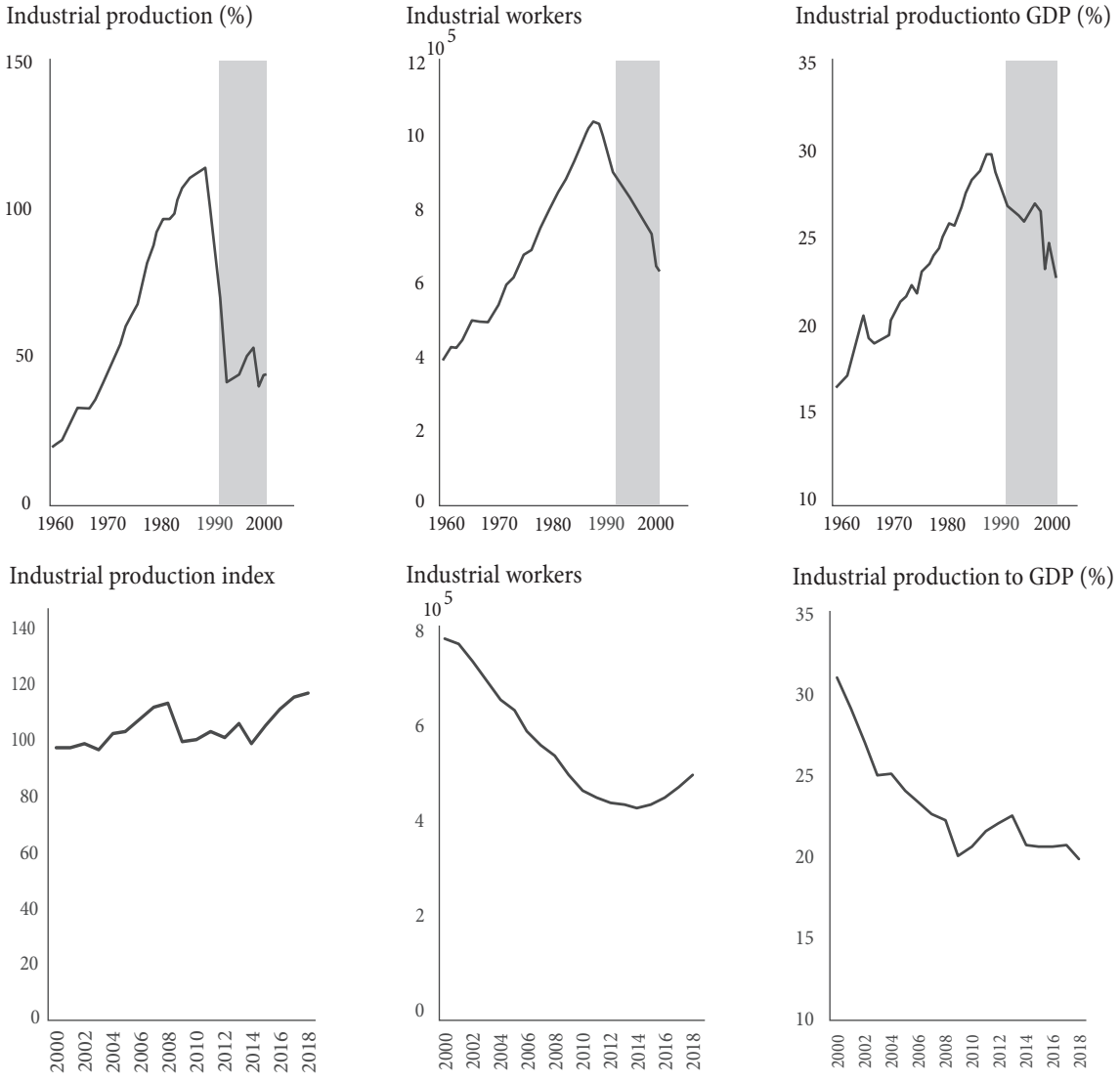
Figure 2: Transitional output gap, Serbia vs. CEE economies: period 1990 - 3Q 2019



Source: Authors' own editing based on EUROSTAT and Statistical Office of the Republic of Serbia.

In the economy the law of gravitation is functioning, altitude of the output powered by industrial production is easier to be lost than to be recovered again. Figure 3 portrays, with some explanatory details, the industrial production in three sub-periods (1990-2000, 2000-2011 and 2010-2018) regarding dynamism of industrial

Figure 3: Industrial production: period 1960-2018



Source: Upper part from [12], and lower part based on authors' own editing of relevant data from Statistical Office of the Republic of Serbia.

production, number of industrial workers and share of industrial production in GDP.

Without the workforce, a realistic assessment of growth potential is not possible. In GDP per capita, "per capita" is equally important as GDP. Unfortunately, population activism is a disadvantage. The fertility rate is below the CEE economies average. Also, in the longer-term period technocrats and well-educated youngsters left the country. Moreover, population is ageing. In 2019, an average Serb is almost 44 years old, standing in the group of the oldest nations in the world. So, Serbia has the problem to generate sufficient workforce to increase the level of output. If this tendency continues, the deficit of human resource, particularly human capital, will be a major development barrier.

In the last period Serbia has demonstrated significant improvement regarding employment indicators, as it can be seen based on unemployment rate from Figure 4 below. Despite the progress in employment level, the workforce still exists as a vulnerability factor.

Government subsidies for FDIs led to employment increase, especially in labor-intensive sectors. However, the share of informal and vulnerable employment remains high, 19.5 percent and 28 percent respectively [14]. A significant cause of such high level of informal and vulnerable employment lies in a relatively high fiscal burden on salaries that does not correspond to the Serbian industry's capacity, presence of unpaid overtime, as well as abuse of part-time employment forms and great number of unemployed people with no formal or elementary education. There were some measures to address informal employment, but it still remains high. Salaries in the Serbian formal sector have been stagnant in the past several years due to austerity measures. In 2017 and 2018, Serbian population aged 15-64 has been reduced by 55,200 and 59,900 respectively, which represents almost 2.5 percent of this population category [15] due to emigration. Decrease of marginal tax rate and introduction of the program for skills set improvement could result in a greater pool of available workforce needed for Serbia's future industrial development.

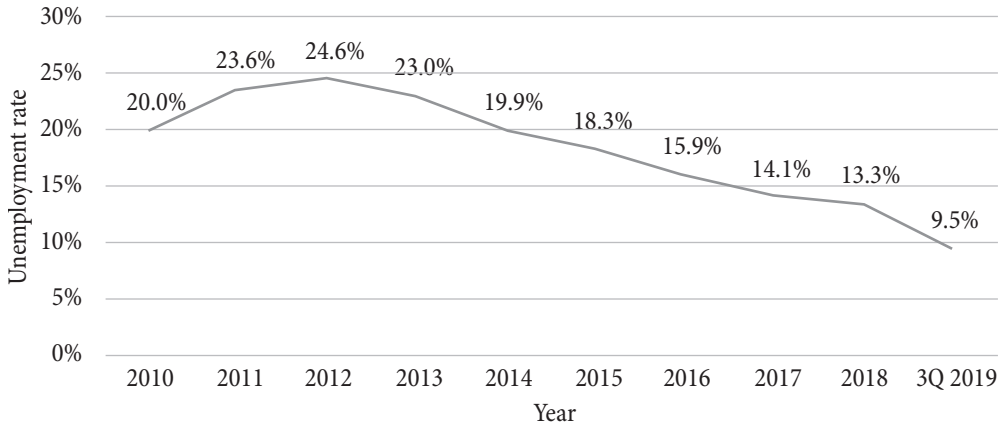
Serbian employment parameters are improving. However, emigration, lower birth rates, labor force structure and quality still remain challenges to be addressed. Moreover, these challenges are crucial for future dynamic industrial growth.

In the last period Serbia has performed well in terms of attracting FDIs, as it can be seen from Figure 5.

However, there is still work to be done on shifting the structure of these investments towards the ones with a higher level of added value and also on stimulating the volume of domestic investments, since they are at the level lower than CEE average.

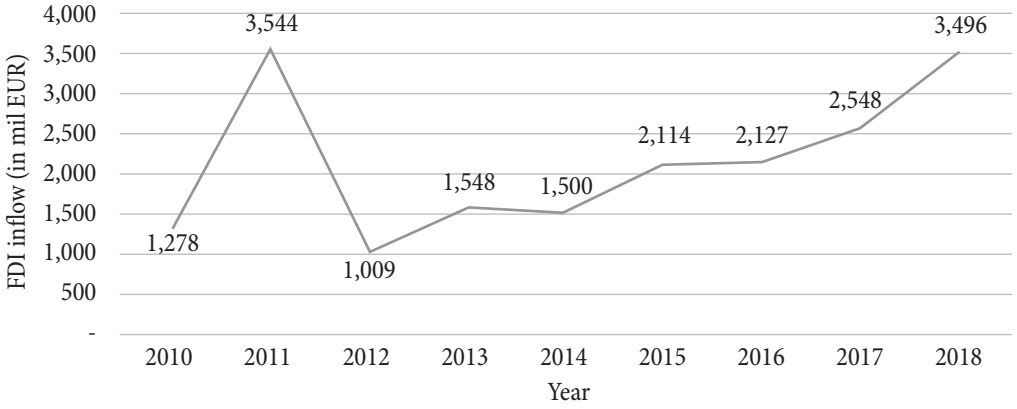
There is a need to shift incentives in such a way to promote investments in industries with a higher level of added value. Moreover, it is important to provide measures aimed at including domestic companies in value chains of multinational companies that invest in Serbia and ensuring better technology and know-how transfer.

Figure 4: Unemployment rate dynamics: period 2010-2018



Source: [14].

Figure 5: FDI inflow in million EUR: period 2010-2018



Source: [10].

Number of PPP arrangements has also increased, as well as the value of such projects, as it can be seen based on Figure 6.

Serbian exports followed similar trends as investment trends. According to Statistical Office of the Republic of Serbia [15] exports value has been growing at CAGR of 10.3 percent during the 2010-2018 period, but without significant shift in their structure towards the goods and services of greater level of added value.

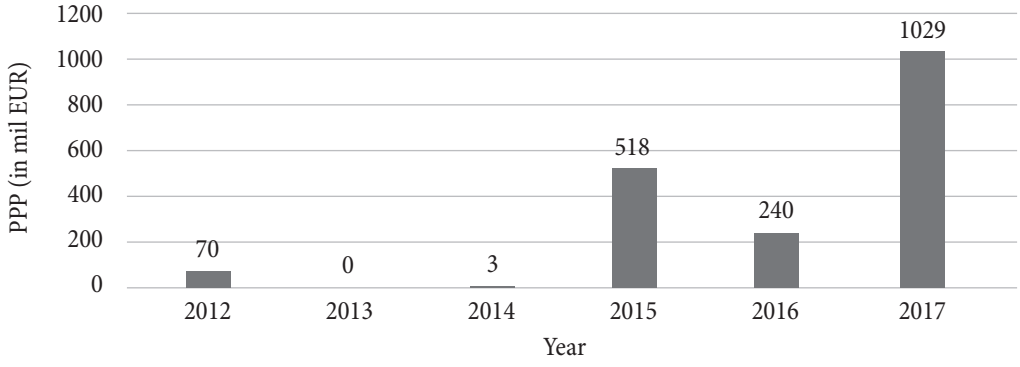
According to the National Bank of Serbia, 67 percent of total Serbian exports are directed towards the EU [10]. Exports have tripled in the last decade, from 3.2 billion euros to 10.9 billion euros in 2019. Furthermore, the import-export coverage ratio from Serbia into the EU has increased, from below 50 percent in 2009 to 82 percent in 2018. FDIs from EU in the period from 2010 to 2019 amounted to 13 billion euros, which is around 70 percent of total FDIs in Serbia.

The new factor of complacency is the implicit (or postponed) debt build-up as a consequence of development strategy based on infrastructure development and FDIs as primary channels of investment base expansion. The shrinking monetary and fiscal policy base is an evident consequence of such strategy.

In terms of growth, total savings is not enough to fulfill investment for sustainable development via commercial banking. The National Bank of Serbia plays a smaller role than the proponents of monetary theory think. Development goals were not behind open market transactions, monetary easing and the balance sheet expansion staying behind liquidity injection on capital market. Price control is the primary focus of the central bank.

Anyway, the mix of vulnerability factors does not look challenging. Vulnerability indicators dampen economic outlook. After fiscal consolidation it is time to deploy the countercyclical buffer. To do that, Serbia needs a new growth model and economic policy platform.

Figure 6: PPP in million EUR: period: 2012-2017



Source: [20].

New growth model and policy agenda

On the global level the Great Recession of 2008 has raised the issue of unsustainable growth based on shareholder capitalism, linear growth model, and maintenance of macroeconomic stability almost exclusively based on inflation targeting. Inherited bubbles in economic structure, particularly growing income concentration and pollutant gas bubble, as well as growing sovereign debt confirm that, following this approach, it is impossible to reach sustainability and inclusivity proposals. The moment of truth is related to the question: What kind of economic system do we want capable to do with structural imbalances from the past in order to deliver a smooth transition to carbon-neutral economy?

As the context relevant for economic activities transforms quickly, the assurance of the new economic paradigm has never been more essential. The new paradigm provides the answers that matter for tomorrow. The key question is how to balance the complexity of emerging business ecosystem with expectations of people?

From a macro perspective, stability comes first. Also, the growth, sustainable and inclusive, has stayed the very essence of macroeconomics. From a micro perspective, digital transformation is in focus because in Industry 4.0 business ecosystem is digitalizing. Companies are in the intersection between the virtual and the physical world. So, the main consequences for the micro paradigm change are virtualization and sharing.

In terms of growth, every country should do a lot by itself. There is no automatic pilot. In conceptualization stage, a double paradigm change and related principles should be followed. In the new setting, a business organization should be structured around the questions as to why it exists and what it aspires to become, shortly its purpose. Drawing upon acceleration of transformation based not on individual interests, but on the entire society, is a viable purpose. At this juncture, combinatorial innovations should be put to work in a responsible way. For this reason, the implementation of the following concepts will be transformational. In the light of this attention, the four things architects of the new economy need to know are as follows:

1. Stakeholder capitalism
2. Circular economy model of growth
3. Heterodox economic policy platform
4. Automatic stabilizers

1. Stakeholder capitalism. In recent times, the conversation about the model of capitalism has intensified. A long held prevailing wisdom about capitalism came from Nobel laureate M. Friedman [5]. His notion that a company's purpose is "just making the value for its shareholders" has had many beneficiaries. After the Great Recession of 2008 this concept is becoming discredited due to unexpected and unintended consequences of the shareholder capitalism like income concentration and irreversible warming of the planet Earth. And, most importantly, due to lack of access for great many economic agents to universal mobility and related technological breakthroughs as ultimate free goods in Industry 4.0. As global economy moves closer to Industry 4.0, the conversation around model of capitalism has accelerated.

The request to balance shareholder's value and company's purpose is being real. New stakeholder is "client Earth". It is not an abstract exercise. The long-term shareholder ROI can increase, as economy is better served. Stakeholder capitalism is gaining momentum of climate crisis by positioning private companies as trustees of society. Stakeholders like investors, regulators, and other are challenging companies to demonstrate systemic and integrated approach in addressing climate related risk. This model annuls short-termism as a result of capital market pressure on short-term valuation. Essence of a purposeful company is to produce solutions for people and planet Earth by doing not philanthropically but inspired by value creation. Namely, company's purpose should be producing solutions for people and planet Earth conservation instead of producing the value for owners by producing the negative external effects for people and planet Earth. Instead of short-termism related with shareholder capitalism, stakeholder capitalism helps to propel economy forward, while acting in a more socially responsible way, particularly in the field of environmental conservation.

The new performance measurement system is giving a concrete meaning to the stakeholder capitalism. In

addition to standard financial metrics, company should also establish new frameworks for measuring company value by measuring their progress towards ESG (environment-society-governance) goals. Thanks to many factors, ESG scorecard, with particular emphasis on "E" metrics, has become increasingly important to investors, financiers and clients. These stakeholders used ESG as a filter (or screening factor) to limit investment in a project with damaging impact on environment.

2. Circular economy model of growth. Linear model of growth is unsustainable because economy can't grow continually within a materially finite context and with the ignorance of negative external effects like pollution. Following the reasoning of J. Forester [4], the planet Earth is system dynamics with three sub-systems: physical system, biosphere and socio-economic system. Structural imbalances and existential threat of anthropogenic climate crisis can't be managed by market mechanism. The economic system can only function in a sustainable and inclusive way if it follows the reversibility principle or circular processes by using analogy from the physical system (energy and matter could not be lost). The main effect of the reversibility principle implementation, both macro and micro, is resource and energy circulated economy. It promotes through intentional industrial policies 3R principle: reduce, reuse, and recycle.

Landmark witch signalizing transition of global economy to circular economy is Paris Agreement ratified by 184 nations [18]. Prevailing idea of this document is to keep global temperature rise bellow 2°C above pre industrial level, along with the limit increase to 1.50C.

Climate crises is a complex and inherently systemic issue. Crafting negative external effect of previous industrialization requires more systemic thinking and integrated approach. Two main categories of climate risk are: transition risk (the risks that rise from policy shift) and physical risk (risks that arise from physical impacts of global warming like extreme weather events). Climate crises is the top macroeconomic risk. At company level, not just in energy sector, it is a source of major financial risk.

The impact of climate crises depends on important external drivers such as emergence of renewable energy technologies and carbon-neutral and mainly disruptive technologies. However these risks are difficult to manage, because they extend beyond consideration of business cycle.

3. Heterodox economic policy platform. Promoting circular economy new deal we actually follow the imperative of Industry 4.0 "to do more, better and faster with less resources and energy and more knowledge". In new circumstances, the traditional policy mechanism has become less reliable, in particular, core elements of monetary, fiscal and competition policy. Core policy tools that are traditionally used to smooth over negative shocks or create positive economic momentum have lost much firepower as interest rates in major currency areas remain close to zero and fiscal policy goes to austerity area. The new economic dynamism inspired by Industry 4.0 has also left competition authorities with an outdated set of measures.

No doubt, the solution for structural recession and anthropogenic climate crisis did not come from core economic policies, but from the other side of the equation, structural (or intentional) policies side. Hard macro policy regime is only a part of the solution. It is not a full solution. Industrial policies are an explanatory element of the so-called "heterodox approach". In this concept automatic stabilizers enable the strengthening of policy toolkits as well as help in harmonization of industrial policies with core policies (monetary and fiscal). In heterodox approach government's intention change behavior of economic agents, including climate related risks when material. The links between climate-related risks and behavior of companies (or strategy) is inextricable.

So, heterodox policy platform is functioning through two parallel processes: verticalization of science, research and development and education along with horizontalization of technological breakthroughs. As a consequence, the new model is based on two institutional choices: "visible hand" of the state (industrial policies, state sector and regulation encouraging the concept of stakeholder capitalism), and "invisible hand" of the market encouraging quick and massive diffusion of innovative solutions throughout the marketplace.

In heterodox approach we must think about core policies in a structural way. Climate crises will have in

inevitable impacts on carbon-neutral investments not only as a factor of mitigation of climate risks, but also as a new investment opportunity. Climate related risk adaption (and mitigation) are also predicted to generate new investment opportunities of $26 trillion up to 2030 [11].

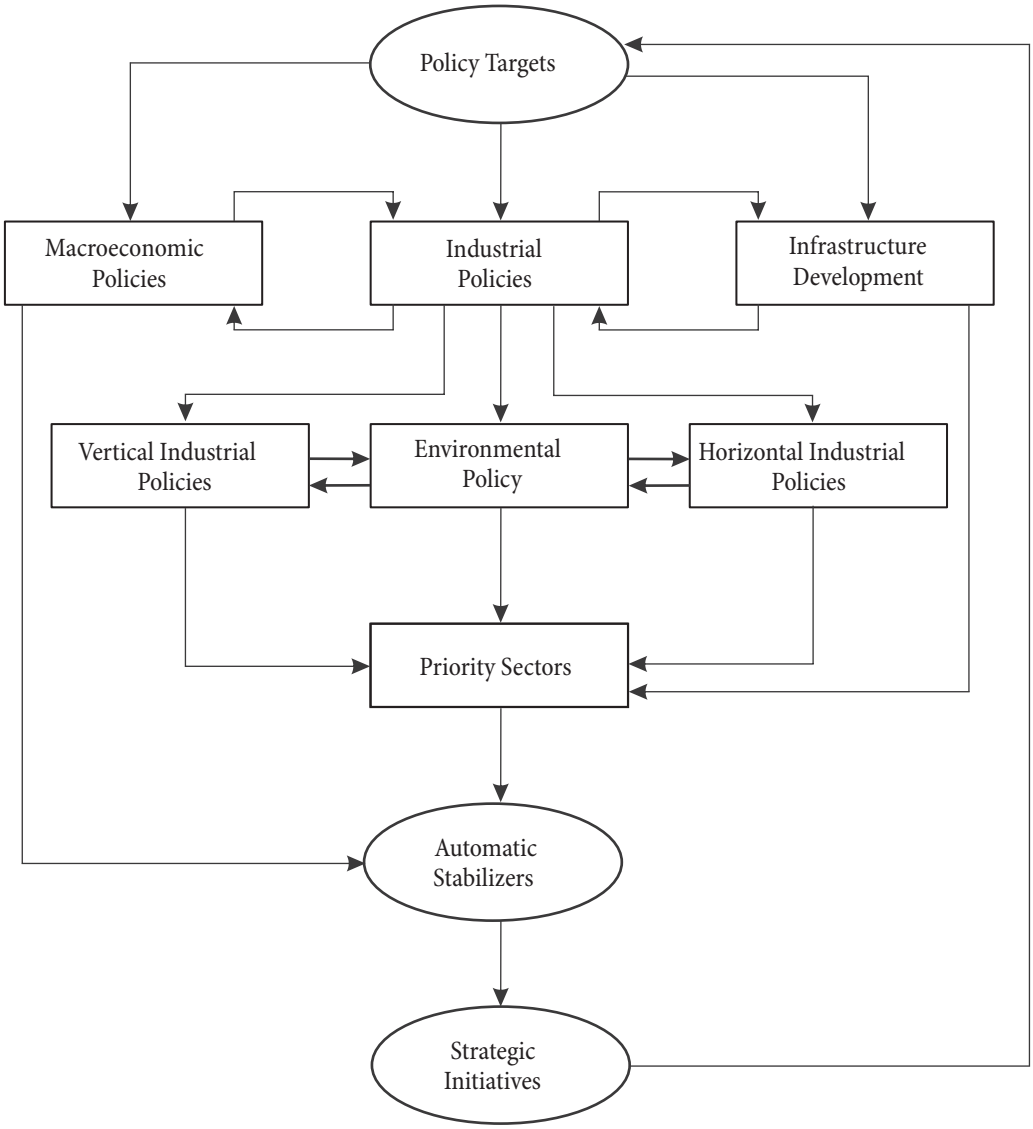
There are three types of industrial policies: horizontal, vertical and environmental. Horizontal (or industry neutral) policies tackle education, research and development, competition policy, etc. Vertical policies are dedicated to tradable sectors (export expansion and/or import substitution). Thanks to automatic stabilizers, all policies function based on the reversibility (or feedback loop) principle (see Figure 7).

4. Automatic stabilizers. It is not possible to implement intention policies without automatic stabilizers in core policy areas. It is an example of applicability of reversibility principle in macro management. Along with the fiscal automatic stabilizers, there is significant progress in other automatic stabilizers from core policy areas, monetary in particular.

The fiscal automatic stabilizer is a very old idea, actually very Keynesian idea, of countercyclical measure defined as the intertemporal reallocation of fiscal burden with the aim to reduce the negative economic consequences in bad times by using surpluses from the good times. In low-income developing economies with output gap like Serbia, the budget balance is a prerequisite for implementation of these instruments.

Tax exemption for research and innovation costs from taxable earnings or exemption of profit tax in

Figure 7: Heterodox policy platform



the tradable sectors plays the role of a fiscal automatic stabilizers supporting development priorities. Subsidies for FDI in carbon-neutral production also make sense. Or, a neutral interest rate and stable and competitive FX rate play the role of monetary automatic stabilizers. Furthermore, regulatory costs inspired by environmental conservation should impact the auditing standards in financial industry and cost calculation in cost and tax accounting in real economy.

Coordination is particularly important in process of setting automatic economic stabilizers. On one hand, low policy rates lead to potentially excessive risk taking in financial sector. On the other hand, if automatic fiscal stabilizers are too tight, they could affect aggregate demand and its structure in wrong way.

In the age of combinatorial innovations, it is not possible to innovate in isolation. Coordination is needed more than ever before. For example, lifelong learning needs coordination input through horizontal industrial policy. The new dimension of competition is competing in the speed of learning. Learning is not only part of the job (or learning by doing), as the job is also to unlearn and relearn (or learning by learning). It is the same at both the individual and organizational level. Access to knowledge of new technologies and roll-outs requires a more inclusive manufacturing environment. Broader ecosystem includes research labs, university, special purpose financial institutions, other companies, etc.

The previous four concepts work in synergy. Combining the previous concepts in one approach we get the purpose of a business organization as developing, designing, producing and selling product/services in the most environmentally sustainable way possible, and by building value chain and business platform around reversibility principle of repairing, reusing and recycling. The "as-is business" is no longer adequate for challenges related with Industry 4.0. Only purposeful "to-be business" is capable to deliver solutions for climate crisis, improving well-being and achieving sustainable and inclusive growth.

While there is a range of challenges on the horizon, at the dawn of the new decade there are also promising pathways to the circular and greener economy. In following part we briefly present snapshots of the present moment in Serbia based on the views of economists supporting the heterodox approach. How the future unfolds depends on window of opportunity today to mobilize people and technology to move toward more sustainable and inclusive outcomes. Again, there is no automatic pilot.

New industrialization as a vision for growth

In Serbia a balanced-budget is enabling some fiscal space and should be leveraged more to support investments. In 2019 government is moving in this direction through intensification of fiscal stimulus, including tax cuts and increased share of local government spending. But it is not enough for staying on a long-term growth trajectory and keeping further transition from consumption-driven to investment-driven economy. The level of fiscal space available for state investment will also depend on government's ability to collect taxes. In the fiscal sphere, in Industry 4.0 there is a paradoxical state of affairs. From one side, the digital transformation is making tax collection harder because non-material assets are becoming more important. From the other side, tax collection could become easier as more transactions become traceable.

The new balance between monetary and fiscal policy will have to be found to compensate for depletion of traditional monetary policy tools. Also, additional fiscal flexibility will be needed in order to restart growth and to facilitate the transition to the new economy on a number of fronts. While fiscal space exists, it is to some extent conditional on the accommodative monetary policy going forward. In case of Serbia, the fiscal space could be shrinking as demand for government debt has been waning.

In monetary sphere, cutting interest rates to bust the growth is an old stereotype. Also, if the central bank is committed to a strong local currency policy, exporters are penalized, importers are subsidized. From development perspective, in circumstances of climate crisis, emergence of the new asset classes like "green bonds" is critical. Last but not least, ESG standards and metrics are proliferated. Better quantification of associated financial risks of climate change has led central banks to stress-test banks and

brought investors on board in insisting on environmental performance and on climate risk.

In facilitating the green transition, competition policy has an important role to play. The transition will necessary involve greater constraints on consumption, and resulting costs to both consumers and producers on the goods in question must not be swept aside but need to be acknowledged and addressed. While the transition to a greener economy is full of opportunities, complementary policy action will matter enormously for benefits to be widely felt and losses to be mitigated.

In new circumstances primary obligation of the government inspired by heterodox approach is define adequate infrastructure for tradable sectors in terms of protocols in education, research and development and competition policy in order to access the world class technology. The core idea is promote technological entrepreneurship from the inside of the socio-economic system.

Regarding imperative of climate crisis resolution, leading trends and specifics of the local economy, the new vision of economic development for Serbia should be based on circular economy new deal. This vision could be specified in the following way: "based on new industrialization respecting circular processes in energy, industrial production, agriculture and transport, develop open, regionally and globally competitive, investment-driven, high-skilled, and digitally transformed economy that contributes to sustainable economic growth and inclusivity both toward the people and nature". This model of growth is able to produce sustainable economic growth and well-being. Investments in such growth are pro-people and not against nature.

In Serbia, circular economy as a concept is not understood and promoted enough. This is reflected in the fact that environment preservation expenses account only for 0.3 percent of GDP. There is an evident need to follow the principles of this concept having in mind that strategic goal of Serbia is becoming an EU member.

Today energy, industrial and agricultural production is dominantly based on linear, mainly outdated, technologies with significant negative external effects. These technologies create more waste per produced unit. If we add the fact that only 5-7 percent of total waste is being recycled [9, p. 21], situation regarding conservation of nature does not look promising. Overall, according to World Bank [23], [24], production of a unit of GDP in Serbia requires more energy (0.37kg of oil equivalent per 1$ of GDP PPP) and creates more CO_2 emission (0.38kg per 1$ of GDP PPP) compared to most of the countries in the region, as well as EU average (0.09 kg of oil equivalent and 0.17kg of CO_2 per 1$ of GDP PPP). In addition, the share of industrial producers in final energy consumption is also greater than in surrounding countries.

When it comes to the use of renewable energy in industry, situation is not that much better, since only 21 percent of total energy was produced from sources of renewable energy [9, p. 21]. The main reason for this is the fact that the use of renewables requires additional investment, which makes it more expensive than traditional energy that is also very cheap in Serbia.

Serbian businesses are not very aware of the importance of preserving the environment, especially regarding waste management, since very few industry players use waste as an input in their production process. According to [9, p. 21], Serbia is lagging significantly in waste management and its recycling. The main reasons for this lie in the absence of the necessary infrastructure for waste management (systems for collecting, sorting, storing and processing waste), as well as that for treatment of polluted water. There are currently 3,500 wild landfills in Serbia, while there are only 8 regional sanitary landfills [9, p. 14]. It is therefore necessary to develop the basic infrastructure as soon as possible and to provide incentives for individual industry players in order to make waste management profitable for them.

Such situation is the consequence of the lack of intention policies. The first step in providing such incentives would be the alignment of domestic legislation with the EU legislation in this area. Preservation of natural resources, improvement of energy efficiency particularly in electrical grids and industrial processes and full adoption of circular economy principles require regulation that is in line with the one in the EU.

To implement this vision, architects of the system should follow the EU orientation [3] having in mind the strategic orientation of Serbia towards accession to the

EU. The portfolio of industrial policies includes priority sectors like processing, utility, mining, and construction materials and excludes the services and the construction. In new industrialization we will use this strategic framework as a blueprint (see Figure 8).

The ultimate goal of the new industrialization is to raise competitiveness of Serbian real economy, particularly manufacturing. Specifically, a competitive Serbian industry (along with agriculture and logistics) significantly contributes to a sustainable economic growth, measured not only by GDP, but also by performance measures of well-being like ESG metrics.

The new growth model and economic policy platform will address key strategic areas identified in the EU framework. The expected outcomes are accelerated growth of industrial production with greater share of combinatorial innovation in its formation, sustainable growth of industrial employment along with improvement of its quality, increase and improvement of structure of industrial investment, and increase of industrial exports based on high-value added products/services. Intention areas foster vicious circle of adoption where better policies create imperatives for others to adopt. Intention areas are also related with major strategic challenges already identified as sources of vulnerability.

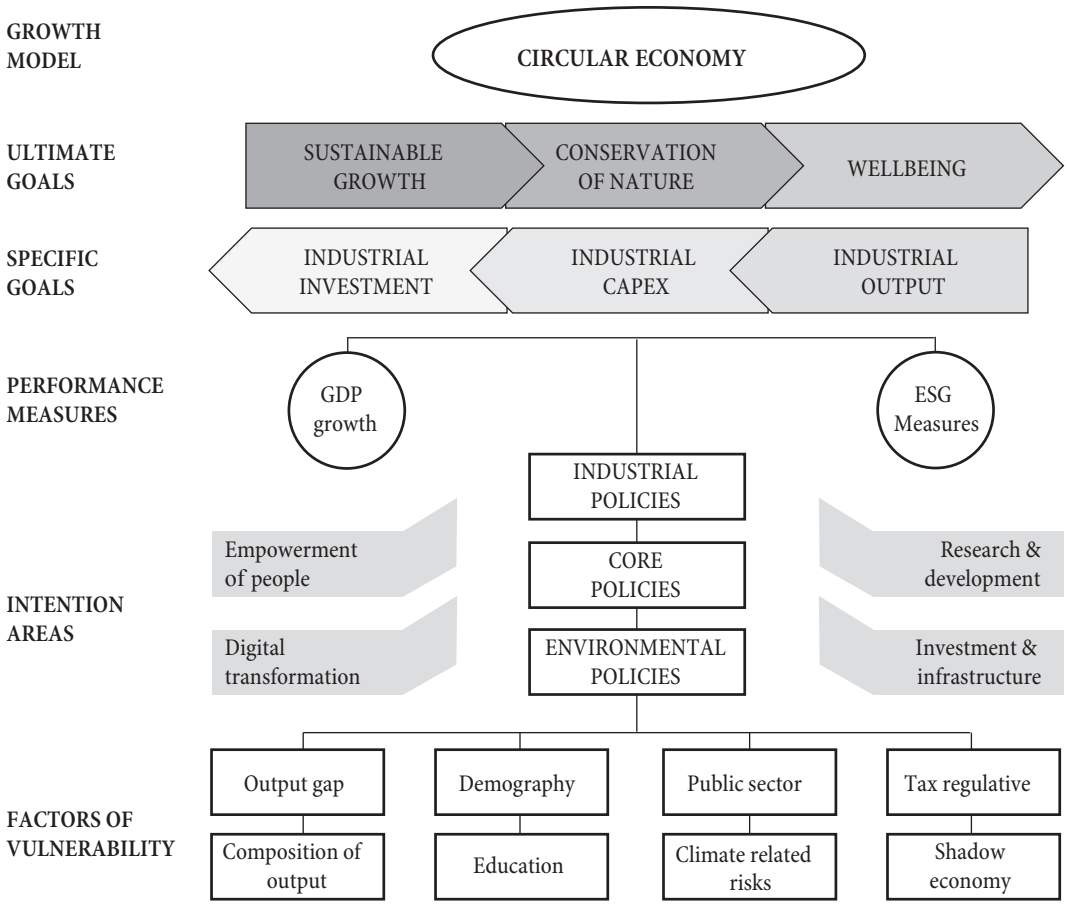
Main intervention areas (or areas of intention) are as follows:

1. Empowering people
2. Digital transformation
3. Research and development
4. Investment and infrastructure

1. Empowering people. Two main areas of improvement are education and corporate governance.

Apart from the size of the pool of available workforce, the new industrialization will also depend on improvement of its skills set. This is especially important since investors are already having troubles finding employees, particularly workforce with high skills set. In Industry 4.0 education could be the greatest gift and a key ingredient for career development. If skills set is

Figure 8: New industrialization in Serbia



power, the government through education policy should power it up.

Increasing access rate in regular education as well as in training and refreshment of knowledge to keep the relevance of skills set remains a key question when workforce is being reduced each year due to lower birth rates and growing emigration. Digital skills improvement should be in focus.

If top line is digital skills set improvement, the bottom line is formal education. The previous is related with increasing funds, since Serbia spends only 3.8 percent of GDP on education, which is less compared to the EU, as well as compared to the CEE countries [16]. Moreover, it is also important to improve the component costs structure, since currently more than 80 percent of education costs represent salaries of employees in the sector [22].

It is also important to make secondary education mandatory. The quality of secondary education varies a lot and quotas are mostly determined by schools themselves with no consideration of demand from the labor market. Introduction of digital skills in secondary education program would also result in greater ability to enter the job market, due to the fact that such skills are not being developed at the moment (although this is expected to change due to the introduction of dual education).

Access to tertiary education is good enough. However, its structure is inadequate in terms of current market demand and quotas [19, p. 32]. One way to ensure greater weight of STEM competence would be to improve the cooperation between university and industry sector. This would include measures such as involvement of industry in curriculum design, greater share of classes held by industry experts, field classes, introduction of trainee program for students by companies, introduction of more practically oriented master and PhD programs, etc.

Lifelong education has the capacity to close the gap between skills acquired through secondary and tertiary education and those demanded on the labor market. Also, this would lead to faster transition from school to work, which is very slow at the moment, since it takes 11.7 months for youngsters with tertiary education and 24.3 months for youngsters with secondary education to find a job [7, p. 2]. Also, informal education through knowledge transfer methods would lead to greater development and adoption of soft skills and algorithm thinking that were recognized as increasingly important in Industry 4.0.

In upcoming times, the segment of the workforce that is expected to perform the best is the segment of telemigrants. This segment includes individual experts as well as micro businesses and SMEs that are based in Serbia but do majority of their work for their clients abroad. In this segment policies aimed at increasing the flexibility of work arrangements could be beneficial for industrial growth. For this segment, there are three pillars that constitute a modern education system. First, academic excellence. Second, a well-organized recruitment and talent management. Third, free financing and fund-raising for regular and permanent education. People need to develop themselves for themselves. So, learning by learning is combined with learning by doing.

Constraints related to human resources development also represent a significant barrier for greater efficiency and effectiveness of research and innovation. In order to ensure its sustainable and significant contribution to the industry, it is important to provide not only greater financial support for young scientists, but also develop world class skills in technological entrepreneurship.

The government must encourage the workforce for technological entrepreneurship and technology related jobs through some initiatives. The fundamental shift that must be made in this direction is lifelong learning. Previous generations, when they were growing up, made a linear progression in skills set from learning at schools and academia to working in industry. Today lifelong learning is reality, which means that the workforce has to be a lifelong learner. It is a big switch in the learning curve that people have to learn to learn, learn to unlearn, and learn to relearn.

Material climate related risks are correlated with focus and ambitions of corporate governance bodies. Corporate governance is fundamental building block of effective risk management. Until now smooth transition towards carbon-neutral economy remains voluntary obligation of corporate governance bodies. Corporate directors must act with care, skill and diligence, so, corporate governance bodies, should be accountable for decisions which respect

climate risk acceptance and mitigation. To boost green finance regulators require disclosure from corporate directors of material climate-related financial risks.

Boards should be composed, particular of non-executive, independent board members who have awareness and understanding how climate-related risks affect the business. Also, climate-related targets should be key for compensations scheme for board members.

2. Digital transformation. In the digital age, demand for ICT solutions is lagging behind supply. To address this gap, it is important to provide various incentives for traditional industry players with the aim to incentivize them to improve their connectivity with digital infrastructure. In addition to this, it is important to define a spectrum of allocation parameters (spectrum width, price etc.) to ensure easier access for lead-edge ICT infrastructure like 5G network, public cloud, etc.

Serbian ICT sector is the largest exporter. However, most of this export is based on outsourced services from global leaders. One of the main problems for ICT sector is the low domestic demand, due to relatively low level of digitalization. Therefore, incentives aimed at stimulating development of solutions to be adopted in domestic industry should be provided. Another type of incentives should be aimed at attracting leading global ICT companies to come in Serbia.

Technology transfer is one of the areas which Serbian industry has most to work on. Traditional industry is not well connected with ICT sector and does not adopt its solutions significantly. According to [8, p. 43], Serbian companies invest five times less in ICT solutions compared to world average. When it comes to adoption of standard modern business solutions, less than 10 percent of Serbian companies apply cloud services, 18.1 percent use ERP software and only 12.8 percent of companies use CRM solutions. Therefore, it is not surprising to notice that automation level in traditional industry is at a lower level. In order to ensure greater adoption of modern solutions in traditional industry, it is important to ensure its greater connection and integration with ICT sector (e.g., through formation of clusters and digital platforms), to provide fiscal stimulus for those companies that invest in ICT solutions, to promote and provide incentives for creation of excellence centers, corporate accelerators, to ensure effective implementation of measures outlined in new artificial intelligence strategy, to promote additive production, robotics, digital modelling and smart manufacturing, to provide incentives for creation of spin-off companies. One measure that the government introduced last year and is expected to have a solid impact is the introduction of tax incentives for investment in research and development and start-ups.

In financial infrastructure segment there is still room to work on introduction of alternative financial instruments and providing finance in the early stage of company's development, mostly when it comes to institutional measures since regulatory measures are expected to be introduced soon. The greatest problem of Serbian start-up ecosystem is reflected in scaling-up or access to finance in the early stage of development. In order to solve this, government should work on introduction of alternative financial instruments (e.g., peer-to-peer lending), introduction of a state-owned investment fund that would allocate money on a matching principle, increasing the capacity of existing Innovation Fund, attracting foreign venture capital funds, provide tax incentives for business angels willing to invest in tech start-ups and stimulate creation of corporate accelerators. The last measure is especially important since it also provides business mentoring for start-ups that are mainly technically well equipped, but with lack of soft skills. This can also be achieved through greater integration of start-up community and facilitation of knowledge from successful founders to those who are only starting their start-up journey.

3. Research and development. Research and development is another intervention area related with the previous one. In modern age, technology is moving by itself. Keeping up with the trends of tomorrow is crucial to keep evolutionary competence. To combat the risk of not being up-to-date for economy as a whole and companies as well, development of a self-made lead-edge technology is crucial. Solutions must be most innovative, most connected and most shared.

Serbia invests in research and development less than EU peers which follow the level prescribed by the Lisbon convention. This is especially true due to low private investment. However, these figures are expected to improve

due to newly introduced tax incentives for companies that invest in research and innovation. Results of this measure should be tracked and such incentive should be provided for self-made entrepreneurs as well. Also, cooperation with industry should be institutionalized through introduction of science-industry cooperation centers, through improvement of mobility of scientists towards industry and greater practical focus of scientific papers.

New technology could not save old jobs, but it can create new ones. Education particularly matters in substitution of older workers with new ones. Opportunity gap is always a consequence of skills set gap, or inadequate education.

4. Investment and infrastructure. If in an economy with the output gap investment is slowing down, structural inflation could return easily. In the previous period, the two pillars of investment were infrastructure development and FDIs. The new priorities are public-private-partnership (PPP) circular economy and combinatorial innovations. Regulatory framework has been improved and now allows for PPP to be used more, but there is still room to use such model of project structuring in large infrastructural projects, since up to now it has been more used in projects of smaller value. Therefore, the use of PPP model should be promoted for future investment in physical infrastructure.

In addition to this, future investment efforts should be designed in such a way as to promote closing of regional discrepancies. Currently, infrastructure development and subsidies for FDIs are designed in such a way to promote balanced regional development. In spite of this, differences still persist, and additional efforts are needed. One way to reduce these discrepancies would be to stimulate domestic private investment in less developed regions. Also, it is important to formulate a strategy for a balanced regional development.

Another important aspect of attracting high quality investments are solid competition practices. Serbia has achieved a lot of progress in this area through the work of the Commission for protection of competition. However, there is still work to be done regarding fine tuning of competition regulatory framework in order to align it with the EU framework and increase the Commission's capacity in terms of human resources and technology used.

Infrastructure deficit, both physical and digital, is a growing concern phenomenon. Both components of infrastructure are mutually interdependent. Poor physical infrastructure in terms of unreliable power supply, inadequate networks of roads and railways, low level of postal digitalization, etc. constrain digital infrastructure development. It is particularly important in the financial sector, whose core business has a digital context. So, fiscal infrastructure could not operate without the digital one.

Lack of access to digital infrastructure, both hard like telecom networks, sensors etc., and soft including software, human capital and tax regulation is one of the most important challenges. Sharing digital infrastructure means public access to solutions and lowering cost of capital in digital transformation. Connectivity based on access to internet must reach 50 percent global benchmark of penetration.

New industrialization could not be based on the "white sheet of paper" approach. There are many limitations. The key challenges of intentional policy will be calibration and harmonization.

Conclusion

Continuation of neoliberal conceptual framework will prevent recovery of Serbia's economy and retards the speed of current improvement. We hope that ideas we have presented will have transformational power, particularly because they afform universal values. However, ideas have power if they are implemented in the concrete policy measures. The neoliberal economic policy platform requires recollection, particularly because heterodox approach we promoted has gained greater momentum in recent years.

By integrating micro and macro view in this paper, we are thinking about economic reality and leading forces of change, not in big boxes and simplified optimization models. We promote systemic thinking in macro management and micro management based on a simple principle well known in physical system, reversibility principle.

These days there is a pressing disconnect between economic orthodoxies and public expectations. Strategists and policy makers have responsibility to take the lead on one of the greatest challenges the economy has ever known,

sustainable and inclusive development in circumstances of multiple bubbles, particularly abnormal carbon footprint. Business leaders need to drive towards sustainability proposal, sharing risk and returns with stakeholders. To do that, they need a new framework. Encouragingly, they are walking up to the concerns of the architects of the economic system. Along the latest the World Economic Forum initiative, good example of broadened responsibility of economy beyond value creation for shareholders with the aim to incorporate all stakeholders impacted in global commons is the European Commission Green Deal to realize a carbon-neutral Europe by 2050.

As a country in the accession process to EU and diligent member of international community, Serbia must follow these initiatives. With Industry 4.0 the change is not just happening, the change can be shaped. We can harness Industry 4.0 for a sustainable and inclusive growth, both toward the people and nature. Exponential growth potentials of combinatorial innovations and universal connectivity inspired the government to provide intention policies to deliver climate change solutions. In the emerging context, micro management is a shareholder's trustee. Macro management is a stakeholder's trustee. Along shareholder's value, it must assume the role of a trustee of the physical system and biosphere for future generation.

There are signs of government's agility that may lead to sustainable and inclusive achievements, but this momentum needs strengthening. Physical and digital infrastructure development is a cost of staying in the competitive race. But, digital leapfrog models could not deliver the same achievements for a low-income country like Serbia as manufacturing-led development model. Without implementation of ICT breakthroughs in industrial production, a new release of the "middle-income trap" is possible. In addition, while digitalization in developing economies initially opened opportunities for development of SMEs based on digital platforms, the reality is that the winner-take-all effects in ICT industry actually prevents further development of early entrants. So, what Serbia desperately needs is technological entrepreneurship, or implementation of ICT breakthroughs in real economy (manufacturing, agriculture, energy and logistics). It should be the bases for a rebound of the real economy.

The role of domestic investors (both private and public) in this transition is unavoidable. With FDIs expansion, tax base erosion will accelerate. Profit shifting is unstoppable because of the growing presence of FDIs in investment structure. Only domestic investment may contribute in a sustainable way to a greater fiscal space. Also, new mechanisms are needed to ensure that digital companies contribute a fair share. This in turn should give more flexibility to governments to facilitate transition to the new economy by expanding their spending on education, workforce skilling and stronger social safety nets among other urgent spending needs. All solutions we have presented in this paper are related with this purpose. The time for action is now.

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