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# THE FUTURE OF SERBIA AND HOW TO SURVIVE IT: CATCHING UP AND CONVERGENCE WITH THE EU

## Budućnost Srbije i kako je preživeti – dostizanje i konvergencija sa EU

## Abstract

Hypercompetition, sometimes referred to as "universal transformative global discontinuity", is the greatest challenge the mankind faces today. The key characteristics of this stage of development are: hiking up of risk stressors and disruptive innovations. Great volatility of global markets is a consequence of permanent shortening of life cycle of almost everything relevant to them (growth model concepts, geopolitical interests, regulations, business models, supply chains, technologies, products, etc.). Maybe more than ever in modern history, we live in a time of profound changes. New normality creates a significant impact on politics, economy, and society. From many perspectives, it is a pivotal moment for mankind.

The main attributes of this stage of development pertain to the vast impact of new normality coming from socio-political context, reflected in financialization, concentration of wealth, massive spillover effects of geopolitics on the economy (particularly on commodity prices), climate changes and security challenges, as well as the impact of technology development (this time inspired by the industrial revolution 4.0) on the growth model and economic policy platform. Addressing these challenges and discussing how national economies and their organizations can benefit from them is the main purpose of this paper.

Again, to survive and prosper, every economy needs to keep growing. Growth, sustainable and inclusive, should not be questioned at all. In new circumstances every national economy, large or small, developed or developing, mature or emerging, is looking for a new vision of growth model. But, it is not easy to make right (re)positioning *vis-à-vis* the leading trends and strategy of market makers. Change management (macro and micro) is a way to respond to main challenges in the age when speed is becoming the currency.

Change management is of critical importance for a small, impotent and out-of-tune economy with delay in transition and limited capacity to respond quickly and accurately to the universe of risk stressors. Serbia's economy is underdeveloped, with delay in transition, catching up and income convergence with developed economies from its surroundings. Vulnerability indicators and cross section analysis of macroeconomic data indicate the presence of many anomalies in the system. The main contradiction is deindustrialization which, combined with relatively high financialization, produces output gap, macro deficits, and growing indebtedness. Coming up with a new growth model that will put the economy in line with the future is not an easy endeavor when an economy is encumbered with serious structural imbalances from the past and risk stressors influencing its future position.

Having in mind the fact that right now the economy is not sustainable, the main challenge for Serbia is not its future, but how to survive it? Multipronged reform agenda is the way to escape from structural crisis and get adequate answers to leading trends in order to shift the economy to sustainable and inclusive growth trajectory. Discussing how Serbia's economy would benefit from right answers to previously raised question, is a very specific purpose of this paper.

The paper is organized into five parts, apart from conclusion. The first two sections are dedicated to principal drivers of change, new normality in socio-economic context and industrial revolution 4.0 affecting the new growth model and economic policy platform. The purpose of the third section is strategic audit of Serbia's economy at the end of 2015. The fourth part consists of a concise elaboration of the EU's major challenges, inspiring the reforms in Serbia, too. The fifth and sixth part provide an overview of currents stage of reforms and proposals for multipronged reforms considering the intersection of new context, economic fact sheets in Serbia and the EU and leading trends. The new industrialization is a core idea.

**Keywords:** *Serbia, new global normality, industrial revolution 4.0, multipronged reforms, new industrialization*

## Sažetak

Hiperkonkurencija, koja se ponekad naziva i „univerzalni transformativni globalni diskontinuitet", predstavlja najveći izazov sa kojim se čovečanstvo trenutno suočava. Glavne karakteristike ove faze razvoja su: intenziviranje rizika stresa i uzurpirajuće inovacije. Velika volatilnost globalnih tržišta je posledica stalnog skraćivanja životnog ciklusa gotovo svih faktora koji su relevantni za njihovo funkcionisanje (ideje za model rasta, geopolitički interesi, regulativa, biznis modeli, lanci snabdevanja, tehnologije, proizvodi itd.). Možda više nego ikada u savremenoj istoriji, živimo u vremenu dubokih promena. Nova normalnost značajno utiče na politiku, ekonomiju i društvo. Iz različitih perspektiva posmatrano, u pitanju je preloman trenutak za čovečanstvo.

Glavne karakteristike ove faze razvoja su usko povezane sa jakim uticajem nove normalnosti u društveno-političkom kontekstu i ogledaju se u finansijalizaciji, koncentraciji bogatstva, masovnom prelivanju geopolitike na ekonomiju (posebno na cene osnovnih sirovina), klimatskim promenama i bezbednosnim rizicima, kao i uticaju tehnološkog razvoja (ovog puta podstaknutog četvrtom industrijskom revolucijom) na model rasta i platformu za vođenje ekonomske politike. Uočavanje ovih izazova i razmatranje na koji način bi nacionalne ekonomije i pojedinačne organizacije u okviru njih mogle da imaju koristi od njih, predstavlja glavni cilj ovog članka.

Za svaku ekonomiju i dalje važi da opstanak i prosperitet zavise od rasta. O potrebi za rastom, naravno održivim i inkluzivnim, se ne polemiše. U novim uslovima, svaka nacionalna ekonomija, velika ili mala, razvijena ili nerazvijena, zrela ili u razvoju, jeste u potrazi za novom vizijom modela rasta. Međutim, adekvatno (re)pozicioniranje u odnosu na vodeće trendove i strategije onih koji diktiraju promene nije lako postići. Upravljanje promenama (na makro i mikro nivou) je način da se odgovori na ključne izazove vremena u kome brzina postaje valuta.

Upravljanje promenama je od ključnog značaja za malu, nemoćnu i raštimovanu ekonomiju sa kašnjenjem u tranziciji i ograničenim kapacitetom za brzo i efikasno suočavanje sa univerzumom rizika. Ekonomija Srbije je nedovoljno razvijena i ispoljava zaostatak u procesima tranzicije, dostizanja performansi i konvergencije u pogledu dohotka sa razvijenim ekonomijama iz bliskog okruženja. Indikatori ranjivosti i unakrsna analiza makroekonomskih podataka ukazuju na prisustvo brojnih anomalija u sistemu. Najveću kontradikciju predstavlja deindustrijalizacija, koja zajedno sa relativno visokim stepenom finansijalizacije, dovodi do stvaranja autput gepa, makroekonomskih deficita i rasta zaduženosti. Nije lako uspostaviti model rasta koji će omogućiti prosperitet ekonomije u budućnosti u situaciji kada je ona opterećena teškim strukturnim neravnotežama iz prošlosti i faktorima rizika koji utiču na njenu buduću poziciju.

Imajući u vidu činjenicu da ekonomija trenutno nije održiva, najveći izazov za Srbiju nije njena budućnost, već kako je preživeti. Sprovođenje programa sveobuhvatnih reformi omogućava izlazak iz strukturne krize i adekvatno suočavanje sa vodećim trendovima, sve u cilju prevođenja ekonomije na putanju održivog i inkluzivnog rasta. Razmatranje na koji način bi Srbija mogla da ostvari koristi od pravih odgovora na prethodno postavljeno pitanje čini specifičan cilj ovog članka.

Članak se sastoji od pet delova, pored sažetka i zaključka. Prva dva dela posvećena su glavnim pokretačima promena, novoj normalnosti u društveno-političkom kontekstu i četvrtoj industrijskoj revoluciji, koji utiču na novi model rasta i platformu za vođenje ekonomskih politika. Cilj trećeg dela je revizija strategijske pozicije ekonomije Srbije na kraju 2015. godine. U četvrtom delu ukratko su elaborirani ključni izazovi za EU, koji takođe utiču na reforme u Srbiji. U petom i šestom delu izloženi su ocena sadašnjeg stanja reformi i predlog sveobuhvatnih reformi koje se nalaze u preseku novog konteksta, ekonomskih činjenica u Srbiji i EU i vodećih trendova razvoja. Nova industrijalizacija je ključna ideja.

**Ključne reči:** *Srbija, nova globalna normalnost, četvrta industrijska revolucija, sveobuhvatne reforme, nova industrijalizacija*

## New normality in the global economy: Problems, causes and solutions

Since the start of the *Great Recession* in 2008, the world economy has dramatically changed. Many people think that the neoliberal economic model and associated policy platform are the principal root causes of it. The model was based on "4Us principle", in terms of *universal* deregulation (particularly capital market), *universal* privatization, *universal* cross-border integration, and *universal* implementation of policy tools (primarily, inflation targeting). Speculative bubbles, financial crises, growing debt and forced migration are main global consequences of the deep fractures of the system such as deindustrialization, finacialization, jobless growth and the like. A system full of structural imbalances is not ready to absorb successfully anti-crisis remedies like quantitative easing, negative interest rates and the like.

From a political point of view, the neoliberal model is extremely risky. Supremacy of the Wall Street over the Main Street is, actually, inequality by design. According to [21], the 62 richest people in the world own as much wealth as the poorest 3.6 billion. Through reinforcing the tendencies toward greater concentration of wealth, system actually contributes to the destruction of the middle class as a cornerstone of democracy. Moreover, the model leads to moral hazard and the supremacy of particular interests over the collective one. Not surprisingly, some influential intellectuals, like *D. Stockman* [26], marked this model as "the great deformation".

The neoliberal model pushed the global economy into a long and deep structural crisis, 2008-present. Actually, the global economy, and particularly its western part, is precariously balanced and shows signs of a fragile recovery. The main problem is growing debt. The third leg of the debt supercycle is not behind the global economy yet. In the post-crisis period, the increase in global debt is greater than the cumulative effect of global growth. Moreover, total global debt rose by USD 57 trillion from the end of 2007 to the 2Q 2014, reaching USD 199 trillion or 286% of global GDP [18, p. 15].

A respectable forecast [13] indicates that in 2016 the global economy is facing another year of growth rate lower than 4%, the rate needed for sustainable economic development. Precisely, forecasted growth rate for global economy is 2.7%, for Western Europe 1.8%, and for Eastern Europe, including Russia, 1.2%. Also, we cannot talk about inclusivity of growth considering that in the great majority of national economies unemployment rate stands at more than 5%.

Besides low inflation, the main features of global economy such as high unemployment, plunging asset and commodity prices, widespread currency weakness and higher US dollar denominated debt are not in tune with macroeconomic fundamentals required for sustainable growth.

When an economy does not function in an orderly manner, politics comes into the game. Politics usually keeps the existing system in place, both internally and externally. It is not easy to calculate precisely the economic consequences of some (geo)political events and processes. But, it is evident that a high correlation between the two does exist.

Wars, terrorism, refugee influx, and social unrest are only expressions of amplified influence of (geo) politics on market forces. These factors remind us of how hypercompetition, which is often, but not exclusively, connected with superpowers and coupled with the destruction of weak states, causes degradation of global security, trade and finance as well as cohesion between other states, but this time superpowers. When some political ideas, on the one hand, and myopic and wrong reactions to them, on the other, come to the fore, the political legitimacy of both might be called into question. This leads to a (geo) political crisis.

In a (geo)political crisis, tensions, media wars, economic sanctions, expansion of state-to-state trade and capital flows are typical manifestations of a new trend toward the deglobalization of world economy.

The world is moving to a multipolar political structure primarily due to a shift in the balance of economic power. There are many open issues in that process, not only as to who will represent the poles of influence in emerging multipolar structure, but also will there be a multipolar structure at all? The shift in the balance of power and, consequently, the emergence of power gap in economies and regions in which players of strategic game have overlapped and opposed interests are principal drivers of change in the global security landscape. Moreover, the implementation of new technologies in defense industry enables proxy wars and intensive engagement of client states in the realization of strategic interests of superpowers. Again, economics is a gismo science, leverage in the hands of politicians.

Growth and prosperity were proclaimed to be the main attributes of the model of neoliberal economy. On the contrary, it pushed the global economy on the path of regression. Moreover, this model, and particularly the measures released to stop its collapse, triggered a (geo) political crisis. Also, it is a crisis of legitimacy of key liberal market institutions (notably the stock exchange) and regulatory bodies (primarily the central bank, securities and exchange commission, and anti-monopoly commission). Due to the implementation of biased and myopic concepts and tools, vital democratic institutions have been manipulated. As a consequence, there are new phenomena such as strong pressure for redistribution (and control) of power and growing popularity of anti-establishment politicians.

In each crisis, economics holds power to find the solutions. In the search for a new model of growth and economic policy platform, a key question is: what is needed for the transformation of neoliberal economic system to a better one without a collapse? Today, there is an almost general consensus among mainstream economists that the last economic crisis cannot be overcome with "more market" measures and by adhering to the principles such

as capital market deregulation, securitization and total privatization or, by the way, the principles and measures that were direct causes of the crisis. When market forces fail, the government comes in to settle inherent structural imbalances.

A new perspective on the growth model and economic policy platform in the post-crisis period does not mean that what we have learned from the model of neoliberal economy is completely incorrect. Perhaps our knowledge is incomplete, particularly regarding the deregulation of capital market, the state's withdrawal from economy and technological progress.

In the post-crisis period, there is fundamental rethinking of the orthodox economic view based on neoliberal ideas of market fundamentalism and policy platform reduced only to core economic policies (monetary and fiscal), with an exclusive focus on inflation (low and stable). New structural economics promotes not only the role of the state in regulation, but also in economic activity. In the new model of growth, core macroeconomic policies combined with industrial policies create a comprehensive economic policy platform referred to as "heterodox". Industrial policies are crucial component of the new wisdom. Industrial policies could be used to correct either market failures or government failures. As *J. Stiglitz* pointed out, "the question is not whether any government should engage in industrial policies, but how to do it right" [25, p. 9]. In our previous papers [9], [10], [11] and [12], we discussed the heterodox approach more extensively.

The core idea of heterodox approach is the harmonization of industrial policies and core economic policies (monetary and fiscal, primarily). To simplify the concept, automatic stabilizers in the monetary and fiscal spheres should enable the functioning of core policies formulated for tradable sectors.

The new concept offers a solution for externalities, particularly coordination, institutional and innovation externalities. Coordination externality combines invisible hand of the market and visible hand of the state. Innovation externality enables infrastructure for creation and diffusion of disruptive innovations. Institutional externality proposes adjustments to institutional settings in accordance with the previous choices. When it comes to coordination externality, the government interventionism dominates the market as prevailing institutional choice in early stages of development, but its influence declines with the acceleration of development. Things look completely different when it comes to innovation externality. Namely, when an economy approaches technological frontiers, the role of government as a risk taker in technological development remains critical independently of the level of economic development. Today, there is a general recognition that without a strong integration of cyberspace technologies and physical systems based on leading edge technologies, no economy will be able to close the gap in development with technological frontiers. Emerging amalgams in the form of "smart, connected products" have the capacity to unleash a new era of industrialization. Smart, connected products have potential to reduce the problem of structural imbalances, particularly output gap and jobless recovery.

Industrial policies should have three focuses: economy as a whole (horizontal policies), tradable sectors (vertical policies), and sectors for opening new opportunities (disruptive innovations). Vertical policies are most suitable for late developers. Horizontal policies come with a higher level of development. Regardless of the level of development, all economies need policies that encourage the development of new, emerging sectors.

The new model of growth and associated policy platform should reboot the global economy and put it back on the path to sustainable and inclusive growth. Desired outcome should be a result of intelligent investment and social equity, along with the reduction of environmental risks.

In order to achieve previous, some things must be harmonized. Firstly, growth must be sustainable. Sustainability is a very fundamental concept in economics and business management. Even though sustainable growth in economics might be something very abstract and elusive, it is reasonable to follow the proposition of business management that sustainability is a consequence of the long-term competitiveness (from the company level to the national economy level), which in itself is a prerequisite for value creation. Secondly, growth must be inclusive, in terms of providing opportunities for all people and capability for

poverty eradication. Besides sustainability and inclusivity requirements, search for the new model of growth must respect one more theme. Namely, the growth must not be only against people, but also not against the nature. The concept of a circular economy is structured to reflect the previous requirements. There are many versions of this concept. One of them is a "blue economy" [22]. The Paris Agreement and success of COP21 climate talks [5] offer hope that sustainability of nature can be fully respected in the emerging model of growth.

## Industrial revolution 4.0

Apart from new normality in socio-economic context, in each industrial revolution technology is the second key layer of change. The ability of human beings to invent technology is their defining characteristic [28]. Prevailing technology at each stage of development, such as ICT in the era of digitalization, has effects on the society as whole, going far beyond ICT industry [30].

Technology is enabler. Simultaneously, it offers opportunity and represents threat. The economy is always at the threshold of transformation driven by the confluence of emerging technologies. Many of them are disruptive by character in the sense of *C. Christensen* [3], [4]. Disruptive innovations have become a powerful part of modern competitiveness thinking. The concept explains a process whereby a new company with fewer resources but with cutting edge technology is able to successively challenge and destroy incumbent competitors.

Disruptive innovations are one of the factors influencing emergence of industrial revolution. According to *K. Schwab* [24], in the last three centuries the economy, after passing through three industrial revolutions, is on the brink of a new one. Industrial revolution 1.0, which started in 1784, used water and steam power to mechanize production by designing equipment for mechanical production. Industrial revolution 2.0, taking place in the period 1870-1969, used electric power for systems of mass production. In industrial revolution 3.0, beginning in 1969, electronics and information technology were used to automate and integrate different components of value chain. Industrial revolution 4.0 is building on the previous one. It is characterized by a fusion of technologies from ICT (mostly virtual) and other technologies (mostly physical) in the process of formation of cyber-physical systems.

In the first two industrial revolutions, scientific optimism backed up with production engineering was the main driving force behind productivity growth and output increase. In these periods the role of regulators was to discipline private entrepreneurs. During the first two industrial revolutions the core technologies were far more transformative than ICT technologies in industrial revolution 3.0. Namely, in the digital revolution the emergence of computer, internet and smart phone have failed to generate a sustained upturn in productivity and growth of output. This is best demonstrated by the case of the US economy. In the period 2006-15, total factor productivity growth, as a measure of innovativeness, in the US was only 0.3% per year. Digitalization neither increased productivity substantially nor did it create new jobs like previous industrial revolutions. Moreover, cost cutting exacerbates deflation tendencies, and investment mostly out of real economy reduces investment multiplier.

Finally yet importantly, this revolution contradictory affected social and political evolution. Namely, the new technology has reinforced tendency toward wealth concentration making "winners-takes-all" feasible.

Today we are on the verge of the new industrial revolution. The latest industrial revolution is driven by the breakthroughs in artificial intelligence, nanotechnology, 3-D printing, human genome, big molecules, and other cutting-edge areas of science. Intersections of innovations in the above mentioned fields with catalyst role of ICT could change life in unforeseen ways affecting every industry and sector. Particularly, it is by courtesy of cyberspace, that the fusion of technologies across the digital, physical and biological spheres becomes possible. For example, auto industry today is under the pressure of three new technologies: zero emission of CO2, autonomous driving, and connectivity.

The speed, scale and systemic nature of changes have the potential to greatly disrupt many incumbent businesses and industries. They have potential to transform almost all industries from real economy, financial sector, mobility, health care, and education. Sometimes a fusion of

technologies leads to rejuvenation of mature industry (e.g. automotive industry). Sometimes it brings breakthrough innovation. For example, breakthroughs in human genome open the space for life science (new diagnostic tools, pharmacy based on big molecules, robotic surgery, pro ageing, health tourism, and the like).

Emerging cyber-physical systems, just like a great part of digital technology as their predecessor, could have deflationary effect. Namely, the principal fear is that new amalgams of cyber-physical systems will destroy the current labor structure, making a large number of workforce obsolete due to redundancy, automation, or disintermediation. This time, new technology could hit white-collar jobs like a neutron bomb. If new technologies shake up the labor market, they could deepen the inequality problem. The impact of disruption will probably vary across industries. Financial services are expected to experience the greatest negative impact, followed by energy sector and health care. This loss could be partially offset by the creation of new jobs in more specialized job families like STEM (science, technology, engineering, and mathematics), particularly in fast growing industries such as ICT, life science, advisory services, and media. But, net effect on the labor force will probably be negative.

With a great level of confidence we can predict that in the near future intangibles, more than material assets, will represent a critical factor of production. But, principal beneficiaries of such structural change tend to be investors as providers of capital (intellectual and financial). There is real threat that net displacement of white-collar workers by emerging cyber-physical amalgams might exacerbate the spread between returns on capital and returns on labor and act as a new driver of income inequality. Despite the fact that the demand for highly skilled labor force will increase while the demand for low skilled workers will decrease, in industrial revolution 4.0 income inequality represents the greatest socio-economic concern.

From macroeconomic level there is a serious threat that new technology could be the main reason for income stagnation, or even decrease. If structural adjustments do not follow the right path, this is very likely. Anyhow, in these circumstances tensions not only between blue collar/low-pay and white collar/high-pay labor segments, but also tensions between white collar labor and investors might cause the breakdown of social cohesion. Model of growth in which "winner-takes-all" by limiting access to opportunities for the middle class cannot lead to sustainable and inclusive growth.

Job cuts trigger a negative domino effect of recessionary tendencies: fear of fear, demand squeeze, ever-growing unemployment, fiscal imbalance, etc. Namely, demand squeeze puts great pressure not only on businesses, but also on the government. When pressure is intensified, the government will have to cope with the consequences of stagnating output by new means, industrial policies for example.

Achievements from cyberspace technology like internet of things, big data and cloud computing will not change only business model of companies and structure of economy, but also the essence of humankind and its identity. Namely, breakthroughs occurring in life science redefine what is meant to be human by pushing back the current threshold of life span, health, cognition, and capabilities. They will compel us not only to redefine our moral and ethical boundaries, but also to make right justification in education, health care, pension plans, and related issues. In such environment education is an "industry" with a substantial lag behind the leading trends.

In addition, pluralistic interactive media are affecting politicians and opinion makers by giving them leverage. Unfortunately, they can be used to disseminate extremism and other form of wrong things, including lies and stupidity. Contamination of the social media with some explications could be counterproductive for democratic development and give rise to many social pathologies.

These trends raise the following question: could the social context support the changes in technology and economy in a situation where robots take over the world, virtual reality replaces normal relationships separating us from each other, and cyber-physical systems hit existing workforce? Devolution might be a possible consequence if we go too fast with industrial revolution 4.0 or in the wrong direction following exclusively the interests of already highly concentrated wealth.

But, there is also a possibility of an optimistic scenario because all of the previous projections do not

have to be necessarily the case. Like in the first two industrial revolutions, if emerging cyber-physical systems are mastered in the right way and massively and quickly diffused throughout economy, it will be the indicator that hopes should overcome fears and economy could pass through structural adjustments successfully. In an optimistic scenario, the new wave of disruptive innovations leads to supply side miracle, with long term improvements in efficiency and value creation through diversification.

On the supply side, many industries are seeing the introduction of new technologies that create entirely new ways of serving existing needs and significantly disrupt the existing industries. Disruption is coming from responsive competitors that, owing to the access to global digital platforms for R&D, marketing and logistics, can eliminate incumbents faster than ever by improving the value for money of delivered products and services.

On the demand side, some positive shifts are also occurring particularly toward clients' engagement in design, marketing, and logistics. Digital capabilities of products and services definitely increase their value. New ICT tools ensure that the costs of communication, transportation and trade decrease throughout the value chain. Particularly, big data and cloud computing dramatically reduce the costs of market intermediation by eliminating market asymmetries and providing a better understanding of consumer needs. This leads to the opening of new markets and bolsters up investment and growth. In that case, the rightsizing of labor force through outsourcing could open the space for diversification and entry into new high value added products and services. In the new context, the opportunity to raise the quality of life by integrating business and pleasure ("bleasure") could be regarded as a new business opportunity.

Innovations based on client expectations and product enhancements affect organization and management too. The shift from digitalization to innovation-based production is also forcing companies to reinvent themselves. New technologies make assets more durable and flexible, while data and knowledge (big data) are transforming the ways in which they are maintained. The emergence of big data, internet of things, cloud computing and new business model based on them, manifests itself in an organizational culture that builds upon the concept of learning organization and management style of so-called "change management".

At this point, we cannot foresee which scenario is likely to emerge. Fears that new technologies may further upset incumbent businesses, cut jobs, particularly in low level income countries, and trigger related social pathologies do not have to be addressed yet, as a matter of fact, but only to be a cause for worry.

## Strategic audit of Serbia's economy fact sheet at the end of 2015

Despite a quarter century of reform experience, macroeconomic fact sheet is not encouraging. Namely, for a long time Serbia has been in self-fulfilling recession cycle leaving untouched three structural imbalances: output gap, macro deficits (current account and fiscal), and structural unemployment. To compensate funds lost due to continuous bleeding, the economy has been constantly increasing the level of debt.

In the period 1990-2000, the principal cause of regression was misunderstanding of geopolitical trends and, consequently, an inadequate positioning toward them. In the period 2001-08, misconceptions, experiments and fallacies in economic reforms led not only to unsustainable growth, but also to unsustainability of the previous reforms achievements. Typical examples include privatization and the capital market development. Misconceptions, fallacies and stop-and-go in the implementation of reforms created an impotent and out-of-tune economy. Deindustrialization during the whole period of transition is the major cause for the absence of strong growth dynamics.

The *Great Recession* 2008-present has additionally deepened old fractures of the system. It was a crisis within the crisis. Consequently, during the last seven years Serbia has not attained the pre-crisis level of GDP. At the beginning of 2016, Serbia ended up at an "unhappy" 7th place in Bloomberg's list of the most miserable economies [1]. But, the devil is not as black as he is painted, considering that Serbia ranks among the 63 relevant economies.

A deeper insight into fragilities of the system can be gathered based on vulnerability indicators. Vulnerability indicators throw the spotlight on the capacity of an

economy to reduce adverse effects caused by various stress factors. At the end of 2015, vulnerability of the economy is evident (see Table 1).

The output gap, as the difference of actual economic activity from its potential level, is the main long-term effect of sustained disequilibrium. Transitional output gap, as the level of output in the current year in constant prices compared to the 1989 level of output, portrayed as J-curve, has not significantly improved during the whole transition period and in 2015 still remains at a very high level (27.5%). Moreover, after 2008, there are three recession sub-cycles. Figure 1 shows the transitional output gap over the period 1990-2015, with the special focus on a crisis within the crisis during the *Great Recession* 2008-present.

As previously mentioned, long-lasting deindustrialization is the primary cause of transitional output gap. According to [23], in the period 1990-2010 industrial production shrank more than 60%, the share of industrial production in GDP fell from 31% to 15%, while number of industrial jobs declined from 1.03 million to 0.30 million. In 2015, the economy gradually strengthens, but the level of industrial production, which was slightly below the comparable level in 2008, indicates the current output gap.

In low-income developing countries, manufacturing, along with commodities, is the most important tradable sector. In addition, the expansion of tradable sectors is connected with investment multiplier effect. Manufacturing expansion is crucial for maintaining external liquidity in the short run as well as for balancing current account in the long run [10]. The recent empirical tests strongly confirm the previous position. According to [14], transitional economies that demonstrated the greatest convergence of GDP p.c. and, above all, the greatest resistance to the *Great Recession*, are actually the countries from the *Visegrad Group* (Czech Republic, Poland, Slovakia, Slovenia, and Hungary) that based their growth on investment in tradable sectors in the pre-crisis period.

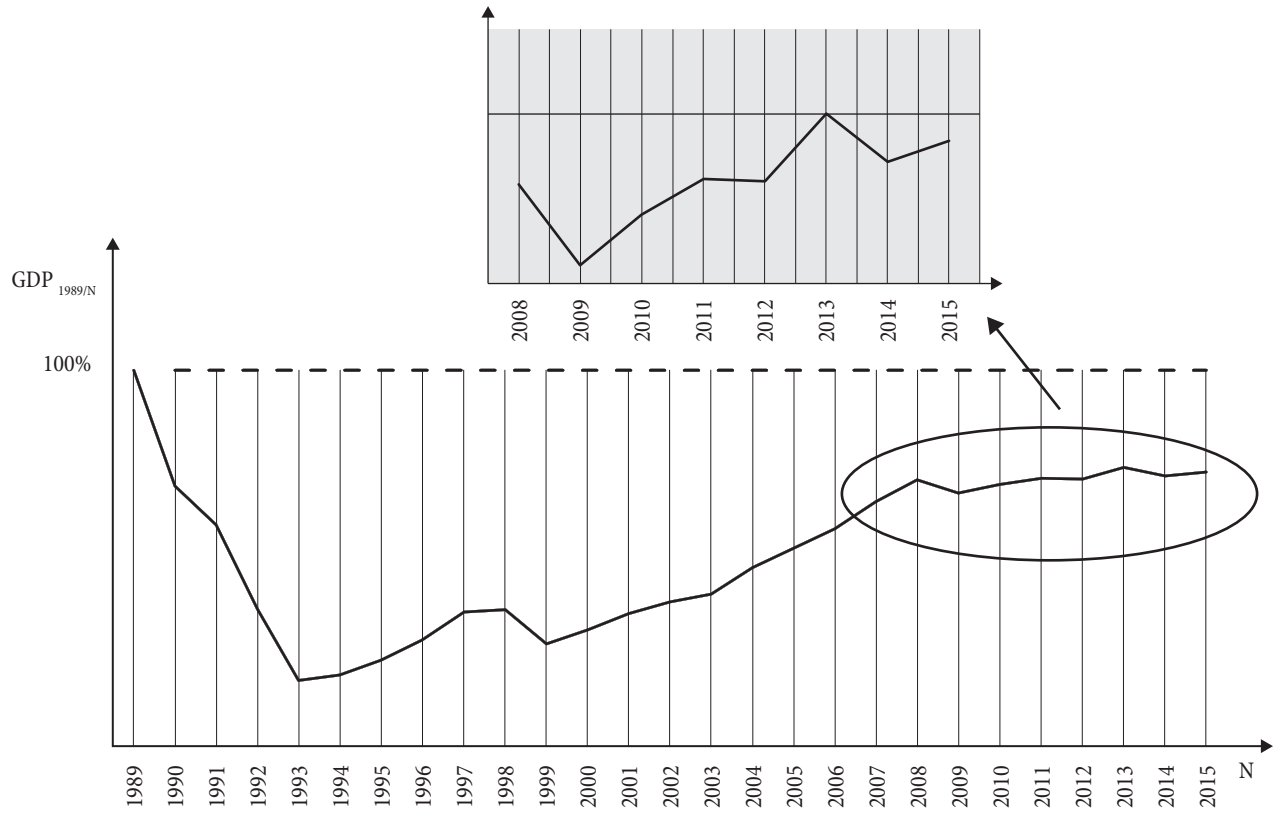
In high-income developed countries, a relatively small share of manufacturing in GDP formation is not so problematic because these economies have strong service sector and high capital market attractiveness. In that case, the export of services and capital inflow can help balancing current account deficits and keep the balance of payments reasonably balanced. Serbia does not have strong service sector and its capital market is thin and in degradation. Therefore, structural reforms toward

**Table 1: Vulnerability indicators, 2015**

| Indicators | Value | Reference point | Type of vulnerability |
|---|---|---|---|
| Transitional output gap | 27.5% | 0% | |
| Okun index (inflation + unemployment) | 19.5% | <12% | OPERATIONAL |
| Macro deficits | 4.8% | <5% | |
| • Current account | 4.1% | <3% | |
| • Consolidated budget deficit | 1.4 | >2 | |
| Dependency ratio | 38.8% | <20% | |
| Youth unemployment | | | |
| Indebtedness | | | FINANCIAL |
| • Public debt/GDP | 76.6% | <45% | |
| • External debt/GDP | 81.7% | <90% | |
| • External debt/Export | 171.7% | <220% | |
| Non-performing loans | 22.0% | <10% | |
| Credit rating | | | |
| • S&P | BB-/stable | rank > BB+ | |
| • Fitch | B+/positive | rank > BB+ | |
| • Moody's | B1/stable | rank > Ba1 | |
| Export (goods)/GDP | 36.5% | >50% | COMPETITIVENESS |
| Currency change (2015/2014) | | | |
| • Nominal depreciation | 0.55% | <5% | |
| • Real depreciation | -0.79% | <0% | |
| Global Competitiveness Index | 94th of 140 | 65-JIE average | |
| Corruption Perception Index | 71th of 168 | 59-JIE average | |
| Ease of Doing Business | 59st of 189 | 60-JIE average | |
| Economic Freedom Index | 90th of 178 | 62-JIE average | |

Source: National Bank of Serbia Statistics and authors' calculations

**Figure 1: The transitional output gap**




Source: World Bank Database and authors' calculation

strengthening tradable sectors are urgently needed to invigorate anemic growth potential.

In 2015, double macro deficits (current account and fiscal) are smaller than in the previous year, but they still persist. As far as current account deficit is concerned, the situation is slightly better than in the previous year due to export expansion and import decrease. A warning sign is the level of FDI, which is insufficient for balanced balance of payments. Sectoral allocation of investment (concentrated on financial sector, wholesale, and commercial real estate) is not adequate again. By contrast, in the emerging countries from CEE a large part of FDI went into manufacturing and infrastructure development.

Output gap is in correlation with high unemployment. In 2015, unemployment rate has dropped to 16.7%, but it is still high. Excessively high youth unemployment (39.0%) threatens to create the lost generation effect.

Another indicator of vulnerability is the ratio of economically active population to dependents. It stands at the level of 0.9. Unsustainably high level of dependents exerts strong pressure on the budget and has an adverse effect on the functioning of the state (pensions, health care, education, science, culture, etc.). A related problem is underdevelopment, particularly visible in state-owned enterprises and enterprises from the group "500+" in restructuring. Dependents and employees in state-owned enterprises in restructuring are not the driving forces of growth and, consequently, they are irrelevant for economic recovery. By contrast, these social groups are in focus of politics.

Growing indebtedness is another layer of vulnerability strongly correlated with the previous one. Public debt is increasing and approaching to 80% of GDP. Growing indebtedness is linked with credibility of the country in terms of the uncertainty of debt repayments. Credibility particularly depends on the difference between growth rate and interest rate. Since the growth rate (0.8%) is much below the interest rate level (hypothetically, the state could not repay debt from rising income), investors are in a risky position. For example, in 2015 the key policy rate was around 6.3% (year average), overnight repo rate was around 8.3% (year average), and average interest rate on euro-denominated loans issued in 2015 was 4.8%. The situation is particularly urgent in the state-owned banks

and insurance companies. Growing public debt and tacit liabilities due to state-guaranteed loans constantly jeopardize liquidity of the system (both macro and micro).

A new warning sign is coming from banking sector, indicating that significant volume of credits cannot be repaid. The level of non-performing loans approaches 23.0% of gross credits released. In the structure of private debt, retailing dominates corporate line. Structure of debt points to a quite opposite situation in comparison with transitional economies from CEE in which the private debt dominates the government one, and the company debt the household one.

Mostly due to the last mentioned indicators, the credit rating of Serbia is below investment grade. Concretely, according to the S&P rating, the credit rating is *BB-/stable* and according to Fitch *B+/tendency positive.*

The situation does not look very good when it comes to the last segment of vulnerability indicators, i.e. competitiveness indicators. In 2015, export/GDP was 36.5%. It means that the situation is slightly better than in the previous year (33.7%). Yet, it is not enough for sustainable growth (>50%) bearing in mind the fact that Serbia is low-income country with high foreign debt.

FX rate is important vulnerability factor, even though the changes in FX rate in 2015 are not significant. Namely, RSD depreciated nominally by 0.55% while in real terms it appreciated by 0.79%. But, it does not mean that currency stability is sustainable in the medium run. In the previous period RSD was significantly overvalued and this is one of the reasons for deficit in the current account. For example, cumulative CPI in the period 2002-13 was 198%, nominal devaluation of the RSD was 91.5%, which indicates that real appreciation of RSD was at the level of 20.4%. Interestingly, since the implementation of inflation targeting in 1H 2006, respective data is: 75% cumulative CPI, 32.2% nominal RSD devaluation, and 13.1% real RSD appreciation. Overvalued FX rate hits profitability of exporters, increases profitability of importers and hinders sustainability of current account.

Other vulnerability factors also reveal a low level of competitiveness. An exception to the rule is the World Bank's ease of doing business index. Namely, the World Bank has recently announced a significant improvement in the climate for investment and doing business (32 places change in rank, precisely). This leap is a consequence of tax reform and improvements in the ease of dealing with construction permits [8]. Such an improvement was an absolute must, considering the fact that in 2014 report Serbia found itself surrounded by the least developed African countries. In terms of tax payment, the amount of tax to earned profit has remained almost the same, but both the number of payments and the hours spent on tax payment activities have decreased. Although the duration and number of procedures have remained the same, the cost of providing construction permit has dropped from 25.7% to 3.6% of the warehouse value.

Other indicators of competitiveness, which are based on correspondent perception, are not so great. The corruption perception index [6] still looks like a high perceived level of corruption, even though Serbia has moved seven places upward in rank. However, this improvement should be taken with caution, since the country range dropped from 175 to 168 countries in 2015. Moreover, when we analyze the scores, not the ranks, the improvement was slight, only by one point. World Economic Forum [15] announced that the rank in competitiveness has not changed for Serbia (94th out of 140 countries). Macroeconomic environment, quality of institutions and market efficiency have turned out to be the major obstacles to the competitiveness improvement. Index of economic freedom for 2015 demonstrates that Serbia stands at undesirable last position in the segment of moderately free countries.

For competitiveness, geopolitical position is also of paramount importance. Serbia took one more step toward the EU accession. In December last year, the European Commission formally declared the opening of two chapters in the negotiation process. A new challenge is refugee crisis. Refugee influx not only increases social costs but also potentially jeopardizes the sustainability of rural areas, particularly near the country borders, impacting on geopolitical risk and speed of accession toward the EU.

The key macroeconomic indicators implicitly portray fundamentals of the system. The key macroeconomic indicators in the post-crisis period 2008-15 are presented in Table 2. The headline in 2015 is fiscal consolidation due to

**Table 2: Macroeconomic indicators, 2008-15**

| Indicator | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Q1 2015 | Q2 2015 | Q3 2015 |
|---|---|---|---|---|---|---|---|---|---|---|
| Real GDP growth, in % | 5.4 | -3.1 | 0.6 | 1.4 | -1.0 | 2.6 | -1.8 | -1.8 | 0.9 | 2.2 |
| CPI, in % | 8.6 | 6.6 | 10.3 | 7.0 | 12.2 | 2.2 | 1.7 | 1.9 | 1.9 | 1.4 |
| Unemployment, in % | 13.6 | 16.1 | 19.2 | 23.0 | 23.9 | 22.1 | 19.4 | 19.2 | 17.9 | 16.7 |
| Current account, in % of GDP | -21.1 | -6.6 | -6.8 | -10.9 | -11.6 | -6.1 | -6.0 | -7.2 | -3.2 | -3.6 |
| Budget deficit, in % of GDP | -1.7 | -3.2 | -3.4 | -4.0 | -5.9 | -5.2 | -6.3 | -2.4 | -0.5 | -0.8 |
| Public debt, in % of GDP | 28.3 | 32.8 | 41.8 | 45.4 | 56.2 | 59.6 | 70.4 | 74.6 | 73.2 | 72.9 |
| External debt, in % of GDP | 62.3 | 72.7 | 79.0 | 72.2 | 80.9 | 75.1 | 77.4 | 81.3 | 81.1 | 80.3 |
| FDI, net (=assets-liabilities) | 2,486 | 2,068 | 1,133 | 3,320 | 753 | 1,298 | 1,236 | 337 | 441 | 509 |
| FX rate (period average) | 81.44 | 93.95 | 103.04 | 101.95 | 113.13 | 113.14 | 117.31 | 121.50 | 120.44 | 120.21 |

Source: National Bank of Serbia Statistics

austerity measures. During the first three quarters of 2015, fiscal deficit was held under control and at relatively low level. Concretely, budget deficit amounted to -2.4%, -0.5%, -0.8% for the Q1, Q2, and Q3, respectively. Unfortunately, in Q4, fiscal deficit escalated to the level of almost 10%. Consequently, yearly deficit is projected to be 4.1%, primarily due to the realization of tacit liabilities of the state and debt servicing. However, it is improvement in comparison to 6.3% fiscal deficit recorded in 2014.

Fiscal balance is one of the prerequisites for macroeconomic stability. By contrast, fiscal imbalances always jeopardize economic expectations, investments, and the future growth. A number of key macroeconomic indicators are doing pretty well. In 2015, the economy has reached price and currency stability. CPI y/y is 1.5%, and, as previously mentioned, RSD slightly nominally depreciated and really appreciated.

When it comes to growth, things seem to be a little bit better. Growth is in positive territory. In 2015, the economy gained some sluggish speed (y/y growth rate is 0.8%). After three contractions since 2008 (-3.1% in 2009, -1.0% in 2012, and -1.8% in 2014), the economy again started to recover. The principal driver of recovery is export growth. However, GDP has not yet reached its pre-crisis level.

Unfortunately, other macroeconomic indicators show a dual nature of Serbia's economic reality, the shining upside and dangerous downside. Sluggish growth is a consequence of the fact that the progress on the export side is insufficiently strong to offset depressed demand, partly due to austerity. Moreover, increase in manufacturing in private sector is followed by jobless recovery. Unfortunately, state sector is the largest contributor to GDP. State sector is inefficient, primarily due to human resource paradox (too many unproductive people and not enough people with adequate knowledge and skills). Paradoxically, state-owned companies come from the sectors with high potentials for sustainable growth and value creation, such as telecommunications, energy, agriculture, and infrastructure.

Failure to reform the state and public sector is the main cause of poor economic performance and threatens to turn the economy from the recovery trajectory. Public administration is large and inefficient. The same holds true for the public sector. Public expenditures of almost 40% of GDP exceed comparable levels in the EU and particularly in fast growing middle-income countries (in the range 12-20% of GDP). Fiscal pressures exacerbate under the legacy of large and inefficient public sector.

Fiscal consolidation squeezes capital expenditures (3.1% of GDP). Low level of investment is connected with high unemployment (17.3% in Q3 2015) and small contribution of industrial production to GDP (22%). A downward trend is visible, but a heated debate over the impact of the new sample from 2014 on the unemployment decrease is still present. When it comes to labor, things do not look promising. Quantity of labor force cannot be the principal driver of growth due to the absence of demographic rent. Birth rate is low (around 0.9% in 2014) and fertility rate is far below the sustainable level (1.42 compared to 2.1). Consequently, the average age is high (more than 43 years).

To conclude, despite fiscal consolidation, without structural reforms and adjustments in monetary system it

is impossible to convert macroeconomic stability measured by relatively balanced budget, price and currency stability into tangible and sustainable performance improvements.

Moreover, the country with public debt approaching to 80% of GDP is not a sovereign country in the fullest sense. It is in the hands of lenders. This is relevant for all countries, but particularly for small ones with a delay in economic development.

Impotent and out-of-tune economy has no core advantages, nothing that is strong enough to counter the gravitational pull of universal transformative global discontinuity. In addition, such an economy is not attractive to investors (particularly foreign) and thus unable to provide foreign direct investments as alternative source of macro deficits financing.

Contrary to Serbia's experience, after 1990 the EU enabled a great majority of CEE economies in transition to carry out multipronged reforms and achieve a robust growth in the context of low and stable inflation as a core benefit of the liberal economic policy platform. Owing to macro-fiscal and structural reforms, these economies turned from regression to progressive trajectory, catching up and attaining income convergence with the EU.

In the same period, Serbia failed to achieve catch-up and convergence due to the burden from the past and wrong experiments that failed to tackle core structural imbalances. With confused geopolitical mission statement, wrong strategic goals and reform tools, it was impossible to achieve catch-up and conversion effect. Shocks for the economy are evident after recent understanding of unsustainability of previous reform achievements. Downside risk persists, maybe even increases, because old risk stressors due to previous structural imbalances largely remain and new risk stressors inspired by new global normality and industrial revolution 4.0 come to the fore.

Serbia has cumulative delay from sustainable and inclusive growth, and from the growth that respects sustainability of the nature. To meet the circular economy requirements, it is necessary to undertake tremendous investment in infrastructure, waste management as well as strategic adjustments in many industries with low rate of return (low attractiveness for private investors).

In a rapidly changing environment an economy with such performances is simply not sustainable. What Serbia disparately needs is multipronged reforms. The escape from crisis calls for adopting a very systematic approach, based on various macro-fiscal reforms in concert and guided by new industrialization as the core idea for structural reforms as well as related adjustments in monetary policy.

## The EU at a tipping point

The EU is in some form of regression since the beginning of 21st century in terms of population and share in global GDP. Since 2008, the EU has been in positive transition from recession to prosperity, but with many hidden fractures on the road to recovery. The new normality entails quantitative easing and negative interest rate policy, on the one hand, and growing social costs due to refugee influx and terrorism, on the other. The previous factors reflect heightened downside risks.

Money printing of such magnitude, due to quantitative easing, has never been done before. Fresh money is being used predominantly for recapitalization of banks, state budget, and financing of mergers and acquisitions. Furthermore, the fact that net profit from the organizations with positive profitability is being used mainly for share repurchase and bonuses leads us to a conclusion that the EU economy crumbles mostly due to the absence of strong drivers of growth. Monetary expansion without strong drivers of growth leads to speculative bubbles. New bubbles combined with high financialization of the economy and growing concentration of wealth inhibit investments in real economy and job creation.

Jobless recovery means that the EU economy is, actually, in a fragile recovery mode. In 2015 growth rate (0.8%) slumped more than originally forecasted (1.6%). The forecast for 2016 is 1.8%, which is again bellow a sustainable growth rate (4%).

Slower growth in the EU is the major external risk to Serbia's recovery. Without a robust growth, expansionary monetary policy may trigger inflation and generate spillover effect from the Eurozone to the periphery of Europe, including Serbia.

Finally yet importantly, the great migration of people and terrorism agonize politicians and ordinary people in every corner of the Europe, influencing low economic expectations and growing risk aversion as well as social costs. In the most optimistic scenario, if refugees integrate into labor markets, the impact on GDP would be positive, but not significantly. However, there are many risks in the roadmap of implementation of this scenario.

Radical proposals for restructuring the EU, like Brexit and constitutional reform toward the three concentric circles of the EU, strongly challenge its functionality. Unfortunately, refugee influx has further deepened old fractures in relations between nations, including the fragile regions like the Western Balkans, increasing costs of EU mediation.

## Where does Serbia stand in the quest for a new growth model?

Wrong privatization strategy and economic policy inspired exclusively by price control implemented via costly tool of inflation targeting provoked distortions in economic fundamentals (high cost of capital and really appreciated local currency). Before the *Great Recession*, such macroeconomic fundamentals shaped the performance of real economy. When demand was squeezed, highly indebted businesses were "under water" in terms of solvency. Losses, bankruptcy and downsizing provoked contraction in real economy as well as deterioration of capital adequacy in financial sector.

Profitability of the Serbian economy measured by ROE after 2008 is in negative territory, with the exception of 2011 [17]. *Malinić et al.* [16] identified 73.2% increase in cumulative losses in the in the period 2008-13. Additionally, declared net losses were higher than declared net income.

Energy is the largest sector of the real economy. A deeper insight into financial health of energy companies reveals an enduring legacy of operating inefficiency [27]. Combining previous with the magnitude of capital leads to negative yield. For example, despite a steady growth in revenues in the period 2008-14, the core company from the industry, Electric Power Industry of Serbia, recorded even negative operating profit (see Table 3). Moreover, in the years when ROI was in positive territory, it was not enough to compensate for high cost of capital.

Banks are in the crisis of profitability and liquidity, too. A diagnostic study financed by the IMF reveals that banking sector is depressed not only due to poor asset quality, but also due to a high level of non-performing loans. According to the World Bank [29], the share of non-performing loans in total gross loans amounts to 22.8%. According to the NBS, this share is a bit lower and accounts for 22%. The more disturbing fact is that the previous indicator is steadily getting worse year after year (from the level of 18.6% in 2012). Moreover, the adjustments on the equity side owing to erroneous practices from the past will additionally increase risk exposure in banking sector.

In 2014, the level of losses, particularly from the real economy, dramatically rose. In real economy, more than 30% of companies that submitted financial statements reported losses. Precisely, 31,402 loss-making companies reported EUR 4.40 billion loss. Table 4 provides a deeper insight into different aspects of the problem. In terms of the size of the company, the biggest share in total number of loss-making companies goes to micro companies (95.11%). Yet, the large companies, participating in total number of companies with only 0.35%, generated 44.57% of total loss. Yet, the biggest share of loss is declared by limited liability companies (57.69%). Situation is not encouraging regarding the origin of the loss-making companies, given

**Table 3: Financial performance of Electric Power Industry of Serbia, 2008-14 (in RSD thousands)**

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|---|
| Growth rate | 20.32% | 8.01% | 8.50% | 12.38% | -0.02% | 21.04% | 1.89% |
| Operating margin | -6.83% | 7.23% | 8.15% | 6.16% | -3.07% | 15.12% | 15.14% |
| EBIT | -24,225,612 | -12,473,804 | -4,444,829 | 23,286,069 | -47,704,062 | 45,956,303 | 69,212,978 |
| Net cash flow | 818,174 | 2,444,378 | -2,608,072 | -131,613 | 7,538,725 | 95,761,151 | 42,113,421 |
| ROIC | -1.41% | 1.67% | 2.08% | 1.74% | -0.40% | 2.96% | 3.03% |

Source: CUBE Risk Management Solution and authors' calculation

that 88% of companies generating 77% of total loss are in the hands of local capitalists.

Losses erode equity and increase risk. In 2014, the share of loss in equity accounted for gravely risky level of 30%. Therefore, such a magnitude of losses is dangerous threat to fiscal balance and sustainable development. In addition, the lesson learned from the past is that there is no possibility to realize big foreign investments with small (and constantly squeezed) domestic capital base. The preliminary data for 2015 shows that situation is worsening. The level of debt is rising, notably in financial sector.

Changes in external environment also threaten Serbia's position because it renders investment in strategic adjustments less likely. In a time of profound changes new and rather unknown risks emerge in real time. On the other hand, the old well-known risks become even more interconnected. As a result of rising interconnectedness, global risks are internalized in new ways and their reach covers more economies, more institutions, and more people [30].

The beginning of the year is always a good time to consider the key risks with growing exposure. Risk universe at the beginning of 2016, according to WEF [31], is presented in Figure 2.

Figure 3 shows that the global economy faces two biggest risk stressors: climate change and forced migration. The last year was the warmest year on record, influencing hectic weather full of extremes throughout the planet. The number of displaced people around the world is 50% higher than after the WWII. The force of nature, as well as human activity, causes these destructions. Climate change and forced movements of people amplify geopolitical risk.

Inside the cluster of economic risks, the most important risks are dramatic fall in prices of all kinds of assets, structural changes in Chinese economy (from export driven to consumption driven economy) and consequent shift in global demand, particularly for commodity prices, along with growing recessionary pressure in the EU.

The lasting threats that bring along the myriad of risks are cybercrime and terrorism. Cyberspace is of rapidly growing importance as a source of risk due to the spillover of geopolitics into economy, wars, refugee influx, etc. In addition, massive digitization increases exposure to cybercrime, both in terms of probability of its occurrence and its potential impact. Discontent could also be intensified by the dynamics of information sharing typified by social media. More than 30% of the global population now uses social media platforms. That network is a platform for creation of unrealistic expectations and promotion of extreme ideologies and methods for their implementation, including terrorism.

What are the business options in the world of ever rising interconnected risks? Experts argue that investments

**Table 4: Loss-making companies in 2014**

| Company | Nomber of loss-making co | Loss in mil. EUR | Share in total number | Share in total loss |
|---|---|---|---|---|
| Size | | | | |
| • Micro | 29,865 | 968 | 95.11% | 21.90% |
| • SMEs | 1,426 | 1,480 | 4.54% | 33.48% |
| • Large | 121 | 1,970 | 0.35% | 44.57% |
| Legal form | | | | |
| • Joint-stock | 767 | 1,189 | 2.44% | 26.90% |
| • Limited liability | 25,732 | 2,550 | 81.94% | 57.69% |
| • Public utilities | 120 | 543 | 0.38% | 12.29% |
| • State-owned | 181 | 23 | 0.58% | 0.52% |
| • Private | 4,863 | 104 | 15.49% | 2.35% |
| • Other | 36 | 10 | 0.11% | 0.23% |
| Ownership origin | | | | |
| • Domestic | 27,663 | 3,406 | 88.09% | 77.06% |
| • Foreign | 3,739 | 1,014 | 11.91% | 22.94% |

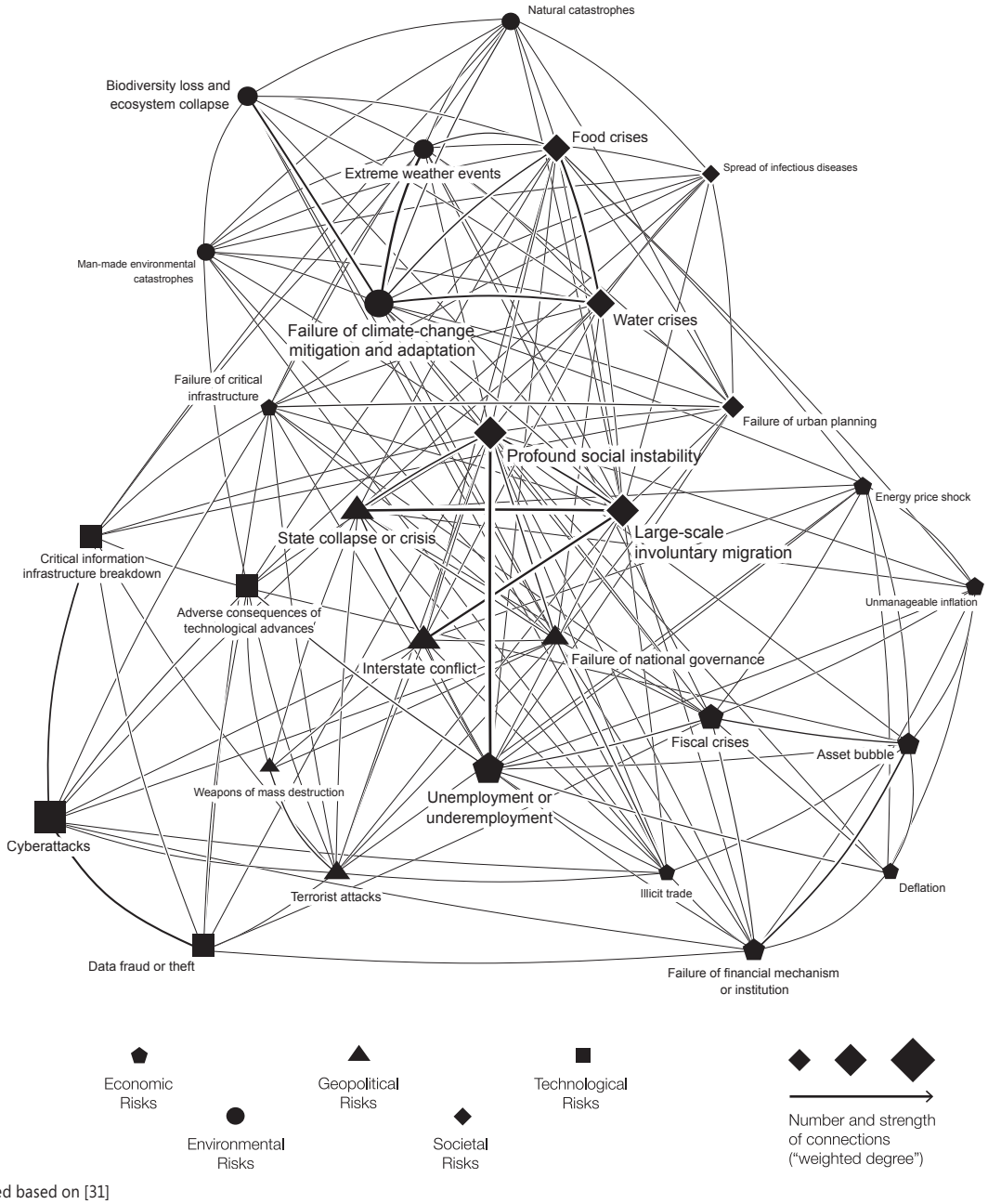
Source: CUBE Risk Management Solution and authors' calculation

in the circular economy (green technologies, renewable energy, etc.) and infrastructure have already risen to the top of the priority list [24]. The role of the state in those investments as regulator and investor is indispensable. This fact further amplifies the significance of a wise and well-directed industrial policy.

Key risks from the global universe are not evenly distributed. The EU, as Serbia's near environment, predominantly faces the risks of high indebtedness and forced migration as a result of crawling economic growth and becomes even more vulnerable to emerging risks in Asia, political conflicts and terrorism in the Middle East and energy price risk in the Far East.

Rapid advances in cyberspace technologies and their impact on economies and societies represent the source of risk *per se*, because they are challenging the competitiveness of the most viable competitors and their business models and hitting the labor force as neutron bomb. Without intelligent integration with physical systems, new ICT technologies can create deflationary pressures on economy. On the other hand, investment in ICT, sometimes in bizarre fields like games and space

**Figure 2: Universe of risk stressors, 2016**




Source: Adapted based on [31]

tourism, are irrelevant to sustainable and inclusive growth. Growth in consumption of such things, coupled with decline in generated revenues, leads to fall in output. Deflation combined with output gap is a dangerous combination.

How does a universe of risk stressors affect Serbia? The answer is: strongly and destructively. However, each national economy exists for a reason. Achieving the mission means transformation of Serbia's economy in pleasant place for investment and decent place for work and life. In the previous analysis we have learned a lot about what went wrong and what would be an adequate policy response to main internal and external challenges.

Earning power of almost all sectors in economy does not provide enough space for reinvestment of profit inspired by right repositioning towards leading trends in technology and market. In addition, the economy has not enough liquidity to service its debt and to cope with emerging risks factors due to new normality of global economy. When economic reforms are reduced on fiscal consolidation, business and monetary side of reforms stay in "wait and see" mode. Moreover, hard budget constraint on macro level is under the pressure of soft budget constraint on micro level (losses). Tacit liabilities and losses, along with repayment of the previous debt strongly attack fiscal balance as a major reform achievement in 2015 (precisely in first three quarters of 2015).

In strategizing about Serbia's future, the first proposition should be: system must be changed from the fundamentals. Formulation and implementation of strategy is not a trivial skill because in a rapidly changing environment full of risk stressors there is no blueprint for the model of growth that must reach not only sustainability and inclusivity, but also conservation of nature as universal policy tenets.

In import and debt dependent economy, high financialization is counterproductive to sustainable growth. The orthodoxies governing the economy are so entrenched that we need breakthroughs to implement paradigm change in the theory of growth and economic policy platform. What the government must do is to remove the stigma of redundancies from institutional setting in order to stimulate output increase and business development.

It is not controversial that fiscal consolidation is a step in the right direction. The first component of macro-fiscal reforms, macro reforms in terms of state reform, restructuring of state-owned enterprises and privatization of "500+" group of enterprises is almost untacked. The economy is heavily depressed with the legacy of large and inefficient state sector. A negative profitability of state-owned enterprises and financial intermediaries is the main threat to fiscal sustainability. Reconciliation of fiscal stability and growth by carrying out the restructuring of public sector is a great challenge the Ministry of Finance is facing, as demonstrated by the latest update of the Fiscal Strategy [19].

With a difficult external environment and a burden of negative consequences of the previous misconceptions, in the long run Serbia could expect, at best, a gradual economic recovery. The IMF projections are 1.5% for 2016 and 2.0% for 2017. The government forecast is a little bit more optimistic.

Nevertheless, the growth of such magnitude is not enough for catching up with peer countries as well as for achieving income convergence with the EU. To achieve income convergence with the EU, it means attaining compound average growth rate of 6% until 2030.

Is this feasible? Yes, and no. Maybe, yes. To make the impossible possible, Serbia needs political leaders with the vision for new geopolitical positioning of the country and skilled technocrats to accelerate and redirect growth and, by doing so, to reignite income convergence with the EU. This is, maybe, the main economic reason for premature elections in 2016.

Saying that a balanced budget is the greatest achievement of the current government is a subtle compliment without going too far. For sustainable growth, three perspectives should be in concert (see Figure 3). First macro-fiscal, second business, and third monetary. Those three perspectives are inextricably linked. If one fails, they all fail.

## How can Serbia pull back from the brink?

Despite fiscal consolidation and significant improvement in macroeconomic fundamentals, in 2015 Serbia is still in self-fulfilling regression cycle. There are no strong drivers

of growth. It is a proof that the universal efficiency of the market is not applicable in a case of major macroeconomic imbalances like output gap. In such circumstances, market forces, particularly in financial sector, unleash recession fears instead of booming prospects. When monetary policy is focused exclusively on inflation (low and stable) instead of output gap (low and stable), and privatization is concentrated only on profit-making companies from the commercial part of state-owned enterprises as well as financial intermediaries, these measures are not sufficient for sustainable equilibrium. Without restructuring of natural monopolies and network technologies as well as loss making state-owned companies and in absence of adequate industrial policies for tradable sectors, such shallow reforms lead to the further deepening of old structural imbalances.

Regardless of the stage of economic development, strategic leadership is a prerequisite for the escape from the crisis. If you do not have a strategy, you are probably a victim of the inertia and context or a part of someone else's strategy. Interestingly, in the last 15 years, governments have released more than 130 strategies. None of them has been completed so far. The main reason for that is an erroneous core idea in transition.

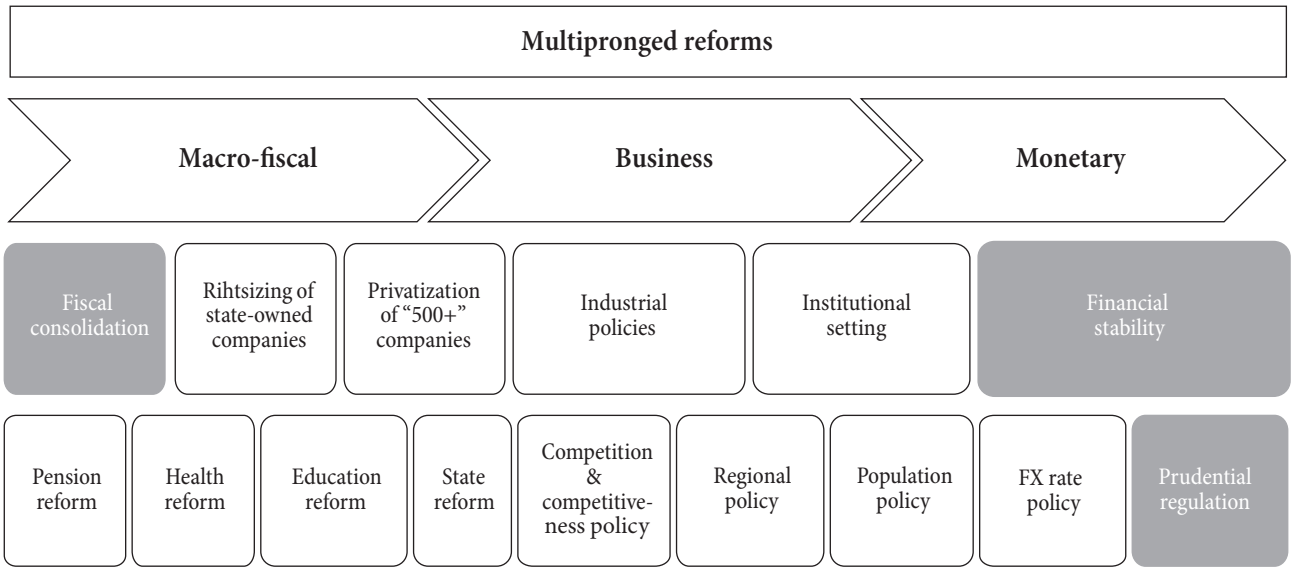
Paradoxically, the future of Serbia is not on the agenda. The cause for that is spillover of daily manifestations of structural imbalances. Previous analysis showed the great level of vulnerability of the economy. Moreover, today the future seems more uncertain than yesterday. It means that today surviving the future is more challenging. The main reasons are the emerging normality in socio-economic context and technological change, as we have already discussed.

In the time of radical structural changes, just sitting back and doing nothing is the greatest delusion, particularly for a small, impotent and out-of-tune economy with the delay in income convergence with the EU. What can political leaders in Serbia do with strategic leadership concerning the problems from the past and new global normality?

To escape a low growth debt trap Serbia's economy needs, more or less, a spectacular turnaround. In the age when the speed is a currency, today is the first day of the future. But, change does not come easily. Escape requires algorithmic thinking and harmonization of four big ideas at once.

1. *Geopolitical positioning.* Political leaders in Serbia must address geopolitical impact on economy instead of ignoring and covering it up. Buying the time when the state is in geopolitical stuck in the middle could be a dangerous fault line. Serbia is in the accession process to the EU, but moving on an elliptic trajectory. Serbia must find a sustainable balance between its own interests, on the one hand, and those of the EU on which it depends

**Figure 3: Multipronged reforms**



in numerous regards and towards which it is approaching, on the other. In order to do that, the political leadership must confront with major dilemmas and painful choices (Kosovo issue, refugees, etc.), and decide to decide. In order to do that, political leaders need to equip themselves with a broader perspective, expanded outlook and the will to settle open issues. The absolute must is achieving compatibility in institutional setting with the EU. In case of achieving previous strategic objective, the rhythm of geopolitical positioning goes to the backstage.

2. *Focus on relevant people.* Internally, Serbia must reorient itself toward people relevant for economic turnaround like technocrats, entrepreneurs and unemployed educated youngsters. Exclusive focus on social groups irrelevant for recovery like pensioners and employees in state sector is suicidal politicking. Populism never leads to sustainable economy. To do refocusing, Serbia must outdo itself. Land locked country should not be mindset blocked. Mindset is important, but mind setting is critical. In this process, the role of politicians is unavoidable. Spirit of conversation and battle of arguments between people with expertise and vision is a way to change Serbia. Selection of right people and spreading the spirit of optimism is political leader's primary obligation. Politicians always think that society changes faster than experts think it can.
3. *Multipronged reforms***.** In the following period, big bullet in economy will be a reconciliation of fiscal stability and growth through multipronged structural reforms. It is technocratic problem. In public finance, Serbia must continue with the policy of hard budget constraint, downsize public administration while reducing state footprint and eliminate the legacy of burdensome state-owned sector through restructuring and privatization. Public sector restructuring and corporate governance could help to get back state-owned companies from natural monopolies and network technologies on strategic course and enable them to operate with discipline and execute with excellence. Outsourcing of non-core businesses is reasonable restructuring alternative, particularly for the telecommunication business. In the business (or structural part) of reforms, the main priories are energizing reforms inspired by full compatibility of institutional setting with the EU and setting up industrial policies for tradable sectors as well related policies like competitiveness and competition policy, regional policy and population policy. By implementing industrial policies, Serbia will start new industrialization.
4. *New industrialization.* Objectives and initiatives for industrial policies should be in harmony with core economic policies (monetary and fiscal). If Serbia aims to continue with the austerity policy in public finance, industrial policies for tradable sectors should also be designed to prevent fiscal inflation. Monetary policy plays a supportive role in tradable sector expansion, by providing stability of the financial system and stable and competitive (means real) FX rate. Competitiveness improvement in tradable sectors is a key issue for industrial policies. Figure 4 shows the landscape of tradable sectors for industrial policies with three layers: policies enhancing comparative advantage, policies enhancing competitive advantage, and policies enhancing sustainable competitive advantage.

Each policy is designed to reach different strategic goals. With industrial policies in sectors with comparative advantage, it is possible to solve the problem of youngster's unemployment in underdeveloped regions, particularly in infrastructure, automotive, waste management and textile and fashion. As far as sectors with competitive advantage like energy, transport and logistic, and manufacturing are concerned, the focus should be on the financing side in order to keep pace with demand. The primary focus in industrial policies for sectors with permanent competitive advantage like ICT, organic food processing and health tourism should be to improve attractiveness of investment in these fields. Also, opening new frontiers for development requires coordinated approach

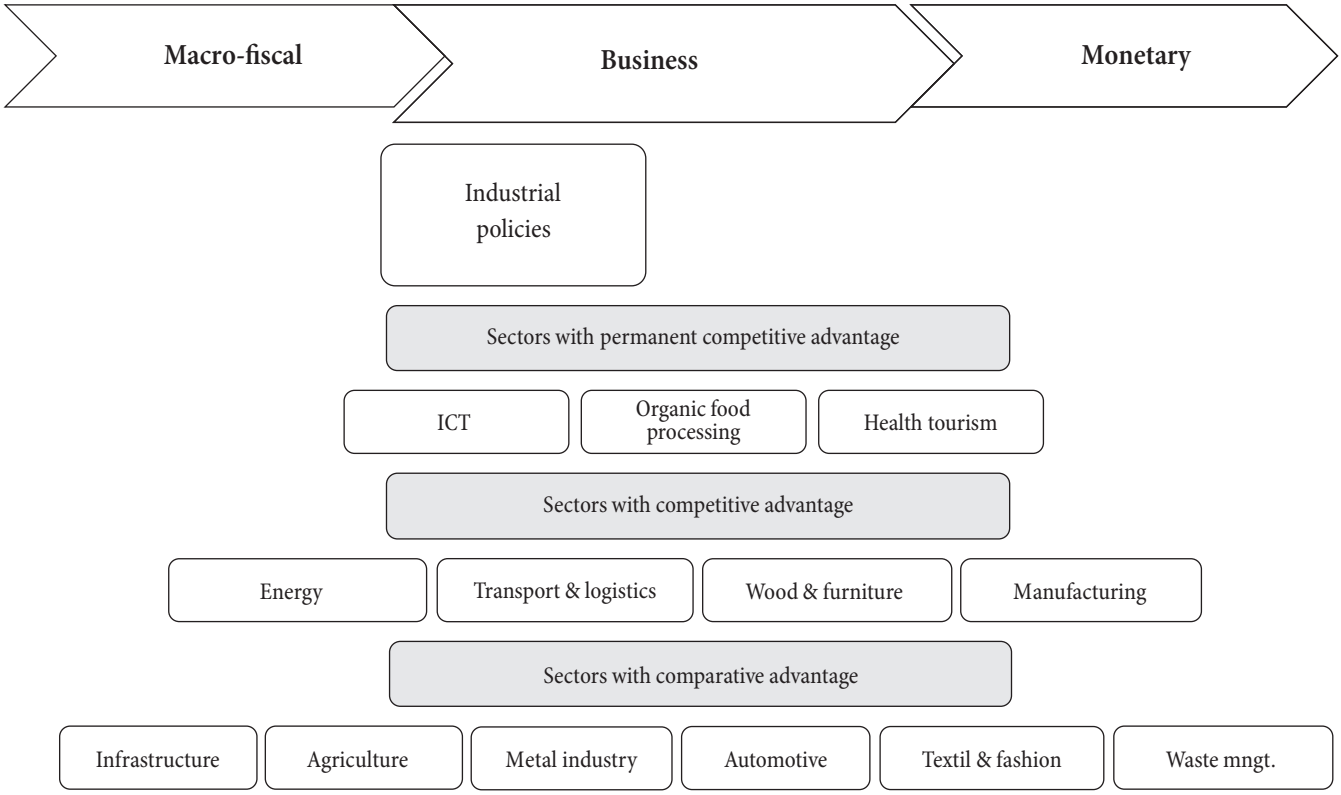
with science and education policies.

In the new industrialization, Serbia needs a clear definition of priorities. Top priorities include infrastructure and ICT. Infrastructure development is a matter of compatibility with the near environment, it is a cost of staying on the accession track. Model of financing and project management (in state hands) are critical components of industrial policy supporting infrastructure development. Debt financing through the loans of multinational organizations like WB and EBRD, building-operating-transferring and other versions of concessional financing, and public-private-partnership should be prevailing models of financing in that area.

ICT is top priority not only owing to its crucial role in this stage of development, but also because Serbia is endowed with increasing level of digital maturity and great diaspora. Mastering industrial revolution 4.0, with special emphasis on cyberspace technologies component, is possible with the capitalization of previous advantages. The purpose of this policy is to transform already existing comparative and competitive advantages in ICT into sustainable competitive advantage. This is, at the same time, an opportunity for making structural adjustments in real economy in accordance with challenges that industrial revolution 4.0 poses. In addition, penetration of export market niches is now possible thanks to the fact that consumers experience goes to omnichannel. Internet of things provides other advantages. Almost a billion of devices in the world are already connected. Internet of things allows companies to collect even more data and, by using those data, to create new values throughout value chain. The use of internet of things will be crucial in the analysis of big data. In addition, further development of this technology will create new methodological requests, and, in that way, new jobs, like big data experts and analysts. Virtual reality and digital experience revival is another challenge. Virtual reality has become more appropriate for mass production. It will become accessible on a large scale thanks to cheap open source tools, especially in the fields of marketing, communication, and human resource training.

Innovations are present in the financial sector too, and their wide spreading is further challenged by emerging concepts of cashless society and bitcoin.

**Figure 4: Tradable sectors landscape for Serbia**



Industrial policy for ICT to support the emergence of cyber-physical systems critical for rejuvenation of tradable sectors must provide the following measures: clusters capable for reinvention of business model of incumbent businesses, coordinated distribution of external funds for technological platforms development, easier access to finance for innovative SMEs, concessional financing, etc.

## Conclusion

Struggling to escape from the middle income trap throughout transition in the early 1990s, Serbia actually entered into a new trap, transitional recession. Unlike the other CEE countries, Serbia did not successfully accomplishe transition, catch-up and income convergence with the EU. Namely, Serbia is still in transition. The *Great Recession* 2008-present only deepened old fractures of the system.

Import and debt dependent economy has no capacity to keep up with changes, nor to achieve sustainable and inclusive growth including the respect toward the nature as well. As a consequence, Serbia is on an elliptic trajectory *vis-à-vis* the EU, toward which it is approaching. Unfortunately, the EU is also on elliptic trajectory due to a dominance of *al à carte* approach (the fiscal union, the banking union, temporary leave of Greece, Brexit, the EU in three concentric cycles, Schengen free of movement agreement revision, economic sanctions for Russia, etc.). Harmonization of two elliptic trajectories is crucial challenge for political leaders in Serbia.

But, neither the burden of misconceptions before and during transition, nor the challenges of new normality in global economy could be a plausible alibi for doing nothing and referring to invisible hand of the market. For political leaders, the economy should be the center of interests. Annulation of the output gap calls for the implementation of a very systematic approach based on the various reforms in concert and guided by new industrialization by industrial policies as the core idea. Multipronged reforms in terms of macro-fiscal, business (or structural), and monetary reforms are a way to survive the future. In the quest for a new model of growth, Serbia does not need to pass through the previous historical phases of economic development and related economic policy model, particularly neoliberal capitalism. The new model of growth (sustainable, inclusive and with the respect toward the nature) and related heterodox policy platform are promising choices. New concept offers a solution for coordination and innovation externalities. Combination of invisible hand of the market and visible hand of the state is logical choice for an economy with structural imbalances. Innovation externality enables following of technological progress initiated by industrial revolution 4.0. Implementation of cutting-edge technologies in amalgams of cyber-space and physical technologies in tradable sectors by industrial policies is the imperative.

Reforms, like every non-evolutionary change of the system, are the consequence of visible hand of the state. However, change without an adequate strategic vision is not possible. Strategic vision should provide the transformation of handicaps into advantages in the process of geopolitical positioning of the country and redirecting the national economy towards a future that reflects its own capabilities, values, and strategic objectives. To do this, we must understand the causes of our strengths and weaknesses as well as new context affecting opportunities and threats of our future. Internal environment should not be ignored, but external environment is critical. There has never been a time of greater opportunities, or the one of greater potential threats. With special attention, we must follow a strategic vision when thinking about drivers of disruptive innovations from cyber-physical systems that substantially shape competitiveness, while simultaneously striving for growth (sustainable and inclusive) and conservation of nature.

We have learned from evolutionary biology that it is not the strongest of the species that survives, but the one that is most adaptable to change. In industrial revolution 4.0, adaptation means adequate speed. In the new environment, speedy fish has eaten other fishes before greater fish manages to do so. In new age, speed is the currency.

Despite macro-fiscal reforms, without structural reforms and adequate adjustments in monetary system, it is impossible to transfer macroeconomic stability, measured by relatively balanced budget, price, and currency stability into tangible and sustainable performance improvements.

Structural reforms by implementing industrial policies dedicated to tradable sectors are urgently needed to solve the growing losses in almost all sectors of economy as well as to invigorate anemic growth potential.

Today the main challenge for any economy is ICT capital and related drivers like quality of labor and innovativeness. In Serbia ICT is a sector with comparative and competitive advantage. Also, ICT has great potential for sustainable competitive advantage through rejuvenation of incumbent industries in real economy, as well as improvement of services, including itself. Despite the fact that ICT is a fully-fledged tradable sector (import substitution EUR 0.3 billion and export more than EUR 0.5 billion), there is no adequate vertical industrial policy in this field, nor horizontal policies in complementary fields like education and science. Instead of using industrial policy to offer indirectly greater economic power and aspirations to technocrats and youngsters from the field, by doing nothing, the state is letting them leave. As a consequence, Serbia misses socio-economic driver inspired by reforms mindset.

Debt servicing and balanced budget require annulation of the output gap through tradable sector expansion. In strategizing about Serbia's future there is no single shot. The big picture of the context, feasible vision for recovery, algorithmic thinking, and systematic approach in implementation reforms are crucial. Multipronged reforms are needed to stop regression and reignite catch up and income convergence with the EU. The EU-like institutional setting, business-friendly mindset of politicians, industrial policies for tradable sectors, vibrant system of education, science focused on most fertile areas for improvement, and sustainable health care are prerequisites for new investments, both in private and state sectors. The rest is "business as usual" story.

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