Republic of Serbia

FISCAL COUNCIL **17 June 2024**

PUBLIC INVESTMENT POLICY IN SERBIA: SITUATION ANALYSIS AND RECOMMENDATIONS FOR POSSIBLE IMPROVEMENTS

Summary:

Public investments are currently one of the most important topics of Serbia's entire economic policy. In the past three years (2021-2023), unusually extensive amounts of budgetary funds were allocated for public investments, and a similar economic policy will also continue in the years to come. The current spending on public investments is about 5 billion euros per year, i.e. over 15% of total public expenditures, which is the third largest budgetary expenditure, right after pensions and public sector wages. From the international perspective, the level of public investments in Serbia has exceeded 7% of the GDP, which is definitely the highest level of public investments in Central and Eastern Europe (CEE), and a rare phenomenon on the global level. However, citizens of Serbia are poorly informed about this phenomenon – they are not getting any insight into the economic or social justification of the large-scale government investment projects, with little or no explanation of their costs, while the process of selection of priorities and contractors for the works lacks clarity and transparency. Such a situation has called for the Fiscal Council to draft a separate study on the topic of public investments in order to give the taxpayers an objective insight into the most important issues that have lacked clarification so far, as well as to offer recommendations to the Government for improving its current policy in this field.

A strong increase in public investments has not been achieved through a systematic approach, which was something that the Fiscal Council was recommending in 2015. This is already the second time that the Fiscal Council is drafting a comprehensive study of public investments. Our previous study was the analysis titled: "Public Investments in Serbia: Supporting Growth in Fiscal Consolidation", which was published in 2015. At that time, the burning issue with public finances (and economic policy) was different than it is now. Since, in that period, the government made insufficient investments into infrastructure projects, public investments were at an untenably low level of below 3% of the GDP. The 2015 analysis revealed that the main reason behind such a low level of public investments was a marked inefficiency and slowness of the public administration in all phases of the implementation of investment projects – from initial selection, planning and preparation of the works all the way to their implementation. Hence, the Fiscal Council's recommendations at the time were along the lines of addressing the identified issues (while increasing the transparency of all the procedures). The IMF made similar recommendations in their analysis from 2016, where inefficiency in carrying out public investments was also identified as the major problem in Serbia. This was why the IMF recommendations were also along the lines of improving the institutional (and procedural) mechanisms for public investment management in the planning,

allocation and implementation phases. However, what finally happened in Serbia is that since 2018, the Government has managed to find a different path towards (an indisputably necessary) increase in public investments. However, the path that the Government chose to pursue essentially failed to include systematic, institutional improvements in public finance management or an increase in transparency.

The growth in public investments, which has occurred since 2018 and culminated since 2021, can be divided into four factors that have been uncommon in other CEE countries.

- The ***first*** and foremost factor is that since 2018 the largest number of infrastructure projects has been implemented under the so-called special procedures – with partial or full exemption from the general laws and regulations governing public procurement, expropriation, planning and construction. Apart from bilateral agreements with other countries (whereby domestic regulations are circumvented to a higher or lesser extent), separate domestic laws were passed, such as the 2019 *lex specialis* on the Morava Corridor or the 2020 *lex specialis* on an entire group of "infrastructure projects of importance". We should also mention the 2019 Regulation on Capital Project Management, which, in addition to the foregoing, also left room for exemption of the projects designated by the Government as the projects "of particular importance" from the processes of identification, pre-selection, strategic importance assessment and readiness of project documentation. A similar and most recent example of this is the *lex specialis* passed in late 2023, which allows for the EXPO 2027 Project, including the National Stadium and Accompanying Infrastructure, to be exempted from the standard procedures. Such a large number of exemptions is a complete departure from standard international practice.
- The ***second*** important factor is a strong growth of investments in the security sector (the army and the police). These investments that primarily refer to armament and equipment are also exempted by law from the standard procedures of public procurement, selection, etc. Thus, in the period between 2018 and 2023, the investments in the security sector were increased to about 1% of the GDP on average (as compared to the previous decade when they commonly stood at 0.2-0.3% of the GDP).
- The ***third*** factor includes emergency investments in health care, which were particularly stepped up during the COVID-19 pandemic. Their volume was tangibly higher than in other CEE countries, probably because Serbia's health care system was more poorly equipped to deal with the crisis than the health care systems in other CEE countries. A considerable part of these procurements bypassed the standard procedures (tenders, etc.), while information about the costs and purchased quantities, etc. were treated as confidential to the extent that went beyond the limits of international standards.
- The ***fourth*** factor includes major purchases of commodity reserves, as well as energy reserves, which were most pronounced in 2022. Since this increase in the reserves can be largely associated with the energy crisis, its nature is temporary.

The shift in public finance management (by circumventing the standard procedures) initially brought about mostly positive effects. Objectively speaking, it is highly unlikely that the aforementioned Fiscal Council recommendations from 2015 (as well as the IMF ones from 2016) would indeed have led to such an explosive growth in public investments in Serbia as the one we have been seeing since 2018. The processes of institution-building and improving the performance of the public administration take a long time and their initial positive effects can only be expected in the mid-term (and usually their subsequent progress is gradual). Hence, the solution that the Government has found – to accelerate the implementation of public investments by circumventing the standard procedures – may be assessed as pragmatic, at first sight. As a result, by 2021 Serbia managed to boost the execution of public investments and then maintain them at the level as high as 7% of the GDP, which is an appropriate level of public investments given that the country's basic infrastructure is in a very bad shape. The achieved increase in public investments had a positive impact on economic growth, employment and private investments (particularly FDIs), as well. It is noteworthy that this enhanced cycle of public investments is taking place under the conditions of general fiscal stability, i.e. it has neither led to excessive borrowing (as was the case e.g. with Greece in the early 2000s) nor has it increased the risk of macroeconomic instability.

Circumvention of the procedures has accelerated project implementation and 'lifted the deadlock' on some projects whose implementation had been delayed for years. The construction of the Corridor 10 is a very clear example of how weak the government's capacity used to be when it came to institutional implementation of some previous public investments. One of the problems we have identified while analyzing this project was the fact that some bidders that had applied to the tenders offered the so-called dumping prices that were unrealistically low. It was only after the tenders had been awarded to them that the additional costs and disputes with the government started to arise, causing delays in the works and major instances of exceeding of the initial deadlines. This example clearly shows how the government's decision to systematically circumvent the procedures (which were highly inefficient at the time) suddenly got rid of these anomalies and accelerated and boosted public investments. By bypassing the procedures, some projects whose implementation had been on a back burner for years, were re-initiated. A good illustration for this is the Morava Corridor (the Pojate-Preljina motorway), whose implementation actually did not start until 2019, when the *lex specialis* was passed for that very purpose even though the planning process formally began back in 2010. Up until late 2018, zero payments from the state budget had been made for this project and then, four years later (in the 2019-2023 period), they cumulatively reached almost 1.2 billion euros. A similar example is the Hungarian-Serbian railway project, which is mainly about modernizing the railway line linking Belgrade and the Hungarian border. Although this project was formally launched ten years ago, most of the works, along with their financial implementation, were carried out only after the *lex specialis* was passed in 2020, whereby it became "the project of particular importance for Serbia". Thus, of the total amount of almost 1.3 billion euros, which was paid for this project from the state budget in the 2017-2022 period, the payment of as many as 1.1 billion euros was spent in the period between 2021 and late 2023.

However, the new predominant model of public investment management features numerous weaknesses and risks. We have categorized these problems as follows: 1) excessive arbitrariness in project selection leads to implementation of investments of disputable justifiability (such as the vaccines factory, sports facilities), while neglecting many other important sectors (such as environmental protection, education) at the same time; 2) "accelerated" projects are characterized by questionable costs and pronounced, subsequent, upward adjustments of previously agreed prices of the works; 3) as a rule, the borrowing terms for large-scale projects being implemented under non-standard procedures are less favourable than for those implemented under the standard procedures; 4) when standard procedures are circumvented, this gradually reduces the positive economic effects of public investments on economic growth and social well-being (poor choice of projects, excessive hiring of foreign companies to do the works, etc.).

Weaknesses in managing the investment policy outside the regulated institutional and procedural framework are becoming increasingly pronounced over time. As mentioned before, to all appearances, the original motive for circumventing the standard procedures was to 'lift the deadlock' on the projects that had been delayed for years due to the state's inefficiency – and, at first, this practice did work without major adverse effects. Namely, when it comes to the earliest projects that were implemented in this manner (e.g. the Corridor 11 project to Preljina), the issue of justifiability of the selected projects was not raised and the objective costs of the works, construction time and other most important parameters were well-known in advance and mostly complied with. However, the investment management outside of the system was not just limited to individual exceptions that would serve to bridge the gap until the domestic institutions have been improved. Over the past five years, this has turned into a widespread practice when it comes to the implementation of the state's biggest investment projects. In turn, as an imminent reflection of this, the investment policy has been plagued by increasing omissions. For example, there is a growing number of initiated or planned investments of questionable justifiability, which can hardly be categorized as priorities, while poorly prepared projects increasingly result in the instances where the initially planned price is later increasingly exceeded. On top of it all, some old problems are starting to resurface, like many years of delays in finishing the projects. To put it simply, the current model of public investment implementation lacks long-term sustainability. This model has exhausted all of its positive effects and, if it continues to be pursued, it runs the risk of causing more damage than benefits soon.

Inappropriate sectoral structure of the capital budget

Due to the arbitrariness in project selection, the sectoral structure of public investments is not in line with the country's objective needs. Certain imbalances in the capital budget of the general government had existed even before the switch to the new model of public investment management. However, these imbalances were additionally deepened to a significant extent when the government predominantly started to rely on non-standard procedures for contracting and implemention of infrastructure projects. Excessive arbitrariness in the process of project selection has led to a situation where some sectors, like environmental protection and education, have been neglected without justification. Even within some of the sectors that are currently being heavily invested in, there are specific sub-segments that are neglected. One such case is insufficient investment in the network of local roads that is not being appropriately taken care of during the process of intensified motorway construction. The other side of too much arbitrariness in project selection is the draining of major funds towards projects of questionable justifiability, like some unproductive investments in health care, or investments in sports facilities.

In the field of transport infrastructure, the strong growth of investments since 2018 has mostly been focused on construction of motorways. Before 2018, public investments in transport in Serbia ranged between 1% and 1.5% of the GDP. Thereafter, this type of investments started to grow strongly, so Serbia ended 2022 with allocations for investments in transport that exceeded 3% of the GDP. By far the highest share of increased investments has been focused on motorways. This has contributed to the completion of the works on key routes whose construction was initiated a long time ago (like the Corridor 10 and a considerable part of the Corridor 11). A significant portion of these investments refers to a relatively large group of new projects that are still ongoing (the Morava Corridor, the Belgrade-Sarajevo and Preljina-Požega motorways, etc.). These investments have visibly improved the availability of motorways, which in turn has brought Serbia significantly closer to the CEE average. Serbia currently has approximately 1.1 km of motorways per 100 km^2, whereas the CEE average is 1.25 km per 100 km^2. If the plans and deadlines are accomplished in terms of the completion of the sections whose construction had already started, Serbia could soon overtake most of the countries in the region. This is one of the rare indicators in the field of infrastructure according to which Serbia is not considerably lagging behind the CEE countries.

Other parts of the road infrastructure, however, remain neglected and underdeveloped. Despite accelerated development of its motorway network, Serbia is still considerably lagging behind the CEE countries when it comes to the overall length of the road network – with only 52 km of roads per 100 km^2, as compared to the CEE average of 130 km per 100 km^2. There are obvious problems when it comes to the structure and quality of the available road network, as well. For example, less than 70% of Serbian roads was built with modern materials like asphalt and concrete, while 30% of them were made of obsolete materials (cobblestone and dirt roads) – which is a less favourable situation than in other CEE countries we have analyzed. Unbalanced investments in Serbia's road infrastructure were also confirmed by the World Bank findings, according to which as many as 25% of Serbia's rural population has to travel more than 2 km to get to the nearest road. By comparison, in most CEE countries, the same indicator has a single-digit value.

Although, in the long term, Serbia's public investments in health care match the CEE average, they were, all things considered, poorly targeted. Before the outbreak of the COVID-19 pandemic in 2020, the average level of government investments in health care, including those funded from both the health care system's own revenues and transfers from the state budget, had been at the level of the CEE average – around 0.3% of the GDP – for many years. However, there is a large number of indicators that show that these investments were not targeted equally well, given the fact that the public health care system in Serbia was tangibly less equipped, as compared to the regional average. We will use some indicators to illustrate this. Per 100,000 inhabitants, Serbia has available: a) 2 *CT scanners*, as compared to the CEE average of 2.4; b) 0.05 *PET scanners*, as compared to the CEE average of 0.15; c) 0.5 *MRI machines*, as compared to the CEE average of 1.3; and d) 0.3 *gamma cameras*, as compared to the CEE average of 0.5. Moreover, Serbia's health care system has less hospital beds per inhabitant, as compared to CEE, and a lower number of hospital stays although the morbidity rate when it comes to the diseases that require hospitalization is at a similar level as the CEE average. The argument that part of the investments in the health care infrastructure and equipment was not targeted well is also confirmed by numerous instances where the acquired equipment was not commissioned in a timely manner. For example, we had to wait for years for the dialysis machines donated by the Italian government to become operational; a diagnostic device was acquired that was not integrated into the standard treatment practice at the Military Medical Academy for more than two years, etc.

The health crisis in 2020 laid bare the systemic irrationalities in investment management in the health care sector. Public investments in health care exploded in the 2020-2022 period, following the outbreak of the global COVID-19 pandemic – and they were significantly larger than those in CEE. In that period, the average level of investments in health care in Serbia grew to 0.7% of the GDP, while CEE countries invested approximately fifty percent less than that (below 0.4% of the GDP on average). The government's swift response to the health crisis was definitely commendable, as the Fiscal Council has repeatedly pointed out in its reports. It is understandable that the investments in the health care system in Serbia had to be larger than those in other CEE countries because, when the crisis erupted, Serbia was more poorly equipped in terms of medical capacities and equipment. However, it remains unclear why these investments were characterized by such a high level of confidentiality that was uncommon in other CEE countries. This is why Serbian taxpayers were left without the answers to the questions of what kinds of equipment were purchased, at what prices, whether and where this equipment is being used, etc. Another question is whether the construction of new infrastructure capacities was the result of strategic planning or *ad hoc* decisions since some of the facilities that were built have not been put into regular operation yet. The 50-million-euro COVID hospital in Belgrade's suburb of Batajnica, as the largest medical facility that was newly constructed during the pandemic, was operational while the health crisis was in progress, but once the immediate crisis was over, it was not repurposed. Another even more indicative example is the construction of a vaccines factory. This facility was funded, *inter alia*, from the respective budgets of the Republic of Serbia and the City of Belgrade. Until this day, the factory has not been used for its original purpose of manufacturing COVID vaccines, nor has it been repurposed to manufacture “ordinary” vaccines or other medicinal products, while generating expenditures that are covered by taxpayers’ money.

Due to multiple decades of insufficient public investments in environmental protection and municipal infrastructure, the situation in this sector is so bad that it is critical. As early as in 2018, the Fiscal Council pointed out in its report that no other sector was lagging behind in such a crushing way like environmental protection, municipal infrastructure and water supply – not only in comparison to developed EU countries, but also to comparable CEE countries. In the period between 2005 and 2022, public investments in this sector were only 0.25% of the GDP on average, almost 50 percent less than in CEE. This is why Serbia is drastically lagging behind the rest of the region in terms of quality and availability of infrastructure in the sector of environmental protection and municipal and water supply infrastructure. Serious problems practically exist in almost all areas: one-third of the population lacks connections to the public sewage system; waste water treatment infrastructure is barely there (it is lacking even in the biggest cities, like Belgrade and Novi Sad); too much drinking water is lost in the water grid; the quality of drinking water is very bad in many parts of the country; the waste management system is plagued by huge, unaddressed problems; and, according to official assessments, as many as 3.7 million inhabitants are exposed to overly polluted air; etc. By neglecting public investments that are needed to address the aforementioned problems, as well as other problems in this sector, Serbia has become one of Europe’s most polluted countries.

A major lack of investments in the education system has persisted for at least two decades and this is the root cause of low quality of infrastructure in this domain. Since 2005, Serbia has continuously earmarked 50 percent – and sometimes even two thirds – less funds for the investments in the education sector (pre-school, primary, secondary and higher education) than CEE countries. Many years of lagging behind in terms of the level of investments has resulted in lower availability and lower quality of infrastructure in all segments of the education system. A useful illustration is provided by the fact that the preschool enrolment rate of children between the age of three and the starting age of compulsory primary education in Serbia is only about 69% - much lower than the CEE average of 88%. Such a gap indicates that Serbia has a considerable lack of infrastructural capacities in preprimary education. This makes it more difficult to achieve higher rates of early inclusion of children in education, which research suggests constitutes one of the key factors in determining the final outcome of the education system. The fact that Serbia is lagging behind can also be observed on other levels of the education system for which we were able to find comparable data – for example, it has much less classrooms and laboratories per 10,000 students than Romania, and Romania is another example of a country with insufficient investments in the education sector.

Growing inefficiencies of investments through non-standard procedures

The lack of control, coupled with the absence of tendering procedures, may increase the cost of investment projects in an unjustified manner – which may be the case in Serbia, as well. The new model of selection, planning and implementation of public investments is accompanied by lower institutional and procedural control, as compared to previous investments that were based on standard procedures. This lack of control can easily reflect in higher cost of new projects. Multiple international studies show that public works contracts in the construction sector are increasingly prone to and leave room for corruption.

Thus, a World Bank study from 2015 found a statistically significant link between higher costs of investment works and poor control of corruption. In countries with pronounced corruption, the cost of the works that were performed was systematically higher (corruption was gauged using the relevant World Bank's WGI indicator, according the which Serbia is quite poorly ranked). In addition to less control, circumvention of tendering procedures may also have an impact on higher prices of the works within the new model of public investments. The absence of market competition when contracting the works may lead to situations where the agreed cost of construction is not the most favourable one for the government. For this reason, the construction of motorways under the expedited procedure might result in a higher cost than it used to be when the tendering procedures were applied. There are certain indications that the increased cost of the latest projects may be associated with the practice of relying on non-standard procedures for far too long.

The most recent projects that are being implemented under expedited procedures are characterized by instances where the initially anticipated cost of the works has been heavily exceeded. The instances of exceeding the initially agreed cost, particularly for large-scale infrastructure projects, frequently occur in Serbia and developed countries alike. For this reason, it is envisaged in the international practice that the initial contract should already include a clause on permissible/acceptable level by which the initial price may be exceeded due to contingency costs, which may be up to 20% on top of the anticipated value of the works. According to the data from the European Court of Auditors, in the EU, the average rate of exceeding the initial project value was 23% in the 2000-2013 period. A similar conclusion in terms of exceeding the agreed price in the EU – to the tune of slightly over 20% – was drawn by other researchers, as well (*Cantarelli, Van Wee, Molin and Flyvbjerg*, 2012). As for Serbia, according to this indicator, until recently, the country has moved within the tolerance band for the infrastructure works done in accordance with standard procedures and initial (completed) projects that were carried out on the basis of direct agreement with the contractors. However, when it comes to the projects for the roads that are currently under construction on the basis of special procedures, they have been increasingly marked by several rounds of subsequent increases in the initially planned cost of the works. An example of this is the Morava Corridor (Pojate-Preljina). Under the 2018 Memorandum of Construction of the Morava Corridor, the maximum cost of 800 million euros was envisaged for this project. In late 2019, the Government contracted the 745-million-euro investment in the project, plus 20% for potential contingency costs (i.e. the maximum amount of 894 million euros). During 2023, however, another 700 million euros were added to the project under the new law, which resulted in the total amount of the loan for this motorway reaching 1.6 billion euros (and this might not even be the final cost). A similar example is the Belgrade-Zrenjanin-Novi Sad motorway. Under the 2020 Memorandum, the estimated value of the project was set at about 600 million euros, but, in the meantime, there has been a large upward adjustment of the project value, according to the plan provided in the state budget for additional borrowing of up to 1.7 billion euros for this investment project. It is true that, in the meantime, the costs of construction inputs have soared and there has even been some talk in public about changing the route of this motorway (including additional works on a parallel, non-commercial road between Novi Sad and Zrenjanin), but it is highly questionable though whether these factors can explain the increase in the initial costs by at least two times, as per the latest budget plans.

Projects that are implemented outside the standard procedures have less favourable financing terms, particularly if they are financed by loans taken from commercial banks. In order to answer the question of whether there is a difference between the financing terms for projects implemented under standard procedures and those implemented under non-standard procedures, we have made and analyzed a sample of road infrastructure projects. This analysis has revealed a systematic difference between the projects implemented under standard procedures, as opposed to those that are not. The interest rates on the loans that were used for financing the former group of projects were noticeably lower than for the latter group of projects. The main reason for this is that the road infrastructure that was constructed via standard procedures (mainly the Corridor 10) was financed from institutional loans (from the EIB, EBRD, IBRD). These institutional loans have favourable borrowing terms, i.e. their interest rates are considerably lower than market interest rates. The average interest rate for this group of projects was only 1.2% in the period from June 2009 through January 2024. By comparison, interstate arrangements (with China or Azerbaijan) have had somewhat higher interest rates, by 1-1.5 percentage points on average. Still, we cannot say that this group of projects has been financed under unfavourable terms so far. The most expensive group of loans for funding the construction of roads (outside the standard procedure) actually pertains to the most recent loans totaling over 600 million euros, which the government has independently taken from commercial banks (e.g. the one for the Danube Highway). The interest rate on these loans is as high as 8-9%. Although this can partly be explained by the fact that these loans were denominated in dinars, such borrowing terms are far from being favourable.

The worsening of borrowing terms for new investment projects is going to have serious budgetary implications. Generally speaking, Serbia has gone through three phases of getting the loans for financing large-scale investment projects. The *first* phase relied on institutional creditors (the EIB, EBRD, IBRD) and entailed strict compliance with all the regulations (compliance with rigorous procedures and supervision in accordance with high standards of these respective institutions). The interest rates and other terms of these loans were very affordable. The *second* phase included entering into arrangements with bilateral creditors. This phase was much quicker, but with somewhat higher interest rates. The *third* phase is happening right now, as the government's investment momentum can no longer be supported even by bilateral arrangements. This is the reason for increasing instances of borrowing on the open market in order to finance the most recent projects, which is by far the most expensive option. An illustration of this is the financing of the first part of the EXPO 2027 Project, including the National Stadium. For these purposes, the government has already issued eight-year bonds worth 150 billion dinars (almost 1.3 billion euros) at an interest rate of 7%. The payment of the interest rates on these bonds alone is going to cost Serbian taxpayers about 700 million euros, which is a huge expense. And this is not even the final cost since more borrowing, which will entail additional interest expenses, will be needed to complete the project.

Although the delays in the construction of roads have indeed become noticeably shorter with the switch to non-standard procedures, this kind of problems has again become very topical. As mentioned before, during the previous process of selection of contractors under the tendering procedure, the motorway construction projects in Serbia used to be characterized by major postponement of the deadlines to complete the works. The construction of all the sections of the Corridor 10 took considerably longer than initially anticipated, and the deadlines were sometimes postponed multiple times. The average delay in the construction of these sections was 3 years and 3 months. At first, the introduction of the new investment model via direct agreement with the contractors, significantly accelerated the construction of motorways. More specifically, the contractors managed to complete the construction of three sections on schedule (Ljig-Preljina, Surčin-Obrenovac and Ruma-Šabac), while the delays with other, already constructed sections were relatively tolerable in general. For the time being, the delays in the initial deadlines for this group of projects are 6 months on average, which is acceptable. However, one should emphasize that several sections that are currently under construction on the basis of non-standard procedures are already well behind schedule. These include Preljina-Požega (the initial deadline was by the end of 2021), the Morava Corridor (the deadline was 2022) and Kuzmin-Sremska Rača (the deadline was 2023). If this was factored into the analysis, the average length of delays in Serbia would exceed one year even in case of bilateral projects. What is even worse, the aforementioned projects with major delays are getting closer to the extent of delays that had plagued the initial deadlines for completion of the Corridor 10 (and they are more expensive, with less favourable borrowing terms). Therefore, this analysis shows that, in this case, the switch to the new method of contracting has indeed had positive effects in the beginning, but then these effects quickly started to fade away.

The economic implications of the current model of public investment implementation

Thus far, the strong increase in public investments since 2018 has had favourable implications, but they are slowly declining. Economic theory and empirical research show that public investments are the best quality type of government spending. Apart from direct impact on improvement of the availability and quality of general infrastructure, the positive impact of public investments on the country's economic development (the GDP, employment, etc.) is considerably higher than that of all other types of public spending (public sector wages, pensions, subsidies) or tax reductions. Hence, the strong increase in public investments since 2018 has undoubtedly had positive implications for the Serbian economy – something that is confirmed in principle by the available data, as well. However, the positive impact of public investments on economic development and social well-being can dwindle considerably if public investments are poorly managed. This specifically means that: 1) no investments are made into 'productive' sectors that can yield the highest multiplicative effects or into those sectors where the state of infrastructure is neglected the most; 2) foreign companies, foreign raw materials and foreign labour are excessively hired to carry out the works; 3) the investments are made into facilities of questionable justifiability and cost-effectiveness; and 4) the stipulated deadlines for completion of the works are not being complied with. The analysis shows that the aforementioned negative aspects of public investments have actually become ever so present in Serbia over the past years. Such trends, unless they are stopped, will undoubtedly decrease even more the positive economic effects that were achieved through the increase in public investments.

The available data points to a link between the increase in public investments achieved so far and growth in GDP, employment and private investments. The strong increase in public investments since 2018 has accelerated Serbia's economic growth rates by about 0.5 percentage points per year, according to our estimate. Namely, the increase in public investments was the main reason for the rise in the share of total investments in the GDP from 17.7% in 2017 to 24.2% in 2022, which has significantly improved the structure and growth potential of the domestic economy. The strong increase in public investments has also had a direct impact on major real growth of the construction industry. According to the data from the Statistical Office of the Republic of Serbia, the cumulative growth of Serbia's construction industry in the period between 2017 and 2023 was as many as 68% (the cumulative GDP growth in the same period was 22%). When it comes to employment growth, our estimate is that the expansion of public investments had a direct impact on employment growth by 25,000 people in the 2017-2023 period, also taking into account the additional employment in the related industries probably by almost 50,000 people (the overall employment growth in Serbia in the same period was about 300,000 people). Moreover, the data shows that the development and improvement of the quality of public infrastructure was an incentive for further private investments (particularly FDIs). Finally, we have found that the strong increase in public investments in Serbia since 2018 has not had an impact on systematic increase in fiscal deficit or public debt, which is also good.

However, the decline in productivity of public investments is getting bigger and bigger due to poor sectoral allocation. The positive economic effects of public investments largely depend on project selection. International research has shown that investments in some sectors in Serbia that are currently neglected (education, environmental protection) can be highly productive. Hence, from the economic perspective, these sectors should be given priority over less productive investments e.g. in football stadiums or procurement of armament and imported equipment. Economic theory and empirical research also confirm a declining marginal return on public investments. This basically means that further investments in new traffic routes ("Vožd Karađorđe", "Osmeh Srbije" roads) are not going to be even close to resulting in positive economic implications, unlike the effects of previous investments in the construction of the Corridor 10, or the effects that potential investments in environmental protection and municipal infrastructure, which is currently in a disastrous shape, could now have.

Insufficient heed is paid to long-term cost-effectiveness of the constructed facilities or the costs of their future maintenance. Economic effects of public investments also considerably depend on the manner of their future usage and maintenance. To that effect, some projects, like the aforementioned vaccines factory or the construction of local football stadiums (in Leskovac, Loznica and Zaječar), are highly questionable due to their very limited usage or no usage at all. Particular attention should also be drawn to the costs of future maintenance of the constructed infrastructure, which are not sufficiently taken into account. The analysis shows that the maintenance costs of only two or three sections of Serbia's motorways are currently adequately covered by revenues from road toll collection – the Belgrade-Novi Sad section (of the Corridor 10), the Belgrade-Niš section (of the Corridor 10), and the Corridor 11 section leading to Čačak. As the Public Enterprise "Roads of Serbia" is unable to cover the annual costs of maintenance of the road network from their own revenues (road toll collection), the difference is compensated by extensive subsidies from the state budget to the tune of 250 million euros each year. This begs the question of what would be the additional costs for the citizens of Serbia regarding the maintenance of the new sections of the motorways that are currently under construction or in the planning phase – particularly regarding those sections where the traffic is not expected to be very busy – and whether this is taken into consideration at all during the current selection of investment projects.

Excessive reliance on foreign contractors reduces the positive effects of public investments. In addition to the foregoing, the manner of implementation of public investments also has an impact on their economic effects. If public investments are implemented by foreign contractors, who hire their own labour, equipment and a considerable part of the materials – the effects on the Serbian economy are tangibly lower than in those cases where local labour and the supporting industry of construction materials and equipment are used. Apart from direct and short-term negative implications, there are also long-term implications of excessive reliance on foreign contractors. In previous times, Serbia (ex-Yugoslavia) used to carry out stepped up investment cycles, which were used strategically in order to grow and develop local 'giants' in the construction industry and this later enabled these companies to competitively export their services all over the world and bring profit to Serbia. To all appearances, this is not going to be the case this time around.

Main recommendations

The current model of non-standard management of the government investment policy has exhausted all its positive effects – and Serbia should go back to the regulated system in a controlled way. Our analysis clearly shows that the current method of selection and implementation of public investments has started to manifest its growing anomalies. Therefore, this method should be abandoned before it starts causing excessive harm to the state. The process of going back to the regulated system would have to be gradual, but consistent and tightly controlled. It would be irrational and probably even impossible to abruptly terminate or modify the initiated projects that are already being implemented on the basis of non-standard procedures. However, this does not apply to the new important projects that are going to be contracted in 2024. All of them would have to start to be implemented in full compliance with the Public Procurement Law, the Expropriation Law and the Capital Projects Regulation. Apart from internal reasons, the process of returning to the regulated system of public investment management is something that is *de facto* required by the EU. The European Commission has already clearly criticized the old Law on Special Procedures for Linear Projects that had enabled the exemption of such projects from the standard procedures. This law was assessed as not being aligned with the EU *acquis* as it had repealed the national public procurement regulations and awarded too much discretion in the selection of strategic partners via direct agreement.

It is necessary to immediately initiate reforms that would remove bottlenecks in the implementation of public investments under the standard procedures. Serbia definitely has major problems in the implementation of the existing laws on expropriation, public procurement, planning and construction, legalization, functioning of the cadastre, etc. – something that the Government has admitted itself on multiple occasions. To completely return to the regulated system of public investment management will be pointless until these bottlenecks have been removed. In other words, it would result in a low level of public investments, similar to the one Serbia had experienced before 2018. Therefore, the reform efforts need to immediately focus on the foregoing aspects of project implementation, in consultation with international and local experts from relevant fields. If there is a justified reason to do so, the reform process could also include possible amendments to the current regulations (but only within the framework of the EU *acquis*).

It is important to immediately publish the feasibility studies for all large-scale investment projects of the state. Circumvention of the general laws and regulations has diminished institutional control over the planning and implementation of public investments. This deficiency can be significantly remedied in a short period of time by increasing the transparency. This primarily refers to the publication of feasibility studies for all major projects that are currently active in the country. Under the applicable regulations, feasibility studies are mandatory for investment projects whose value exceeds 25 million euros (The Rulebook on the Pre-Feasibility Study and Feasibility Study) and, therefore, they should exist for all investments of public and professional interest. Feasibility studies are important because one can find therein relevant analytical data that demonstrates why the implementation of a particular investment is justified, including the description of the project options, the selected options (quantitative and qualitative multi-criteria analysis that takes into account spatial, environmental, legal, socio-economic and other solutions), technical analyses of the project options (where the technical feasibility of a project option is assessed against spatial solutions and estimated costs of the project), financial analysis of a project option (where the financial profitability and sustainability of the investment is determined), as well as the risk analysis, etc. Even though the development of these meaningful studies is required by law, they are currently not publicly available for almost any of the current projects.

It is necessary to consistently comply with the statutory obligations on long-term planning and regular monitoring of public investments – which is currently not the case. Under the 2018 Law on the Planning System, the Government was required, by 1 January 2020, to submit for adoption to the National Assembly the draft *Development Plan* for the period of at least ten years, which, in hierarchical terms, is the highest long-term development planning document. In line with the priorities stipulated therein, the next step in the process would be for the Government to adopt the *Investment Plan* for the period of at least seven years, containing all the planned investments in the areas of public interest – aligned with the mid-term economic policy guidelines (referred to in the Fiscal Strategy), spatial plans, local development plans, etc. The 2018 Law on the Planning System also stipulates that, upon expiry of each calendar year, the Ministry of Finance shall prepare an annual report on the *Investment Plan* implementation and submit it to the Government for adoption, while every three years it shall prepare a performance report – on the basis of which the need for review/modification of the plan can be identified. Hence, the applicable legislation in Serbia explicitly provides for an obligation of planned management of public investments, as well as regular reporting and performance measurement obligations. However, none of this has yet been implemented in practice. The ten-year development plan has not been adopted yet and thus no other subsequent step has been implemented. It was only in mid 2023 that the Draft Regulation of the Procedure for the Preparation of the Draft Development Plan was adopted, so the final development of the plan and subsequent documents is still pending even though the statutory deadlines to do se have long since expired.

It is necessary to halt the practice of excessive exemption of public investments from crucial parts of the pre-implementation phase of the project cycle. There are deficiencies in the current regulatory framework that should be addressed. This primarily refers to too much liberty granted to the Government under the Capital Projects Regulation. Namely, the regulation actually gives the Government a high degree of discretion in designating investments "of particular importance". Thereby, such projects do not have to go through the most essential part of the preparatory phase (the process of scoring and ranking such projects by their importance in comparison to other projects), but they are directly included in the priority list. In procedural terms, it is enough for the Government to issue a decision designating a specific project or a group of projects as the projects of particular importance, by invoking some bilateral (or multilateral) agreement, without any further rationale or elaboration of the essence of the project. Although, in October 2023, the Government passed a regulation that more closely stipulates the requirements and criteria for awarding the status of a "structure of particular importance for Serbia", these criteria are still too general and lacking clear quantitative terms. So, for instance, it may happen that a project that will "improve the local, regional or national economic development" or "improve the tourism potential of a local self-government" – which are all very vague qualifications – is granted a priority status. Our recommendation is that the procedure for awarding the status of the project of particular importance be made much more rigorous, i.e. this concept should be limited only to rare and extraordinary circumstances – it should in no way be used practically without any restrictions whatsoever. It would also be justifiable for the legislative branch of power to become more actively involved in this process, i.e. the procedure for awarding the special status to projects should also be subject to parliamentary debate.

Investments based on public-private partnerships can also bypass the most essential parts of the project cycle, which is something that should be better regulated. Public investments that are based on public-private partnerships (PPPs) are implemented under special regulations and so they can bypass the key provisions of the Capital Projects Regulation. There is no explicit obligation for these projects to go through the most essential parts of the preparatory phase (pre-selection of the project idea, analysis of the project proposals, preparation, readiness assessment, and selection) or the implementation phase (including the evaluation of the completed project). This facilitates another 'escape' from the single pipeline and allows such projects to enter the parallel flow. For the time being, the volume of the public funds that are invested in the infrastructure through PPPs is not large, but it has a tendency to grow. This is why PPPs should be included in the single pipeline as soon as possible and their transparency should be increased. This is important both for ensuring the efficient use of the taxpayers' money and for reducing fiscal risks. International experiences show that PPPs can be a good way for the state to deliver the infrastructure of appropriate quality, but also that in situations where PPPs are forged too easily, without doing thorough analyses in the earliest phases (long-term cost-effectiveness, comparison with alternative options under objective criteria), they are accompanied by a high risk of unforeseen budgetary costs.

Regular and transparent reporting, in line with good international practice, needs to be in place also during the course of the project. Major problems that may occur during the implementation of investment projects (like exceeding the initial cost of the project, deadlines, etc.) could be pre-empted and minimized with better and more transparent reporting. The examples of such reporting exist both in the EU and in the region. Bosnia and Herzegovina has recently put in place a practice of very transparent publication of data on the implementation of investments in the field of transport infrastructure. The website of the public enterprise "The Motorways of the Federation of Bosnia and Herzegovina" provides rather detailed (technical, financial) information on the status of individual motorway sections. In addition to the estimated value and funding sources, the degree of project implementation by phases (design, expropriation, construction) is also published for each section, along with remarks on the current status. This allows for the progress in the project implementation to be tracked on quarterly basis and checked against the planned deadline for construction. Moreover, the website not only offers detailed information on the status of the motorway sections that are under construction, but applies the same principle to reporting the data on those sections for which the tendering process is currently underway, as well as for sections whose construction is in the preparatory phase.