

# Monitoring Fiscal Risks in the National Economy

Mladenka Balaban<sup>1\*</sup> | Zoran Grubišić<sup>1</sup>

<sup>1</sup> Belgrade Banking Academy, Faculty for Banking, Insurance and Finance, Belgrade, Serbia

## ABSTRACT

Due to the materialization of various types of fiscal risks over the past years, Serbia has begun institutionalizing and developing fiscal risk monitoring. The lack of systematic monitoring of fiscal risks in previous years has led to difficulties in resource planning and poses a risk of unexpected budget expenditures, which distorts resource use and leads to suboptimal spending and compromised results and targets. Fiscal risks are short- and medium-term budget, financial or other reports or projections of public finances. The paper systematically presents the fiscal risks of each national economy with an emphasis on the World Bank project aimed at improving the monitoring of fiscal risks in Serbia. The paper presents four methodologies for monitoring different types of fiscal risks as well as the structure of some of these risks in Serbia. The paper presents a quantitative monitoring of fiscal risks, which is still developing in Serbia, in the context of the crisis and government borrowing. The paper points out the various fiscal risks that affect the budget of the national economy, as well as ways to monitor and reduce fiscal risks.

**Key words:** *fiscal risk, budget, public finance, economy, government, monitoring*

**JEL Classification:** E69

---

## INTRODUCTION

Any fiscal risk that materializes becomes a burden on the state budget and fiscal position, which is why a functional monitoring system is a key to maintaining the stability of public finances. In the Republic of Serbia in 2019, a (new) advisory project was launched by the World Bank, to support Serbia in further strengthening its resilience to fiscal risks and reducing its sensitivity to fiscal and economic shocks. With the increasing increase in the free movement of capital on the world market, countries have come to the position of competing with each other for the favor of economic entities, in order to attract as much investment as possible to their territory. (Marjanović D. 2018). The project also aims to help the Ministry of Finance to strengthen the regulatory framework, institutional capacity and coordination with other relevant actors to better manage fiscal risks. Internal risks, ie their materialization are a consequence of activities in the public sector, and the probability of their realization can be influenced by decisions and policies of the Government. Identifying the biggest fiscal risks that may affect public finances in the medium term is a starting point in better fiscal risk management. There are detailed data on certain fiscal risks and it is possible to identify whether and with what probability they will affect fiscal aggregates in the medium term. For others, however, there are not enough detailed data, but only their identification raises awareness of the possibility of deviations from the planned fiscal framework in the coming period. Fiscal policy should be kept in the hands of national

---

\*Corresponding author, e-mail: mladenka.balaban@bba.edu.rs

governments and that rules to avoid excessive deficits should be put in place. Those rules were considered necessary because governments' temptation to create budget deficits to absorb negative shocks in an EMU could lead to problems of sustainability of those deficits and to growing government debts. (Castro, Vitor. 2011).

The Ministry of Finance has a leading role in managing fiscal risks. As a key institution for medium-term macroeconomic and fiscal planning, budget formulation and management, it is important that the Ministry of Finance also takes an active part in establishing the institutional structure, in the context of normative activities and capacity building for fiscal risk management. Therefore, an organizational unit for fiscal risk management has been established within the Ministry of Finance, which includes strengthening the regulatory and methodological framework, capacity building, and developing technical tools and models necessary for monitoring and assessing fiscal risks. Finally, the result of these activities should be the identification and assessment of risks and proposing exit strategies, as an aid to the Government in maintaining the stability of public finances, which is a key goal of fiscal policy and one of the basic preconditions for more dynamic economic growth.

The unique methodology for monitoring fiscal risks includes four methodologies, namely:

- Methodology for monitoring fiscal risks arising from the operations of public enterprises;
- Methodology for monitoring fiscal risks arising from the activities of local self-government units;
- Methodology for monitoring fiscal risks based on litigation.
- Methodology for monitoring fiscal risks that occur as a result of natural disasters.

## **SOURCES OF FISCAL RISK IN REPUBLIC OF SERBIA**

The fiscal system and fiscal policy are a key factor in initiating the process of improving the competitiveness of the Serbian economy. That is why it is necessary to lay the institutional foundations of the fiscal system, while increasing the efficiency of the tax administration and creating transparent control of public finances (Marjanović D. and Domazet I. 2018). Financial support to state-owned enterprises through subsidies, activation of state guarantees and other funds was a significant burden on the state budget. A large number of state-owned enterprises (SOEs) in the past decade have needed financial assistance from the state due to losses and liquidity problems due to e.g. shrinking markets for their business or a large number of employees inherited from the socialist period. At the same time, the reduction in the number of employees brings with it social implications, regulated prices, low pay from other public sector entities, etc. Although in the last few years there has been a decrease in the level of state financial support through subsidies, in the period 2014-2018. subsidies continued to average around € 200 million, taking into account only public enterprises. Similarly, servicing the debt of state-owned enterprises from the state budget based on the activation of loans covered by the state guarantee amounts to approximately 300 million euros per year. In contrast, the total amount of state-guaranteed debt is about 1.4 billion euros. There are other ways of ad-hoc financial as well as indirect support to state-owned enterprises, such as tolerating tax deferrals and other contributions, which allows for the growth of arrears between state-owned enterprises as well as between state-owned enterprises and the public sector.

State Own Enterprises (SOEs) are a major source of fiscal risk in Serbia. According to the IMF analysis, in the last 10 years, state-owned companies have cost the budget about 1.9% of GDP annually. To help state-owned enterprises, the government relied on various mechanisms such as direct budget subsidies, state guarantees and debt collection, as well as various types of indirect support, such as enabling arrears among state-owned enterprises, tax delays and other contributions. In recent years, Serbia has made significant progress in implementing state-owned enterprise reforms to improve their operational sustainability and limit fiscal risks, while

significantly reducing state aid. However, state-owned enterprises continue to create significant direct and potential liabilities for the state.

**Table 1.** Historical damages from disasters in Serbia by type of danger according to the DesInventar database (2000–2020)

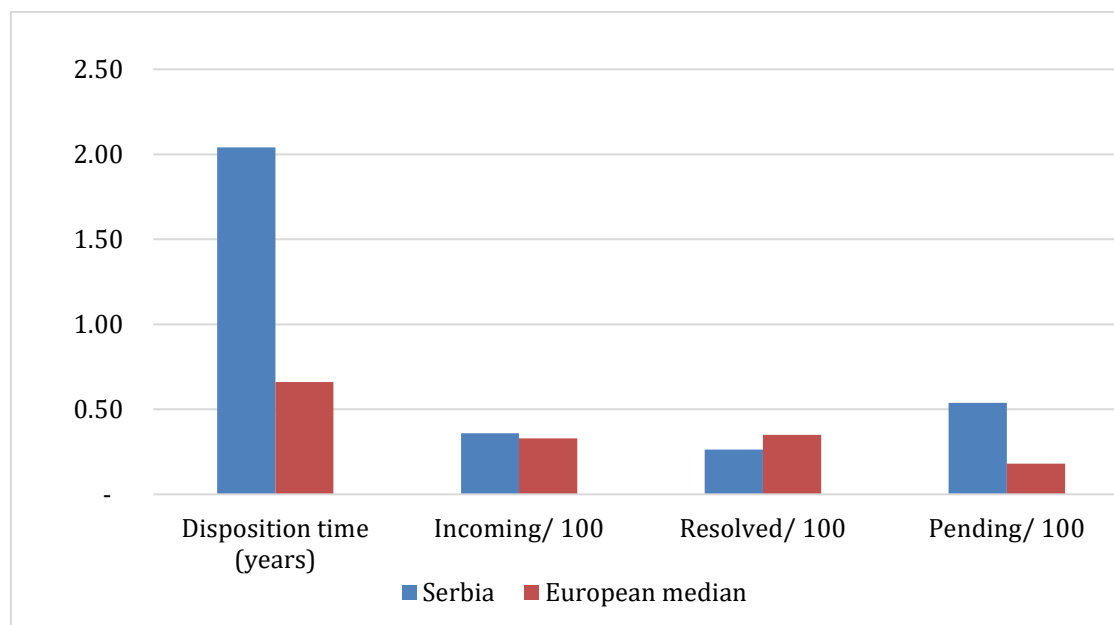
Type of hazard	No. of events	Total damages (RSD)
Drought	47	90,084,246
Flood	513	413,675,282,758
Earthquake	1	10,900,000
Landslide	65	35,743,523
Storm	26	77,785,082
Snowstorm	128	462,124,886
Fire	271	1,755,752
Forest fire	535	248,759,257
Hailstorm	224	5,514,847,334
Other <sup>a</sup>	159	1,734,878,303
<b>TOTAL</b>	<b>1.969</b>	<b>421,852,161,140</b>

Source: DesInventar Database, [http://www.desinventar.net/index\\_www.html](http://www.desinventar.net/index_www.html).

Therefore, Serbia is exposed to various types of natural disasters, including floods, droughts, earthquakes and landslides. In recent years, the country has been severely affected by disasters and suffered extensive earthquake damage, especially in 1999 and 2010. It is estimated that 30 % of the country is in danger of landslides. The total drought damage is estimated at \$ 500 million a year (1.4 % of current GDP), and floods are recurring across the country. According to data from the DesInventory database, almost 2,000 catastrophic disasters were registered in Serbia from 2000 to 2020 (Table 1). The total recorded losses in this period amount to about 421 billion dinars. According to estimates, the biggest economic losses in the period 2000-2020. years were the result of floods (responsible for 98 % of losses).

The next fiscal risk is connected with local self-Government (LSGs). Sub-national governments are a crucial element for achieving inclusive and sustainable development in Serbia and play an important role in providing public services. The new Public Administration Reform Strategy aims to increase the share of funds spent through LSGs (from 14.8 % in 2021 to 16.5 % by 2026) and to invest significantly in the capacity of public sector staff at sub-national levels. A new LSG development strategy is under development. LSGs manage and oversee local public enterprises as well as private contractors to discharge these and other functions. However, so far, many LSGs struggle with insufficient resources and capacities to provide the services under their jurisdiction and therefore may represent a fiscal risk for the central government. There are 174 local self-governments in Serbia. Local self-government units are municipalities, cities and the city of Belgrade. Despite significant differences in size and level of development, all local self-government units are organized in the same way and have the same competencies.

The risks associated with legal claims have been identified as one of the key fiscal risks in the Serbian context. In particular, in past periods, legal cases have been a significant source of fiscal risk for claims related to, among others, military pensions and old foreign currency savings. In this type of case, the claims seer government compensations, for which having timely information about their results and costs is crucial. Compared to other European countries, Serbia does not have favourable results when analyzing claims against public institutions. As shown in Graph 1, administrative cases take more than 3 times the number of days to be solved in Serbia (745) the European median (241). This leaves Serbia as the fourth country with a higher number of days to solve an administrative case, behind Malta (1,056), Portugal (927) and Italy (888).



**Figure 1.** Administrative cases – First Instance

Source: CEPEJ (2020). *European judicial systems: CEPEJ Evaluation Report* [https://public.tableau.com/app/profile/cepej/viz/CEPEJ-Questionexplorerv2020\\_1\\_0EN/QuestionExplorer](https://public.tableau.com/app/profile/cepej/viz/CEPEJ-Questionexplorerv2020_1_0EN/QuestionExplorer)

Serbia faces challenges related to the judicial performance in administrative cases when compared to other European countries: a higher number of days to solve a case, fewer solved cases per year, a high number of pending cases, increasing number of new cases. In general, those challenges can be summarized in two main aspects. On one side, the cases are taking longer to be solved (which reduces the number of cases that can be solved each year and therefore increases the backlog). On the other, there is an increasing number of new claims being filed before courts. Serbia has been experiencing a rise in the payments related to legal cases.

## METHODOLOGY FOR MONITORING FISCAL RISKS

### Monitoring fiscal risk in public enterprises

The methodology for monitoring fiscal risk in SOEs, have two aims. First, it suggests a monitoring process from the collection of SOEs data and identification of fiscal risks to the FRMD reporting on SOEs., international practices often recommend elaborating a matrix showing the list of PEs and the source of fiscal risks to government finances associated with each company, as shown in the table below. Again, the review and update of this matrix, usually performed annually, implies receiving regular information from other institutions, although the department in the Ministry of Finance for monitoring fiscal risk would be the only entity responsible for completing the matrix.

**Table 2.** The matrix of identification of PEs fiscal risks sources

List of PEs	Guaranteed Debt	Subsidies and other transfers	Restructuring and Capital Injections	Dividends	Corporate Taxes and fees	Privatization Proceeds	Poor business performance	Quasi-fiscal Activities	Macro and Market risks (Variation of the exchange rate, economic growth, etc.)
PE 1		*					*		*
PE 2	*			*	*		*	*	*
PE 3	*	*	*				*	*	*
PE 4	*		*				*	*	*

Source:

[https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/SBO\(2014\)4/FI](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/SBO(2014)4/FI)

Fiscal risk analysis performed by the department for monitoring fiscal risk could be further developed by assessing the likelihood of risk realization. The department is currently computing the financial ratios of companies and monitoring their evolution. By benchmarking these financial ratios to pre-defined thresholds, the analyst can compute a risk rating for each company. This rating can, then, be used to determine which companies represent a higher risk for the national budget, or even to set a probability of default for the company which could be associated with the amount exposed to risk to calculate an expected loss for the government. Both quantitative and qualitative indicators could be rated on the same scale to calculate more easily the overall risk rating of the company. Each indicator could receive a grade from A+ to D, A+ indicating the lower risk and D the highest. The methodology should be used backwards-looking and forward-looking by computing planned figures from the ABP or the quarterly reports of the companies or forecasts of other departments/institutions.

There are multiple approaches when it comes to risk assessment. Three main credit risk modelling approaches are Altman Z-score, credit score and scenario analysis. All of them centre on the use of the financial ratios of the companies that could be used to calculate a composite index such as the Altman Z-score or a credit score, frequently used for rating purposes. This report will use the Altman Z-score as an example to the evaluations of credit risk modelling that relies on corporate ratio analysis based on three dimensions: the company profitability, liquidity and solvency. The rating obtained with this simple quantitative method could represent part of the overall risk rating of the companies (for example 60%), the remaining part being found by computing a set of qualitative indicators. Qualitative indicators could take the form of an index and represent a certain percentage (e.g., 40%) of the overall risk rating attributed internally to each public enterprise. The index would consist of a number of categories of indicators with their respective weight. For example it can be used five categories: Managerial Independence (8%), Quasi-fiscal activities (15%), Operating and Regulatory Environment (5%), Corporate Governance (10%), Other factors (e.g., competitive position, environment) (2%).

The results of the Z-score rating and the analysis of the qualitative indicators would determine an overall risk index for each PE. The public enterprises with a high-risk rating must receive greater attention from the Ministry of Finance and they should be highlighted in the quarterly fiscal risk report.

### **Monitoring fiscal risks arising from the activities of local self-government units (LSG)**

The criteria to determine which local self-governments should be monitored by the department for monitoring fiscal risk in the Ministry of finance are essentially the size of the municipalities,

the total outstanding liabilities, the total amount of transfers received from central government, as well as the size of arrears of public utility companies. The methodology could be extended to all the other local self-governments in a later stage if the Ministry of Finance considers it necessary.

The department for monitoring fiscal risk in the Ministry of finance, will classify the LSGs according to these criteria and monitor the ones for which the execution of government transfers to the LSG, including the additional transfers from government reserves, deviated substantially from budgeted transfers.

To monitor fiscal risks arising from local self-governments, the FRMD will use a set of fiscal risk indicators. Many indicators can measure the liquidity, solvency, profitability, and investment capacity of local self-governments. The ones proposed in this methodology, and summarized in the table below, are frequently used by local self-governments in other countries. In addition, few indicators of the general economic situation in the region or in the municipalities could be added to further expand the comparison between local self-governments. Most of these indicators can be calculated from LSGs financial accounts and national economic statistics, but one requires information on the cash balance available in the Bank Account of the local Treasury. An early warning system tries to flag local self-governments when they show first signs of fiscal difficulties which could lead further to a crisis. This methodology suggests the FRMD should examine the ten fiscal risk indicators described in the previous sub-section to determine which local self-governments are heading towards financial troubles which could have an impact on the national budget.

The Gross Operating Balance is the difference between LSGs current revenues and operating expenditures. The ratio is obtained by dividing this difference by current revenues. The own-source revenues ratio indicates the level of the local self-government's dependency on intergovernmental transfers. This ratio is obtained by dividing the municipality's own-source revenues by its current revenues. Own-source revenues are all the revenues that are not coming from transfers from other government levels. The Cash balance ratio is an indicator of the local self-government's liquidity position and the potential stress to meet payments obligations in the short-term. This ratio is obtained by dividing the Cash balance on the municipality's account by the debt service amount of the year. The short-term debt ratio measures how much the local self-government has to borrow for liquidity purposes. It is obtained by dividing the total stock of short-term debt (less than one year maturity) of the municipality by its total revenues. The Public Debt Law set a ceiling of 5% on this indicator of local self-government short-term borrowing. The long-term debt ratio measures how much the local self-government must borrow for investment purposes. It is obtained by dividing the total stock of medium/long-term debt (more than one year maturity) of the municipality by its total revenues. Debt service coverage reveals local self-governments capacity to service its debt and its solvency in the medium-term. It is obtained by dividing municipality's debt service expenses by its current revenues. It indicates the part of revenues absorbed by the overall debt service, that is to say by the payment of interest and principal. It is, therefore, a measure of the constraint exercised by the existence of a debt on the financial leeway of a municipality. The interest burden indicator measures the cost of borrowing of the local self-government and the burden of interest payments for the budget. It is obtained by dividing municipality's interest expenses by its current revenues. The investment intensity ratio is an indicator of local self-government investment effort and its capacity to meet the needed local service priorities. GDP per capita level is a measure which allow the comparison between local self-governments GDP per capita. The number of local self-government employees per thousand inhabitants is a measure of administrative efficiency. This indicator tells if the local self-government is overstaffed and, thereby, is dedicating too much of its revenues to recurrent administrative expenses.

**Table 3.** Proposed fiscal risk indicators to monitor local self-governments

Number	Indicators	Type of Indicators	Source	Formula	Possible Benchmark Threshold
1	Gross Operating Balance ratio	Profitability	Financial Accounts	Gross Operating Balance / Current Revenues	Above 5%
2	Own-source revenues ratio	Profitability	Financial Accounts	Own-source revenues / Current Revenues	Above 50%
3	Cash Balance Ratio	Liquidity	Consolidated Account of LSG Treasury	Cash Balance / Debt Service for the year	Above 1
4	Short-term debt ratio	Liquidity	Financial Accounts	Short-term Debt Stock / Total Revenues	Below 5%
5	Long-term debt ratio	Solvency	Financial Accounts	Medium to Long-term Debt Stock / Total Revenues	Below 50%
6	Debt Service Burden	Solvency	Financial Accounts	Debt Service Expenses / Current Revenues	Below 10%
7	Interest Burden	Solvency	Financial Accounts	Interest Expenses / Current Revenues	Below 5%
8	Investment Intensity	Investment Capacity	Financial Accounts	Capital Expenditures / Total Expenditures	Above 15%
9	GDP per capita level	Macroeconomic	National Statistics	Local GDP per capita / Average National GDP per capita	100%
10	Municipal employees per 1000 inhabitants	Macroeconomic	National Statistics	Municipal Employees / Adult Population	10

Source: [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/SBO\(2014\)4/F](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/SBO(2014)4/F)

The system is based on two composite indexes to evaluate local self-governments self-financing capacity and payment burden. The value of these indexes is calculated according to the results of fiscal risk indicators. For each index, the local self-government will be categorized (i) “At risk”, (ii) “Under scrutiny” or (iii) “normal”. Of course, local self-government with a low self-financing capacity and a high payment burden will be flagged in the quarterly fiscal risk report as necessitating immediate assistance.

Taking into account the results of the calculation of indicators and historical levels of financial support to LSGs (through all means of transfers), the department for monitoring fiscal risk should provide a quantitative amount or range of estimated outflows towards the LSGs in the coming period. Less favorable level of indicators signals potentially higher financial outflows towards LSGs in the coming period.

**Table 4.** Benchmarks of fiscal risk indicators and associated level of risk

Risk Level	Index 1. Self-financing Capacity				Index 2. Payment Burden					
	Gross Operating Balance ratio	Own-source revenues ratio	Investment Intensity	GDP per capita level (in % of National Average)	Cash Balance Ratio	Short-term debt ratio	Long-term debt ratio	Debt Service Coverage	Interest Burden	Municipal employees per 1000 inhabitants
Low	>10%	>60%	>20%	> 120%	> 100%	< 2%	< 20%	< 5%	< 2%	< 5
Medium	5 - 10%	50 - 60%	10 - 20%	90 - 120%	50%-100%	3 - 5%	40 - 50%	5-10%	2-5%	5 -10
High	0 - 5%	25 - 50%	3 - 10%	75 - 90%	25%-50%	5 - 7%	60 - 70%	10-15%	5-8%	10 -25
Excessive	< 0%	< 25%	< 3%	< 75%	< 25%	> 7%	> 70%	> 15%	> 8%	> 25

Source: [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/SBO\(2014\)4/INAL&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/SBO(2014)4/INAL&docLanguage=En)

Taking into account the results of the calculation of indicators and historical levels of financial support to LSGs (through all means of transfers), the department for monitoring fiscal risk should provide a quantitative amount or range of estimated outflows towards the LSGs in the coming period. Less favourable level of indicators signals potentially higher financial outflows towards LSGs in the coming periods.

### Process of monitoring fiscal risks from natural disasters

Minimizing the fiscal risk from a natural disaster requires that i) adequate investments in risk reduction are undertaken and that such investments are maintained by providing necessary finance on recurring basis, and ii) that there is enough fiscal space/contingent financing to be able to respond to the materialization of residual risk in a timely and effective manner. Disaster insurance penetration in Serbia is low. The public sector has a budget that covers insurance. However, public asset insurance against disasters in Serbia is very low. Similarly, insurance coverage against natural disasters by the private sector in Serbia is low. According to the data of the Insurers Association of Serbia, only two or three percent of households in Serbia are insured against floods, and fewer than 10 percent of households have property insurance. Only about 25 - 30% of property insurance policies in Serbia have additional flood insurance. Regarding agricultural insurance, there is a state subsidy of 40% except in five districts with high exposure to severe weather events, where the subsidy is 75%. In view of these facts, it is very important to establish a methodology for monitoring fiscal risks.

The methodology for monitoring fiscal risks from natural disasters has the following steps:

- Collection of and monitoring of disaster-related expenditure data. Depending on data availability, the department for monitoring fiscal risk should annually collect data on budgeted and actual annual investment and associated recurrent expenditure on risk reduction at all levels of government. Such data should be collected from the Treasury. If such data is currently not being adequately tracked, the department could work with the Treasury to introduce budget tags/classifiers which would enable to better track disaster-related expenditure. Such tagging could result in across-cutting disaster-related expenditure subprogram.
- Information on disaster-related fiscal risk can inform two key policy areas: investments in risk reduction and adoption of risk financing instruments to deal with residual risk. First, the benefit of further investing in risk reduction is intrinsically linked to the risk of foregoing such investments. Thus, a better understanding of the potential fiscal cost of disaster impacts with the current state of infrastructure will allow a better analysis of the potential returns on risk reduction investments. Department for monitoring fiscal risk should work with other Government agencies to ensure that adequate funds are made



available for risk reduction. Secondly, the department can use estimates of the potential fiscal impact of disasters to assess the potential financing gap after major events and to inform decisions on the adoption of financial instruments to close that gap, such as reserve funds, contingent credit lines, or insurance.

**Table 5.** Key data on natural disasters

Data
Capital and current expenditure for risk reduction at central government level
Capital and current expenditure for risk reduction at local government level
Investments and expenditures for risk reduction of SOEs
Post-disaster expenditures for emergency response, recovery and reconstruction
Technical assessments on probability and magnitude of natural disasters risk
Macroeconomic parameters
Fiscal data to assess impact on fiscal balance

The information in this report should be based on the data and analysis outlined in the previous section taking into account the analysis produced with the Fiscal Risk Model. It should also identify key steps to be taken in order to reduce natural disaster risk and the associated fiscal risk in the future.

### Process of methodology for monitoring risks from legal contingencies

There are several aspects for the monitor to be aware of potential impacts of the amounts that will need to be paid related to court cases. International experience shows that the highest amount paid corresponds to interest, rather than the original claims. The main aspects related to the accumulation of interests are the time that a regular case takes to be solved in court and the time that the public institution takes to pay. Serbia faces challenges related to the judicial performance in administrative cases when compared to other European countries: a higher number of days to solve a case, fewer solved cases per year, a high number of pending cases, an increasing number of new cases. In general, those challenges can be summarized in two main aspects. On one side, the cases are taking longer to be solved. On the other, there is an increasing number of new claims being filed before courts. Serbia has been experiencing a rise in payments related to legal cases.

Most countries do not have detailed data on the time that takes to solve a judicial case. Most of the estimates are based on the experiences of lawyers or other informed opinions. However, when empirical studies have been carried out with samples, there is a big mismatch between those perceptions and the real-time a case takes to be solved. For this reason, the European Commission for the Efficiency of Justice (CEPEJ) has created a formula to estimate the time (in days) to solve a case. The suggested formula is the following:

$$\text{Time to disposition} = (\text{Pending cases (inventory)}) / (\text{Solved cases}) \times 365$$

As mentioned before, this indicator is relevant to monitor the payments related to legal claims given that the longer a case takes, the higher the amount to be paid. It is important to note that this is an estimate of the time taken to solve a judicial case. However, that formula does not fully reflect the time taken to solve the controversy, which is only closed when the institution effectively pays the total amount of the decision. The proposed methodology assumes that all institutions make their payments within a reasonable and similar time among them. The third aspect to consider monitoring is the effective payments made. Similarly, to the other aspects, it is suggested to compare the perceptual variation between specific periods. The variation of this indicator can be a consequence of a variation of the previous indicators. However, unlike the other

two indicators, this comparison is useful to identify a potential change in the behavior either of courts or of the payment schedules of the public institutions.

## CONCLUSION

Any fiscal risk that materializes becomes a burden on the state budget and fiscal position, which is why a functional monitoring system is a key to maintaining the stability of public finances. Recognizing and proactively managing fiscal risks, using risk mitigation measures, insurance and other mechanisms, helps states save public funds and better protect their citizens. The government will maintain a reserve, provision or “fiscal space” in their fiscal plans in case certain risks materialize. The level of the reserve will depend on the estimates of the potential impact of certain risks and their likelihood of occurring in the fiscal risk reports. The Ministry of Finance should establish strict criteria for accessing these funds and separate reserves can be established for new policies to be decided over the course of the budget execution vs. funding for unexpected events.

The budget beneficiaries are also responsible for monitoring and preventing their fiscal risks, allocating funding in their budget if their materialization becomes probable and funding from their own budget if a risk unexpectedly materializes before they can claim additional funds from the general budget.

The government may decide in the situations of excessive fiscal risks which are assessed to have a potentially significant impact on the budget and probability of materializing, to introduce specific measures to address individual fiscal risks. These measures include limits on state guarantees, risk-based fees for state guarantees, subsidies linked to performance.

As needed, the government may decide to form separate funds which would serve as a liquidity response in cases of certain risks materializing.

## REFERENCES

- Castro, V. (2011).** “The impact of the European Union fiscal rules on economic growth.” *Journal of Macroeconomics*, 33: 313–326
- Cooper, D.J., Ezzamel, M. (2013).** “Globalization discourses and performance measurement systems in a multinational firm.” *Accounting, Organizations and Society*, 38: 288–313.
- Marjanović, D. (2018).** “Competitiveness of the Serbian Economy Through the Prism of Tax Incentives for Foreign Investors”, Vol 51 No 3-4, *Economic Analysis*, Institute of Economic Sciences, Belgrade, Serbia: 95-104
- Marjanović, D., Domazet, I. (2018).** “Unapređenje makro konkurentnosti–fiskalni aspekti”. Beograd: Institut ekonomskih nauka.
- IMF (2018).** “Managing Public Wealth”, *Fiscal Monitor Reports*, <https://www.imf.org/~media/Files/Publications/fiscalmonitor/2018/Octobe/pdf/fm1802.aspx?la=en>.
- IMF (2016).** *Analyzing and Managing Fiscal Risks - Best Practices* <https://www.imf.org/external/np/pp/eng/2016/050416.pdf>
- IMF (2008).** *Fiscal Risks - Sources, Disclosure, and Management*, <https://www.imf.org/external/np/pp/eng/2008/052108.pdf>
- IMF (2015).** *Fiscal Transparency Evaluation of Finland*, <http://www.imf.org/external/pubs/ft/scr/2015/cr1560.pdf>.
- OECD (2020).** *Best Practices for Managing Fiscal Risks, Lessons from case studies of selected OECD countries and next steps post COVID-19, Establishing a Fiscal Risk Management Department in the Ministry of Finance of Serbia*, <https://openknowledge.worldbank.org/bitstream/handle/10986/26421/113855-WP-Establishing-a-fiscal-risk-management-department-in-the-Ministry-of-finance-of-Serbia-PUBLIC.pdf?sequence=1&isAllowed=y>



<i>Article history:</i>	Received: December 16, 2021
	Accepted: December 29, 2021