RUSSIAN FEDERATION

SELECTED ISSUES

August 2019

This paper on Russian Federation was prepared by a staff team of the International Monetary Fund [as background documentation for the periodic consultation with the member country]. It is based on the information available at the time it was completed on June 27, 2019.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org
Price: $18.00 per printed copy

**International Monetary Fund
Washington, D.C.**

INTERNATIONAL MONETARY FUND

RUSSIAN FEDERATION

CONTENTS

FURTHER IMPROVING FISCAL TRANSPARENCY IN RUSSIA TO RAISE GOVERNMENT EFFICIENCY AND REDUCE VULNERABILITIES TO CORRUPTION[1]

Fiscal transparency has acquired a central role in IMF surveillance since the wave of crises that struck emerging markets in the late 1990s. Budget openness is important because it increases investor confidence, facilitates the efficient allocation of resources by the public sector, and reduces opportunities for corruption. Cross-country evidence from European countries confirms that fiscal transparency is broadly and robustly correlated with better outcomes, including lower borrowing costs, higher efficiency of public investment and revenue collection, and improved corruption perceptions. Russia scores relatively well on fiscal transparency and has made significant progress in improving its practices over the last 5 years. However, there remains room for further improvement. Fiscal statistics should be compiled by an independent statistics agency and expanded to include sub-soil assets, public private partnerships, and pension liabilities. The credibility of the budget could be enhanced by subjecting underlying macroeconomic and budget forecasts to greater independent scrutiny, discontinuing extrabudgetary expenditure by the National Welfare Fund (NWF), and reducing the share of classified expenditure. Surveillance of fiscal risks could be strengthened by publishing a regular report on the state-owned enterprise (SOE) sector, extending the horizon of long-term fiscal forecasts to cover 50 years, and regularly publishing a comprehensive report on fiscal risks.

A. Introduction

1.   Fiscal transparency has acquired a central role in IMF surveillance since the wave of crises that struck emerging markets in the late 1990s. In a seminal paper, Kopits and Craig (1998) defined fiscal transparency as "openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections." The IMF's Fiscal Transparency Code sets standards for international good practices in this area. The benefits of fiscal transparency have been known at least since the times of Aristotle who noted in his book *Politics*: "to protect the Treasury from being defrauded, let all money be issued openly in front of the whole city, and let copies of the accounts be deposited in various wards." As noted by Kopits and Craig (1998), non-transparent fiscal practices tend to create various allocative distortions in public finances. Examples include inefficient tax expenditures, the accumulation of arrears and contingent liabilities, misallocation of public procurement (particularly in the area of public investment), and quasi-fiscal activities which avoid legislative scrutiny.

2.   Fiscal transparency enables the market to evaluate and impose discipline on government policies. It raises the political costs of unsustainable policies. As noted by Sedmihradska and Haas (2013), budget openness reduces "fiscal illusion," that is, the overstatement of the benefits and understatement of the costs and risks of various government programs. Fiscal transparency decreases

---

informational asymmetry between politicians (especially incumbents) and voters, and, therefore, it improves accountability, reduces the political business cycle, and increases political competition. It strengthens the enforcement of fiscal rules, by making their circumvention more difficult. Kelmanson *et al* (2019) note that improvements in fiscal transparency could reduce informality in Central, Eastern, and Southeastern Europe (CESEE), by improving perceptions of government effectiveness and by strengthening the perceived link between fiscal revenues and expenditures. Kemoe and Zhan (2018) find that higher fiscal transparency reduces sovereign interest rate spreads and increases foreign holdings of sovereign debt. Finally, the wide availability of information about public finances and public procurement can deter illicit behavior. As the old saying goes, sunlight is the best disinfectant.

3.   **This paper focuses on the potential to improve government efficiency and reduce opportunities for corruption in Russia by further improving fiscal transparency.** The analysis presented here is in the context of the 2018 Framework for Enhanced IMF Engagement in Governance, which supports more systematic, candid, and even-handed engagement with member countries on this issue. Transparency's potential to reduce corruption vulnerabilities in Russia was noted also in IMF (2016). As pointed out by Mikhailova, Klimanov, and Rabadanova (2018), Article 36 of the Budget Code of the Russian Federation codifies fiscal transparency as a major guiding principle for budgeting. According to Bondarenko, Gudkov, and Krasilnikova (2013), there is a perceived link between corruption and public expenditure transparency and accountability: 37 percent of respondents in Russia list lack of transparency and accountability for public expenditure as one of the top three causes of corruption, which is close to the European Union average of 33 percent. The remainder of this paper reviews cross-country evidence from European countries on the benefits of fiscal transparency, reviews where Russia stands, and makes policy recommendations for further improvements.

B. Cross-Country Evidence from European Countries

4.   **The cross-country evidence presented below confirms that fiscal transparency is broadly and robustly correlated with better outcomes.** Improved outcomes include lower financing costs, better efficiency of public investment and revenue collection, and improved corruption perceptions. These findings are consistent with de Renzio and Wehner (2017) which offers a comprehensive survey of the literature on the impact of fiscal openness, including experimental designs, natural experiments, and regression analysis.

5.   **The chart below ranks 24 European countries according to the 2017 Open Budget Survey and illustrates the strong correlation between budget openness and income.** Western European countries (in red) rank well, while CESEE countries (in blue) are weaker, on average.[2] However, some countries in Emerging Europe (Russia, in orange, and Romania) perform very well. The Open Budget Survey is a set of third-party indicators compiled by the International Budget Partnership. It focuses on these aspects of fiscal transparency that matter most for public accountability, like having a citizen's budget, open data, and public participation in the budget process. The index is based on a survey of 109 questions assessed by experts, and it covers 115 countries dating back to 2006. Thus, its main

---

[2] The rest of the charts in this paper follow the same color convention.

upside is its broad coverage and time-series variation. It also has certain shortcomings: it focuses on central governments only, so it ignores subnational governments and public corporations. It also focuses on *de jure* measures of fiscal transparency (mostly dealing with the timely availability of budget information) whose relation to *de facto* budget openness is likely to be imperfect.
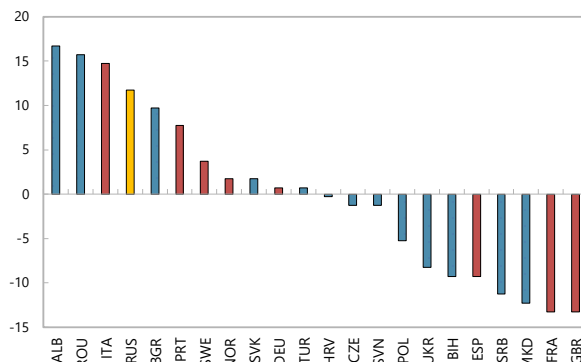

Source: Open Budget Survey.

Source: International Monetary Fund.
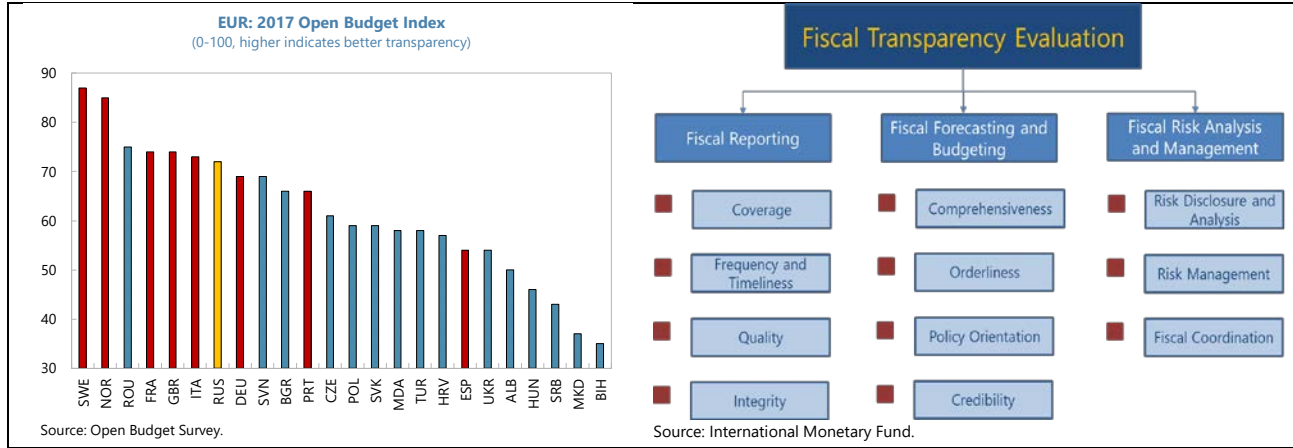
6.   The IMF's fiscal transparency evaluations provide an alternative to the Open Budget Survey. These are comprehensive assessments of a country's budget openness practices performed by IMF experts, with a focus on the information needed for good fiscal management. The Fund has published fiscal transparency evaluations (FTEs) for 25 countries worldwide, including 11 European countries. FTEs offer an in-depth assessment of each country's fiscal transparency practices according to 36 criteria, grouped into three main pillars: fiscal reporting, fiscal forecasting and budgeting, and fiscal risk analysis and management (see chart above). A fourth pillar was recently introduced, covering transparency in managing natural resource revenues. The FTEs focus on *de facto* practices and cover the entire public sector (including local governments and state-owned enterprises). An obvious downside is the small country coverage and the lack of time-series variation.

Source: IMF Fiscal Transparency Evaluation database.

Sources: IMF and Open Budget Survey.
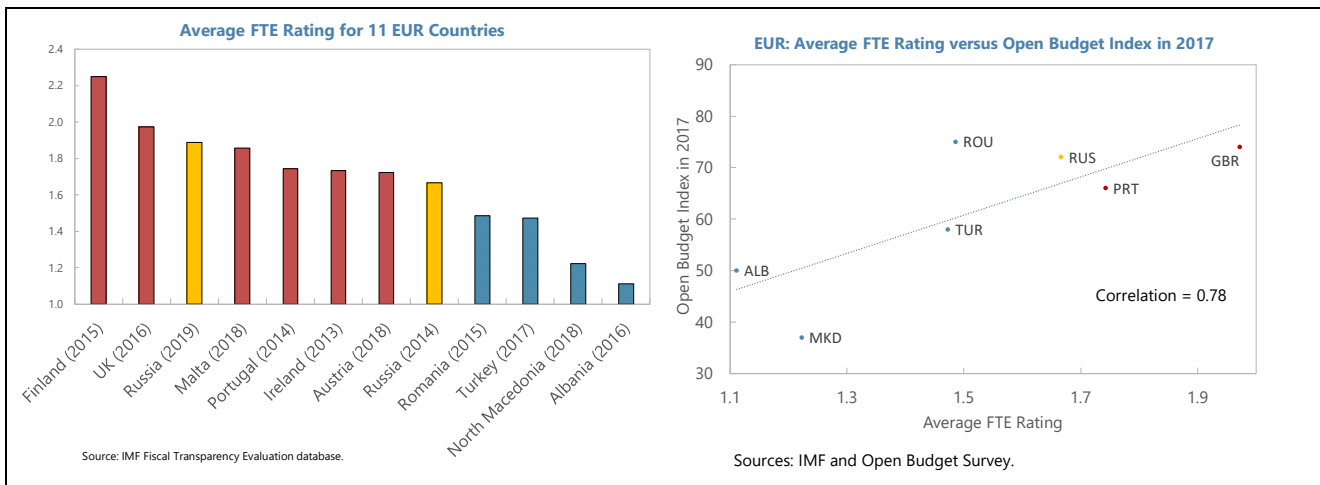
7.   FTE ratings are correlated with income, as well as with the Open Budget Index. In the first chart above, the left corner is dominated by Western European countries, while the right corner is all CESEE countries. Russia's 2014 fiscal transparency evaluation placed it above all other countries in

Emerging Europe and near advanced European countries such as Portugal, Ireland, and Austria.[3] Note that this chart offers an unweighted average over the 36 FTE criteria for each country. However, some of these criteria are more macro-critical than others. The FTE ratings are also highly correlated with those from the Open Budget Survey, with a correlation coefficient of around 0.8 for the seven European countries covered by both (second chart above). The nearby text chart shows the change in the Open Budget Index for 22 European countries between 2010 and 2017. Russia compares very well, once again.

EUR: Change in Open Budget Index Between 2010 and 2017


Source: Open Budget Survey.

8.   A better rating on the Fiscal Transparency Evaluation is correlated with lower spreads on credit default swaps (CDS) and thus lower financing costs for governments (text chart). Both variables in the chart are income-adjusted, that is, these are the residuals after regressing each variable on the natural log of real per capita GDP (PPP-adjusted). This addresses the potential criticism that fiscal transparency and CDS spreads are both driven by income levels: even after the impact of income is filtered out, the correlation survives. It is important to emphasize that this and subsequent

Correlation Between Average FTE Rating and CDS Spreads for 11 EUR Countries
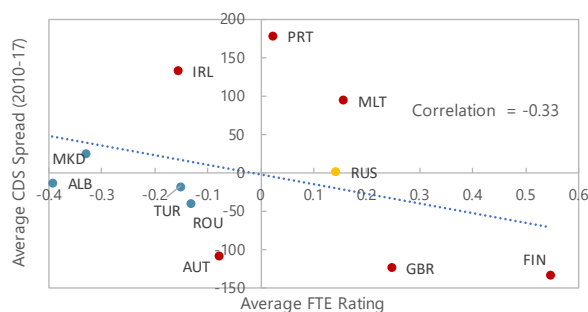
Sources: IMF Fiscal Transparency Evaluations database and Bloomberg.
Note: Both variables are controlled for GDP per capita (PPP-adjusted).

scatterplots only establish statistical correlation rather than a causal relationship. Nevertheless, the negative correlation here is consistent with the findings in more comprehensive studies. For example, Kemoe and Zhan (2018) analyze a global panel of 33 emerging and developing economies over 2005–16 and find that higher fiscal transparency reduces sovereign interest rate spreads and increases foreign holdings of sovereign debt.

9.   A better rating on the Fiscal Transparency Evaluation is correlated with higher efficiency of public investment, after controlling for per capita GDP (first chart below). The measure of public investment efficiency comes from the IMF's Investment and Capital Stock Dataset and quantifies the efficiency with which public investment (the input) in a particular country is transformed into physical and social infrastructure (the output, as measured by the length of the country's road network, electricity production, access to water, the number of hospital beds, and the number of secondary

---

[3] The 2019 update of Russia's FTE is discussed in Section C below.

teachers). The measure considers per capita income, because it determines access to technology as well as the initial capital stock. For each country, the public investment efficiency measure is relative to the most efficient country with a similar level of income. The chart suggests that budget openness can play a role in closing the efficiency gap in public investment which can yield sizable economic dividends.

Correlation Between Average FTE Rating and Efficiency of Public Investment for 9 EUR Countries
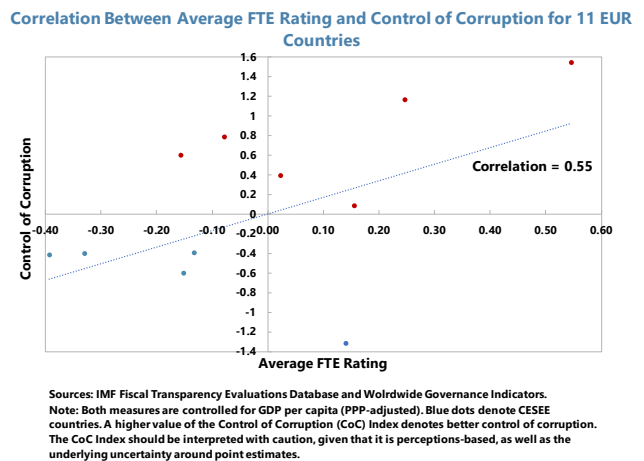
Sources: IMF, Fiscal Transparency Evaluations Database and Investment and Capital Stock Dataset.
Note: Both measures are controlled for GDP per capita (PPP-adjusted).

Correlation Between Average FTE Rating and Revenue Efficiency for 10 EUR Countries

Sources: IMF, Fiscal Transparency Evaluations Database, Tax Rate Database, and Revenue Analysis Tool.
Note: Both measures are controlled for GDP per capita (PPP-adjusted).

10.   A better rating on the Fiscal Transparency Evaluation is correlated with higher revenue efficiency, after controlling both for per capita income (second chart above). The measure of revenue efficiency presented here is the average of two measures: personal income tax (PIT) efficiency (defined as the ratio of actual PIT collection as percent of GDP to the average statutory PIT rate) and VAT C-efficiency (the ratio of actual VAT revenue as percent of GDP to the product of the standard VAT rate with aggregate final consumption as percent of GDP). Intuitively, both measures estimates how much a country collects from PIT and VAT, relative to a hypothetical maximum.

11.   Higher fiscal transparency is correlated with improved control of corruption, after controlling both for per capita GDP (text chart). The Control of Corruption Index comes from the Worldwide Governance Indicators (WGI), a set of third-party indicators compiled by Daniel Kaufmann (Brookings Institution and Natural Resource Governance Institute) and Aart Kraay (World Bank). The index aggregates 30 different data sources on both perceptions of and experiences with corruption by business executives, households, and experts. A higher value for the index indicates better control of corruption.

Correlation Between Average FTE Rating and Control of Corruption for 11 EUR Countries

Sources: IMF Fiscal Transparency Evaluations Database and Woilrdwide Governance Indicators.
Note: Both measures are controlled for GDP per capita (PPP-adjusted). Blue dots denote CESEE countries. A higher value of the Control of Corruption (CoC) Index denotes better control of corruption. The CoC Index should be interpreted with caution, given that it is perceptions-based, as well as the underlying uncertainty around point estimates.

12.   Corruption is hard to measure and available measures are imperfect. There are well-known issues with perception-based measures of corruption. They don't measure actual corruption, and they

are highly persistent over time. However, the Control of Corruption Index covers surveys of *experiences* of corruption, in addition to corruption *perceptions*, which reduces somewhat the scope for bias. Furthermore, perceptions (whether justified or not) are an important driver of investment decisions. Finally, the statistical relationship between budget openness and corruption perceptions is robust to other measures of corruption, including the Corruption Index by the International Crisis Risk Group and the Corruption Perceptions Index by Transparency International (which uses a subset of the information used by the WGI).[4] Still, perceptions-based indicators should be interpreted with caution, given the possibility for subjectivity and bias, the standardized assumptions, and the underlying uncertainty around point estimates. It is also important to emphasize once again that scatterplots like the ones presented above only establish statistical correlations rather than causal relationships. While the statistical correlation between fiscal transparency and better outcomes appears to be broad and robust, we cannot rule out omitted variables or reverse causality.
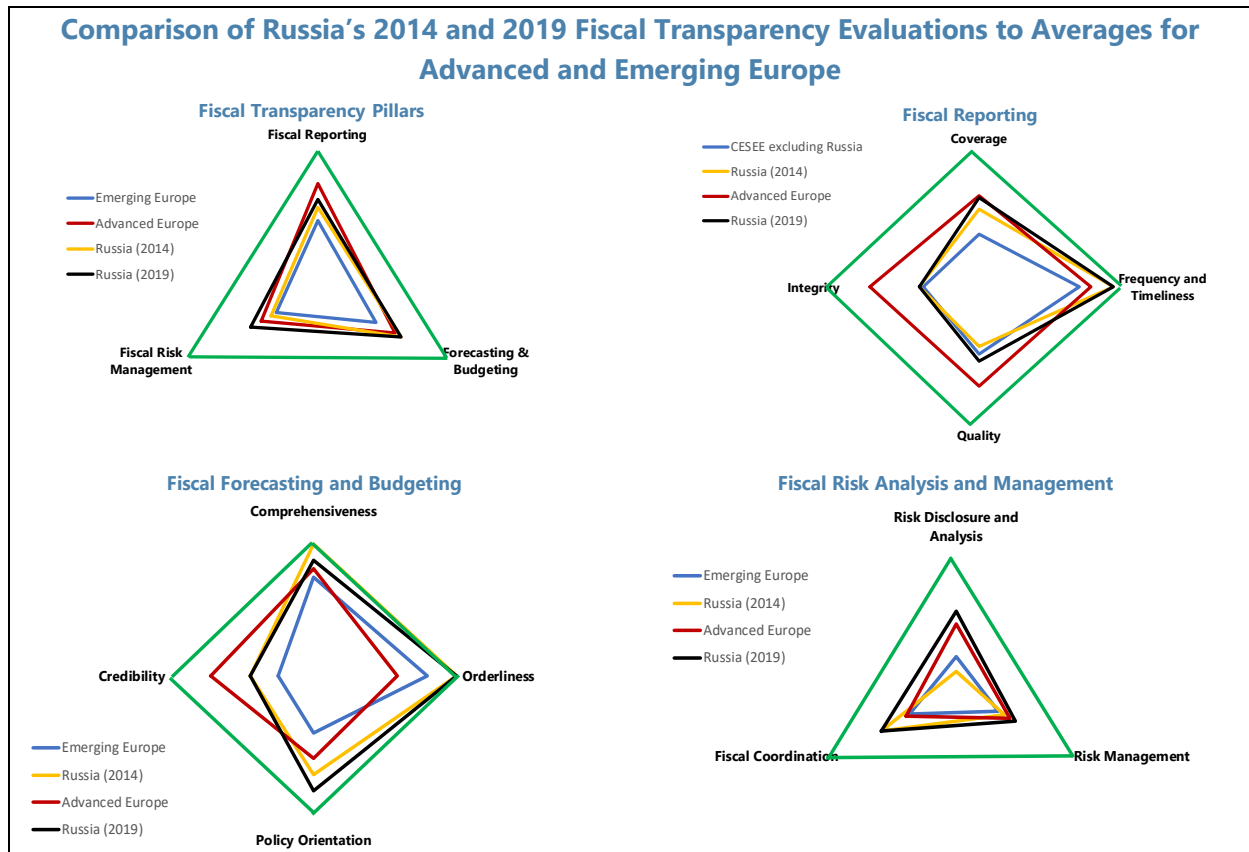
13.   To investigate the possibility of omitted variables, Table 1 below presents results from panel regressions on the impact of fiscal transparency on corruption perceptions. The data cover 102 countries over 6 years: 2006, 2008, 2010, 2012, 2015, and 2017. The dependent variable in all regressions is the Control of Corruption Index from Worldwide Governance Indicators and fiscal transparency is measured by the Open Budget Index from the International Budget Partnership (both discussed above). Additional controls include PPP-adjusted GDP per capita (from the World Bank's Worldwide Development Indicators), voice and accountability, political stability and absence of violence, rule of law (all from the WGI), and ease of doing business (from the World Bank's Doing Business Survey). A dummy variable for commodity exporters (as defined by the IMF's WEO) is also included, in order to reflect the hypothesis that higher economic rents associated with natural resource wealth create opportunities for corruption. All regression equations were estimated with two estimators: fixed and random effects. Fixed effects is a superior estimator when there are likely to be omitted variables, while random effects are preferable if there is little variation over time. All regression equations include time-fixed effects to take care of potential structural breaks in the series (for example, due to changes in methodology).

14.   The coefficients on the Open Budget Index and all other independent variables enter with the expected signs, and are also almost always statistically significant. The results from both parsimonious and comprehensive specifications of the regression equation show that control of corruption is positively associated with per capita income, voice and accountability, political stability and absence of violence, rule of law, and ease of doing business. Control of corruption is negatively associated with being a commodity exporter. Table 1 also shows a fairly robust link between fiscal transparency and control of corruption, even after conditioning for multiple other drivers of corruption perceptions. Taking the most comprehensive regression specifications in the last two columns of Table 1, they both suggest that improving a country's Open Budget Index by one standard deviation (or 24 units) would increase the Control of Corruption Index (whose standard deviation is about 0.86) by about 0.05. Similar results are reported in Haque and Neanidis (2009) for a cross section of 59 countries in 2006, in

---

[4] These results are not presented here, but are available upon request.

Luna and Montes (2017) for a panel of 82 countries over 2006–2014, and in IMF (2019a) for a global cross section of countries.

15.   While regressions analysis can mitigate the risk of omitted variables, it leaves the issue of causality unresolved. Fully disentangling all the causal links among corruption, institutions, and economic development may not be feasible. Nevertheless, the results presented here are consistent with the set of experimental designs and natural experiments reviewed in IMF (2019a), all showing that improved budget openness can increase government efficiency and reduce opportunities for corruption, especially when combined with a high degree of press freedom and wide access to digital technologies.

Comparison of Russia's 2014 and 2019 Fiscal Transparency Evaluations to Averages for Advanced and Emerging Europe

C.   Improving Further Fiscal Transparency in Russia

16.   Russia was one of the first countries to volunteer for an IMF fiscal transparency evaluation and was one of the best performing emerging markets when the evaluation was completed in 2014. The spider charts below compare Russia to the averages for four CESEE countries (Albania, North Macedonia, Romania, and Turkey) and six advanced European countries (Austria, Finland, Ireland, Malta, Portugal, and Great Britain) for each of the three pillars of the fiscal transparency evaluation. According to the 2014 FTE, Russia's fiscal reports provided a relative complete, timely, and accurate picture of general government finances. This placed Russia between the average of emerging and advanced European countries that undertook an FTE. Fiscal forecasts and budgets were prepared within a comprehensive legal framework, provided a clear picture of medium-term economic and budgetary

Table 1. Russian Federation: Regression Results on the Impact of Budget Openness on Control of Corruption

Dependent variable: Control of corruption	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Estimation method	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects	Fixed effects	Random effects
Independent variables														
Constant	-4.285***	-4.244***	-4.219***	-3.981***	-4.026***	-3.923***	-3.908***	-2.964***	-3.819***	-4.098***	-4.285***	-3.992***	-3.147***	-2.377***
	(0.661)	(0.393)	(0.655)	(0.361)	(0.677)	(0.372)	(0.663)	(0.292)	(0.888)	(0.413)	(0.661)	(0.388)	(0.901)	(0.303)
Log per capita GDP (PPP-adjusted)	0.443***	0.436***	0.437***	0.409***	0.416***	0.402***	0.404***	0.298***	0.368***	0.366***	0.443***	0.425***	0.298***	0.191***
	(0.075)	(0.044)	(0.074)	(0.040)	(0.076)	(0.042)	(0.075)	(0.033)	(0.102)	(0.049)	(0.075)	(0.043)	(0.103)	(0.037)
Open budget index	0.002***	0.003***	0.002**	0.002***	0.002***	0.003***	0.002***	0.003***	0.002**	0.003***	0.002***	0.002***	0.002**	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Voice and accountability			0.070***	0.121***									0.060**	0.145***
			(0.023)	(0.022)									(0.028)	(0.028)
Political stability and absence of violence					0.030*	0.061***							0.006	0.048**
					(0.017)	(0.018)							(0.021)	(0.022)
Rule of law							0.082***	0.266***					0.084***	0.232***
							(0.024)	(0.025)					(0.028)	(0.029)
Ease of doing business									0.002	0.007***			0.002	0.008***
									(0.002)	(0.002)			(0.002)	(0.002)
Commodity exporter												-0.488***		-0.219***
												(0.123)		(0.076)
Country fixed effects?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Time fixed effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	539	539	539	539	539	539	539	539	395	395	539	539	395	395
R-squared	0.402	0.415	0.464	0.517	0.430	0.471	0.502	0.703	0.421	0.472	0.402	0.482	0.601	0.789
Number of countries	102	102	102	102	102	102	102	102	102	102	102	102	102	102

Robust standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1
Source: Authors' estimates.

developments, and included a detailed account of the outcomes to be achieved with public money. This put Russia's practices in this area in line with the average of advanced European countries. Fiscal risks management was identified as an area of relative weakness with the exception of relatively strong procedures for disclosing and controlling risks related to budgetary contingencies, guarantees, and subnational governments. Russia's practices in this area were only slightly better than the average for emerging Europe.

17.   **Over the last 5 years, Russia has made significant further progress in improving fiscal transparency, with the largest improvement in the area of fiscal risk analysis (charts above).** Based on an updated evaluation conducted in 2019, Russia has improved its standing relative to evaluations conducted for other European countries (see chart on page 4). In particular, fiscal reporting has become more comprehensive with the annual publication of a detailed account of the cost of tax expenditures, adoption of a program classification as the basis for budget appropriations, and publication of the first official estimates of the volume and value of sub-soil oil, gas, and mineral reserves. The budget has become more accessible with the publication of a new Citizen's Budget and pilots in participatory budgeting in more than half of the regions. Fiscal risk disclosure has improved significantly with the publication of a comprehensive Fiscal Risks Report and the publication of longer-term (to 2036) macroeconomic and fiscal scenarios. These reforms placed Russia's fiscal risk practices above the average for advanced European countries (charts above).

18.   **Nevertheless, Russia's fiscal reporting, budgeting, and risk management practices continue to fall short of international best practices in a number of important areas.** Responsibility for the compilation and dissemination of fiscal statistics remains with the Federal Treasury, a semi-autonomous agency of the Ministry of Finance. Russia's over 30,000 SOEs remain outside the scope of consolidated fiscal reporting and many do not publish audited financial statements. Russia's fiscal rules have been subject to frequent revisions which undermine their credibility as durable anchors for fiscal planning. The proportion of the Federal Budget classified for national security purposes has increased from 10 percent in 2010 to 17 percent in 2018. Russia's National Welfare Fund (NWF) has been used in the past as a vehicle for extrabudgetary domestic spending to finance bank recapitalizations, infrastructure spending, and subsidized credit for SMEs. Regular budget execution rules were recently suspended to allow for unlimited carryover and reallocation of resources into, between, and within the government's 13 national projects which account for around 10 percent of the federal budget. Finally, little progress has been made in tracking the almost 2,500 public private partnership projects, with an estimated value of around 2.2 percent of GDP in 2017.

19.   **To build on recent progress and address the gaps highlighted above, Russia should consider the following further reforms to improve fiscal transparency:**

- **State-owned enterprises:** Produce a summary document on the financial performance of the SOE sector and require all SOEs to publish audited financial statements. This could support wider reforms to SOE governance discussed in Box 1.

- **Statistical independence:** Reinforce the institutional independence of Rosstat. Assign to Rosstat the responsibility for the dissemination of government finance statistics independently of the government.

- **Public private partnerships:** Publish annual estimates of the government's total long-term obligations under PPP contracts.

- **Forecast credibility:** Publish in budget documentation comparisons between government economic and fiscal forecasts and those of independent bodies and explain any material differences.

- **Fiscal rules:** Adhere to the current fiscal rule, in order to rebuild buffers and promote intergenerational equity in sharing Russia's finite natural resource wealth with future generations.

- **Budgetary integrity:** Discontinue extrabudgetary domestic investment by the NWF. Review and reduce the classified portion of public expenditures. Disclose the costs of quasi-fiscal policy mandates for SOEs in an appendix to the budget and in SOE financial statements.

- **Supplementary budget:** Return to normal in-year virement rules for the 13 national projects.

- **Fiscal risks report:** Publish an updated Fiscal Risks Report (FRR) every 3 years and require government to respond within 2 years.

- **Long-term analysis:** Incorporate 50-year macroeconomic and fiscal projections into the FRR to assess intergenerational fairness under various scenarios for oil prices and other macroeconomic parameters.

- **Natural resources:** Publish annual estimates of the volume and value of Russia's natural resource reserves under different price and production scenarios. Consider undertaking an evaluation of natural resource management against the recently introduced Pillar IV of the IMF's Fiscal Transparency Code.

Box 1. Best Practices in SOE Governance

IMF (2019b) contains recommendations for improving SOE governance in all CESEE countries. These are aligned with the OECD guidelines on SOE corporate governance which spell out international best practices, and include:

- create and maintain a public SOE register;

- move away from a decentralized SOE oversight model which generates conflicts of interest between policy-setting and ownership, and hinders comprehensive monitoring;

- get rid of special accounting rules for SOEs which hinder transparency and comparability;

- publish an ownership policy document which spells out the rationale for public ownership of each SOE, strikes a balance between active engagement and delegation by the state, and clarifies non-commercial mandates, dividend policies, and rules for fiscal support;

- make boards more independent and professional (for example, by centralizing board selection);

- clarify the links between the income statements and balance sheets of SOEs and those of the budget; and

- gradually incorporate local government SOEs into this framework.

References

Bondarenko, Natalya, Lev Gudkov, and Marina Krasilnikova, 2013, "The Social Nature of Corruption," *Vestnik Obschestvennogo Mnenia* 116 (3–4): 91–110.

De Renzio, Paolo, and Joachim Wehner, 2017, "The Impacts of Fiscal Openness," *The World Bank Research Observer* 32 (2): 185–210.

Haque, Emranul, and Kyriakos Neanidis, 2009, *"Fiscal Transparency and Corruption,"* Discussion Paper 114, University of Manchester Centre for Growth and Business Cycle Research, February.

International Monetary Fund, 2014, *Russian Federation: Fiscal Transparency Evaluation*, IMF Country Report 14/134, May.

———, 2016, *Corruption: Costs and Mitigating Strategies*, Staff Discussion Note 16/05, May.

———, 2019a, *Fiscal Monitor: Curbing Corruption*, April.

———, 2019b, *Reassessing the Role of State-Owned Enterprises in Central, Eastern, and South Eastern Europe*, European Departmental Paper 19/11.

Kelmanson, Ben, Koralai Kirabaeva, Leandro Medina, Borislava Mircheva, and Jason Weiss, 2019, *Explaining the Shadow Economy in Europe: Size, Causes, and Policy Options*, IMF Working Paper, forthcoming.

Kemoe, Laurent, and Zaijin Zhan, 2018, *Fiscal Transparency, Borrowing Costs, and Foreign Holdings of Sovereign Debt*, IMF Working Paper 18/189, August.

Kopits, George, and Jon Craig, 1998, *Transparency in Government Operations*, IMF Occasional Paper 158, January.

Luna, Paulo Henrique Lourenço, and Gabriel Caldas Montes, 2017, "Mitigating Corruption Through Fiscal Transparency: A Panel Data Approach," *45° Encontro Nacional de Economia*.

Mikhailova, Anna, Vladimir Klimanov, and Asiyat Rabadanova, 2018, "The Correlation of Budgetary Openness and Transparency with the Position of Countries in the Main International Rankings," *Voprosy Ekonomiki* 2018 (12): 66–76.

Sedmihradska, Lucie, and Jakub Haas, 2013, "Budget Transparency and Fiscal Performance: Do Open Budgets Matter?" *ACTA VSFS* 7 (2): 109–122.