



REPUBLIC OF KAZAKHSTAN

SELECTED ISSUES

February 2020

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IMPROVING PROGRESSIVITY AND EFFICIENCY: A REVIEW OF THE PERSONAL INCOME TAX AND OTHER TAXES ON LABOR IN KAZAKHSTAN¹

This paper conducts a review of taxes on labor in Kazakhstan, which, despite the current relatively-low level of collections, have the potential to become an important source of non-oil fiscal revenue. The existing labor tax system is characterized by a low, flat headline rate, limited progressivity except at the lower end of household income distribution due to deduction of the minimum wage, and a relatively high tax burden mainly born by the formal sector. Having a more equitable and efficient labor tax system would involve a targeted strategy for deductions and exemptions, expanding the tax base, and continuing to improve tax design, administration, and collection enforcement.

A. Introduction

1. Kazakhstan would benefit from higher non-oil revenue to create fiscal space for additional social and capital spending, enhance resilience, and support fiscal consolidation to rebuild buffers and support long-term sustainability. Public finances have relied heavily on receipts from the oil sector. Oil revenues made up almost half of general government total revenue before the sharp oil price drop in late 2014 and remain sizable (32 percent of total revenues during 2015–18). By contrast, performance of taxes related to non-oil activities, such as the personal income tax (PIT) and value-add tax (VAT), has been relatively weak. The decline of oil prices has led to a fall in total revenues, despite higher oil production brought about by recent capacity upgrades. Higher non-oil revenue is needed to close the gap in social and capital spending while maintaining long-term fiscal sustainability (Figure 1).²

2. This paper focuses on one group of non-oil taxes—PIT and other taxes on labor—and reviews their effective burden, progressivity, and efficiency. These taxes are found to have limited responsiveness to oil-sector fluctuations, and thus help enhance the resilience of public finance to oil shocks.³ They also have a direct impact on household income and welfare, and closely relate to the functioning of the formal labor market. The relatively low level of current collections suggest that they have the potential to become a more important source of non-oil fiscal revenue. The next two sections present an overview of the various labor taxes, their overall burden and

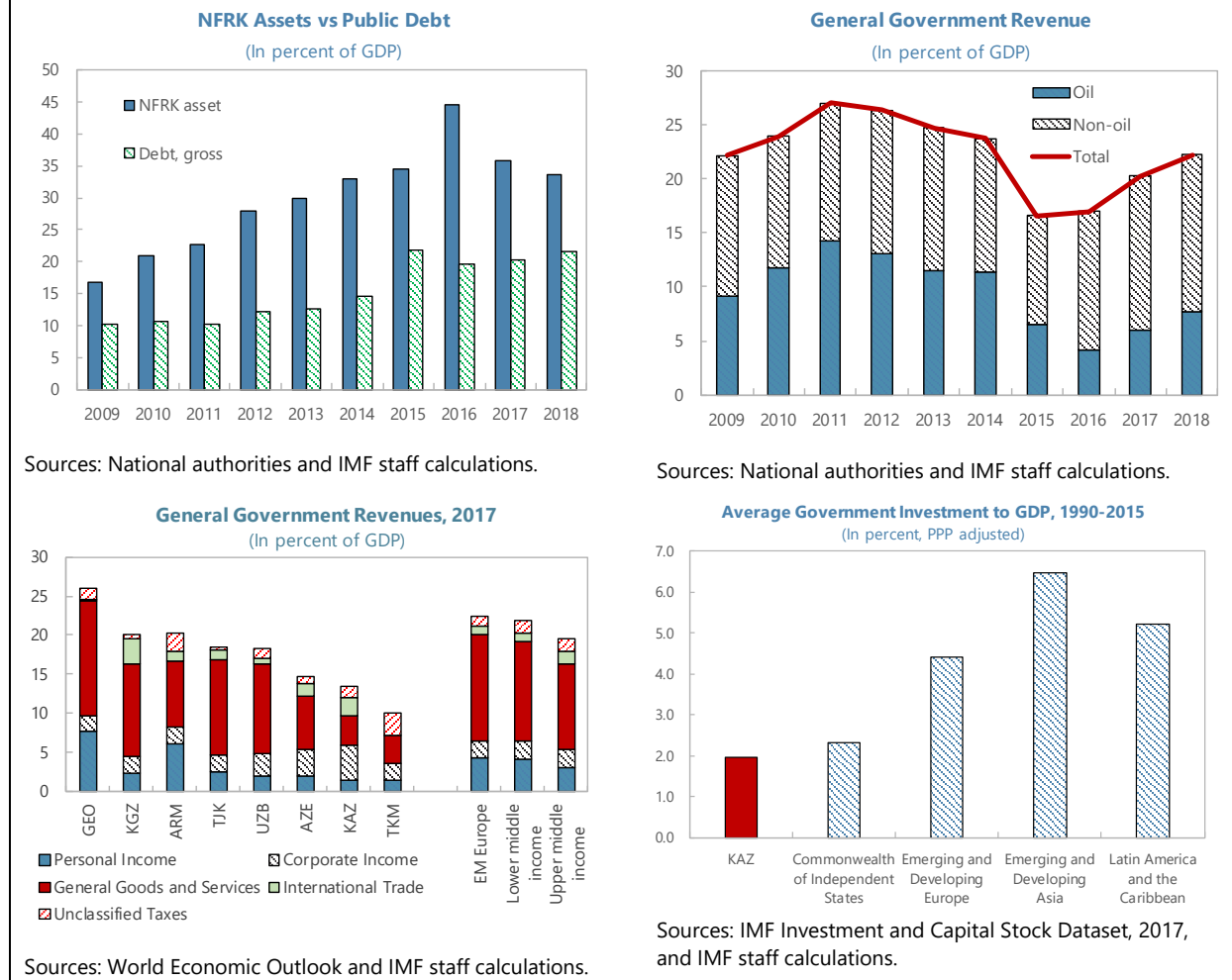
¹ Prepared by Obeid Ur Rehman and Wei Shi.

² Estimates from a cross-country panel regression model are shown in Appendix I.

³ Impulse responses of Kazakhstan's major taxes to oil-sector shocks are presented in Appendix II. The results are from a structural vector autoregression (VAR) model using quarterly data during 2002–18 and the following recursive ordering: international oil price (simple average of Dated Brent, West Texas Intermediate, and the Dubai Fateh), domestic oil production (from Haver), and revenues for specific taxes. All variables are expressed in logarithms. Qualitatively-similar results can be obtained with autoregressive models.

progressivity, and how they may interact with individuals’ decision between formal employment and self-employment. Section D concludes with policy recommendations on broadening the tax base and improving tax design and administration. Data limitation, notably lack of sufficient information on household income, precludes calibrating the magnitude of tax policy changes and estimating the corresponding revenue impacts. Future analytical work in these areas would be helpful.

Figure 1. Kazakhstan: Selected Fiscal Sector Indicators



B. Effective Tax on Labor—Who Pays and How Much

3. Labor in Kazakhstan faces a variety of taxes and mandatory contributions. Although individually each tax or contribution has a relatively low rate, the combined effective tax rate on labor is high. A social tax, social insurance contributions, obligatory social medical insurance (OSMI), and a proposed employer share of obligatory pension contributions (OPC) are charged to employers, while employees pay the PIT and a share of the OPC.⁴ Total taxes and mandatory

⁴ Social insurance contributions are fully creditable against an employer’s social tax liabilities. Therefore, they are not an additional tax burden on the employer and are hence not separately discussed in this analysis.

Table 1. Kazakhstan: Labor Tax Schedules

| | | <i>Base</i> | <i>Bracket</i> | <i>2007</i> | <i>2008</i> | <i>2009</i> | <i>2017</i> | <i>2019</i> | <i>2020</i> |
|---|---|-------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Panel A: Paid by Employees | | | | | | | | | |
| Personal Income Tax (PIT) | Gross income with deductions for the minimum wage and employee OPC 1/ | | <i>Lowest</i> | 5% | | | | 1% | 1% |
| | | | 2 | 8% | | | | | |
| | | | 3 | 13% | 10% | 10% | 10% | | |
| | | | 4 | 15% | | | | 10% | 10% |
| | | | <i>Highest</i> | 20% | | | | | |
| Obligatory Pension Contributions (OPC) | Gross income capped at 50 times the minimum wage | | | 10% | 10% | 10% | 10% | 10% | 10% |
| Obligatory Social Medical Insurance (OSMI) | Gross income with OPC deduction, capped at 15 times the minimum wage | | | | | | | | 1% |
| Panel B: Paid by Employers | | | | | | | | | |
| Social Tax | Gross income with OPC deduction, credits for social insurance contributions | | <i>Lowest</i> | 20% | 13% | | | | |
| | | | 2 | 15% | 11% | | | | |
| | | | 3 | 12% | 9% | 11% | 11% | 9.5% | 9.5% |
| | | | 4 | 9% | 7% | | | | |
| | | | <i>Highest</i> | 7% | 5% | | | | |
| Social Insurance Contribution | Gross income capped at 10 times the minimum wage | | | | | | 5% | 3.5% | 3.5% |
| OSMI | Gross income with OPC deduction, capped at 15 times the minimum wage | | | | | | 1% | 1.5% | 2.0% |
| OPC 2/ | Gross income capped at 50 times the minimum wage | | | | | | | | 5% |
| Panel C: Total | | | | | | | | | |
| Total Taxes + Contributions | | | <i>Lowest</i> | 35% | 33% | | | 22% | 28.5% |
| | | | 2 | 33% | 31% | | | | |
| | | | 3 | 35% | 29% | 31% | 32% | | |
| | | | 4 | 34% | 27% | | | 31% | 37.5% |
| | | | <i>Highest</i> | 33% | 25% | | | | |

Source: IMF staff.

1/ The monthly minimum wage levels is set annually by the government. For 2019 it was set at KZT 42,500 (\$112).

2/ The introduction of additional OPC is postponed to 2023 by decision of the President.

contributions for labor add up to between 22–31 percent of gross income and are expected to increase to around 29–38 percent over the medium term.

4. Major labor tax reforms took place in 2007–08 and led to a tax system characterized by flat rates. Prior to the reforms, Kazakhstan had a progressive PIT and a regressive social tax with rates ranging between 5–20 percent. The reforms replaced both with flat rates at 10 percent and 11 percent, respectively; these have remained flat for the past decade. In 2019, to make the PIT more progressive, the rate for low-income individuals was reduced to 1 percent, changing the PIT to a two-tier schedule. The flat social tax rate was decreased from 11 percent to 9.5 percent in 2018, but

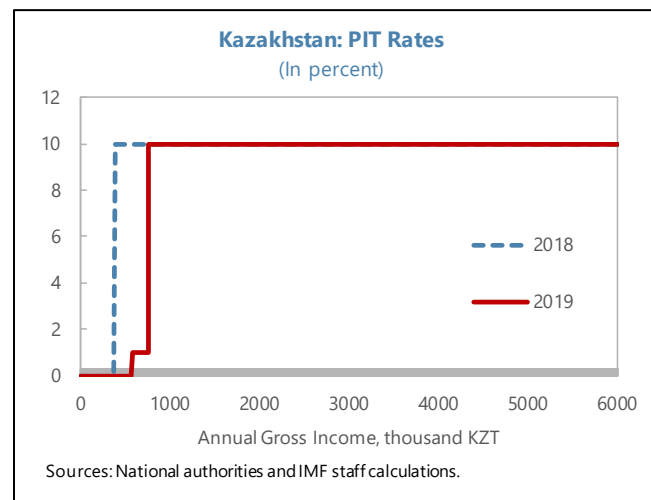
the reduction was largely offset by imposition of the (flat) OSMI, and the overall labor tax burden remained unchanged. The OPC rate payable by employees has remained constant at 10 percent.

5. There are plans to increase contribution rates. Specifically, starting in 2020, the government plans to impose a 1-percent employee contribution to the OSMI and a 0.5-percentage point increase in employer OSMI contributions. An additional 5-percent employer contribution to the pension fund was initially scheduled for 2020, but is now likely to be delayed to 2023. These new contributions will bring the total tax and contribution burdens above the levels prevailing prior to the 2007–08 reforms.

C. Progressivity of Labor Taxes

6. The only source of progressivity in labor taxes and contributions comes from the PIT. Progressivity is defined as an increasing average effective tax rate, i.e., tax liability divided by gross income, as income increases. Deductions for the minimum wage and obligatory pension contributions make the PIT progressive by reducing the income base on which the PIT is applied. Therefore, even with a flat nominal PIT rate at 10 percent, low-income individuals face a lower effective tax rate. All other taxes and contributions have flat rates; however, the fact that the income base for most contributions is capped effectively makes them regressive at high income levels.

7. A lower PIT rate for low-income taxpayers and deduction of the minimum wage provide some progressivity. The lower PIT rate of 1 percent was introduced in 2019 for employees with monthly earning below KZT 63,125.⁵ Also, the minimum wage was increased from KZT 28,000 to KZT 42,500, raising the threshold at which the PIT takes effect.⁶ As the PIT rate is only applied after the minimum wage threshold, the lower 1-percent rate for low-income tax payers only applies to a small portion of the wage distribution, namely those earning between KZT 42,500–63,125 per month. Employees earning below KZT 42,500 are exempt through the minimum wage and those earning above KZT 63,125 are not eligible for the lower tax rate.



⁵ Equivalent to 25 Monthly Calculation Indexes (MCIs). MCI is used to benchmark pensions and other social payments. It is set annually by the law of the Republican Budget. In 2019, 1 MCI is equal to KZT 2,525.

⁶ The minimum wage is revised every year by the government, usually to account for inflation, though the 2019 increase is significantly higher than inflation.

8. An important measure to study the efficiency and progressivity of labor taxes is the effective tax rate.

Figure ‘Kazakhstan: Effective PIT Rates’ and Table 2 compare the effective PIT rates in 2018 and 2019 against the current wage distribution. As with the marginal rate, the effective PIT rate is zero at wage levels below the minimum wage. In 2018, the effective PIT rate increased gradually after crossing the minimum wage threshold, eventually plateauing at around 8.5 percent. The 2019 reform lowered the effective tax rate at all income levels. The average

effective rate decreased from 6.9 percent in 2018 to 6.0 percent in 2019. The largest decrease was for employees earning wages corresponding to the new, lower 1-percent rate. For example, for an individual earning KZT 750,000 annually—i.e., monthly earnings of KZT 62,500 just at the eligible threshold—the effective PIT rate decreased from 4.5 percent to 0.2 percent. Approximately 8-15 percent of wage earners are likely to be affected by the PIT rate reduction to 1 percent.⁷ As a result, the share of the PIT liability of the bottom 70 percent of employees in 2019 decreased from 32 percent to 27 percent.

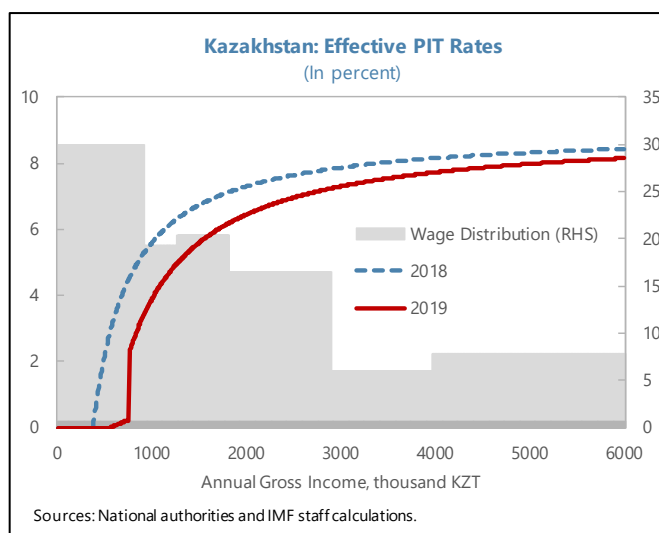


Table 2. Kazakhstan: Share of Labor Taxes by Income Brackets

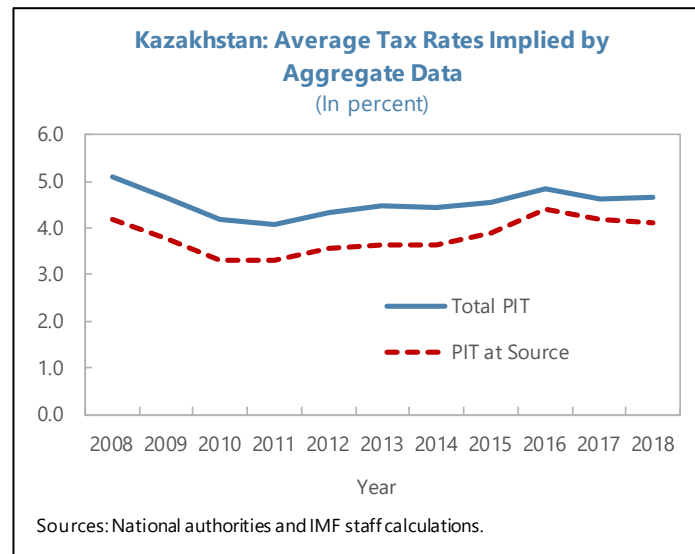
| Monthly Income Bracket (KZT) | Average Income | Percent of Employees in Bracket | Effective Tax Rate | | Share of Total Tax Liability | |
|------------------------------|----------------|---------------------------------|--------------------|------------|------------------------------|--------------|
| | | | 2018 | 2019 | 2018 | 2019 |
| 0 - 75,000 | 37,500 | 30.0 | 1.5 | 0.0 | 1.7 | 0.0 |
| 75,001 - 105,000 | 90,001 | 19.3 | 5.9 | 4.3 | 10.8 | 9.0 |
| 105,001 - 150,000 | 127,501 | 20.4 | 6.8 | 5.7 | 18.7 | 17.8 |
| 150,001 - 240,000 | 195,001 | 16.5 | 7.6 | 6.8 | 25.7 | 26.5 |
| 240,001 - 330,000 | 285,001 | 5.9 | 8.0 | 7.4 | 14.3 | 15.1 |
| > 330,001 | 415,001 | 7.9 | 8.3 | 8.0 | 28.9 | 31.6 |
| Total | | 100.0 | 6.9 | 6.1 | 100.0 | 100.0 |

Sources: National authorities and IMF staff calculation.

⁷ A more accurate estimate cannot be made as more detailed wage distribution information is not available.

9. Actual PIT collections are weaker than implied by the micro-level average tax rate.

Although the estimated average tax rate in 2018 is 6.8 percent, the total PIT collected was approximately 5 percent of aggregate wages (compensation of employees), largely withheld at source—the PIT collection method for employees in the formal sector. This gap between the micro and macro average tax rates suggests the presence of tax incentives, economic informality, and incomplete compliance.

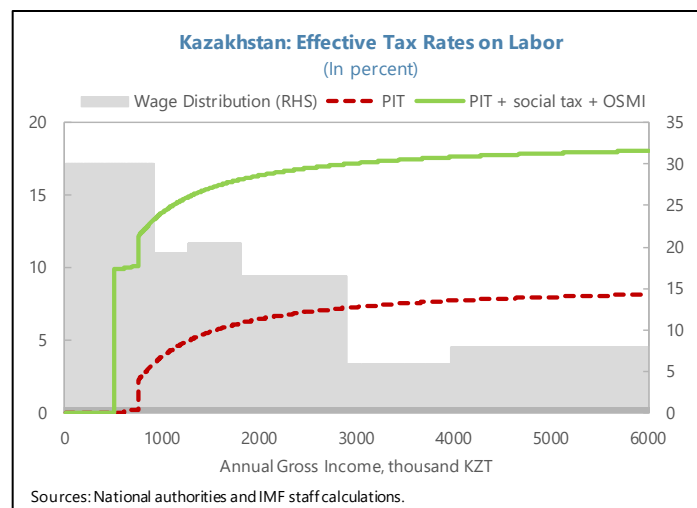


10. When assessing progressivity and the tax burden, it is important to consider the role of other taxes and contributions on labor.

As mentioned earlier, PIT is the only present source of progressivity in labor taxes and contributions. All other taxes and contributions increase the effective tax rates at all income levels without changing progressivity. Figure ‘Kazakhstan: Effective Tax Rates on Labor’ shows the effective tax rates after combining PIT, social tax and OSMI. The social tax and OSMI shift the effective tax rate up but do not change the shape of the curve.

11. Although social tax and OSMI are paid by employers, like any tax on labor, their incidence may fall on employees.

Depending on labor market conditions, the effective labor tax may be as high as the green line (if the entire incidence of labor taxes is on employees). At the median wage, the effective labor tax rate could be as high as 15.7 percent, not including obligatory pension contributions (10 percent), as these are usually not considered a tax on labor. However, if the pension contributions are seen as a forced burden not directly tied to future compensation, they may have the same impact on labor market activities as additional taxes.



Self-Employed vs. Employed

12. The labor tax burden disproportionately falls on employees of the formal sector.

Around 6.6 million out of Kazakhstan's 8.7 million employed individuals have all labor taxes and contributions withheld at source by their employers. This is the primary collection mechanism for most labor taxes, and 90 percent of PIT revenue is collected this way. The remaining two million are self-employed, with 94 percent categorized as "own-account workers," meaning that they do not employ other workers on a continuous basis to work for them. Self-employed individuals self-assess, report, and pay their tax liabilities. Although they make up almost 25 percent of the employed population, PIT revenue from self-assessment accounts for only 9–11 percent of total PIT revenue.

The past few years saw growth in the share of PIT revenue collected through self-assessment, but its low share in PIT revenue highlights challenges the government faces in tax enforcement and administration associated with self-employed individuals.

| Kazakhstan: PIT Revenues (In billions of KZT) | | | | |
|--|-------------|-----------------|---------------|----------------------------|
| | PIT Revenue | Taxes at Source | Self-Assessed | Share of Self-Assessed (%) |
| 2018 | 838.4 | 739.7 | 91.9 | 11.0 |
| 2017 | 750.2 | 676.5 | 68.2 | 9.1 |
| 2016 | 691.8 | 627.1 | 61.0 | 8.8 |

Sources: National authorities and IMF staff calculations.

13. Self-employed individuals face different—and in most cases lower—tax rates than regular employees.

Options available to self-employed individuals include a general regime for registered individual entrepreneurs, one of several special tax regimes for small and medium enterprises (SMEs), and starting in 2019, a unified cumulative payment regime if they are neither registered as individual entrepreneurs nor have employees. Individuals subject to these regimes face lighter tax burden. For instance, for someone with a monthly income of KZT 100,000, the monthly tax liability under the general regime for individual entrepreneurs amounts to around KZT 17,000 if he or she hires one additional labor; it will be even lower if he or she is eligible for the other two regimes. However, if such a person is formally employed, the combined taxes and social contributions could be as high as KZT 26,750.

14. Given the significant share of the population that benefits from special regimes, it is worth reviewing their efficiency, and especially, limiting their use by high-income self-employed individuals. Many countries allow for discounted and simplified tax regimes for SMEs which are considered engines of growth that provide both employment and output. However, lower tax rates combined with limited enforcement and administration capacity could mean that SMEs—or entrepreneurs—enjoy significant benefits relative to the much larger, formally-employed population. This may mean that some highly-compensated individuals have incentives to limit their tax obligations by registering as self-employed. The unified central payment, introduced in 2019, could help bring low-income self-employed population into the tax net. Yet, to increase tax collections and progressivity, it is important to consider ways to limit the use of simplified regimes by high-income self-employed individuals and more adequately capture income and activities, for example, through third-party information sources—such as vehicle registration, property registration, and credit registry—and risk-based audits.

Table 3. Kazakhstan: Taxes on Self-Employed Individuals

| | Individual Entrepreneur (IE) | | Unified Cumulative Payer |
|---|---|---|--|
| | General Regime | Special Tax Regimes | |
| Eligibility | Individuals who hire employees or have annual income greater than 12 MW must be registered as IE. | Multiple regimes for registered small/medium enterprises based on employment and income limits. | For individuals not registered as IE, with no employees, who sell goods and services to other individuals and annual income is below 1,175 MCI.(*) |
| Personal Income Tax (PIT) | 10% | 1-3% | |
| Social Tax (ST) | 2 MCI for themselves 1 MCI per employee | 2 MCI for themselves, 1MCI per employee or 1.5% of the simplified tax regime | Unified Cumulative Payment: 1 MCI—Cities 0.5 MCI—Other areas |
| Obligatory Social Medical Insurance (OSMI) | 2019—0% 2020—5% of 2 MW | 2019—0% 2020—5% of 2 MW | Revenue Distribution: 10% as PIT 20% as ST 40% as OSMI 30% as OPC |
| Obligatory Pension Contributions (OPC) | 10% | 10% | |

Sources: National authorities and IMF staff calculation.
 (*) Monthly Calculation Index (MCI) for 2019 is KZT 2,525 and Minimum Wage (MW) for 2019 is KZT 63,125 per month.

D. Increasing Tax Revenue, Progressivity, and Compliance

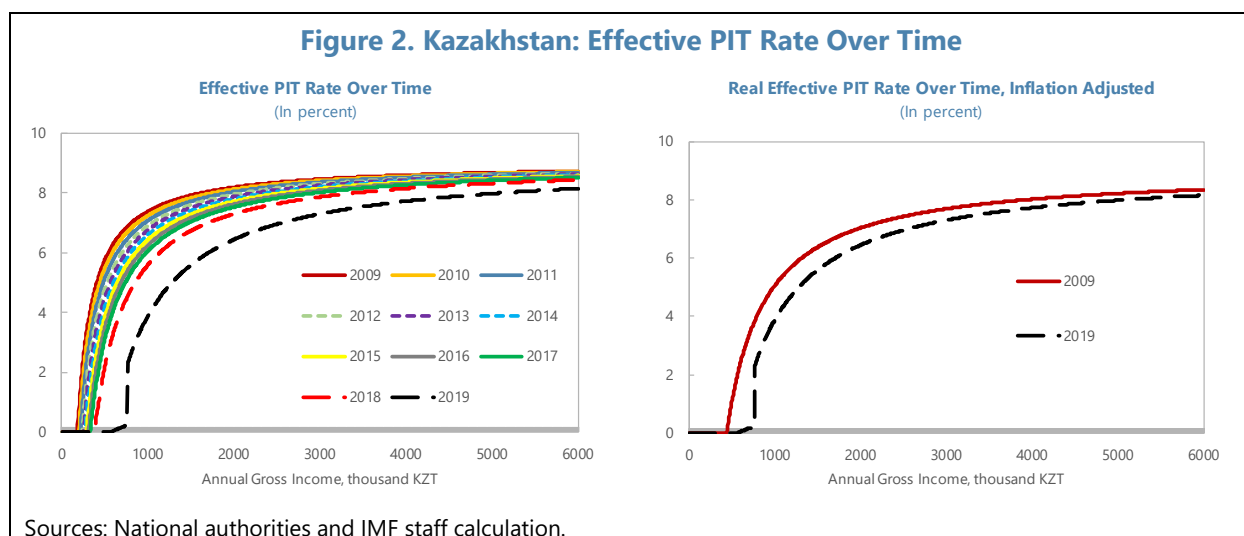
15. Given the challenges facing the labor tax system in Kazakhstan, reform efforts are needed to improve revenue potential and to make labor taxes more equitable and efficient.

On the one hand, the combined effective tax burden born by employees and employers in the formal sector is relatively significant. On the other hand, as the tax base is narrowed by various incentives (agriculture; capital income, see Box 1) and the simplified regime, revenue potential is not yet fully realized for high-income taxpayers, and there remains room to enhance tax administration. There are non-rate aspects of the PIT regime (base, deductions, administration) that may be leveraged to increase revenue and progressivity. These actions may be more viable than changes in tax rates; tackling some may be a forerunner of a more comprehensive tax reform.

Differentiating Deductions for Better Targeting

16. Although the PIT rate had remained constant at 10 percent for almost a decade, the effective tax rate decreased in nominal terms over time due to the deduction of rising minimum wages. Figure 6 shows the evolution of the effective PIT rate from 2009 to 2019. The annual revision of the minimum wage in Kazakhstan increases the threshold at which the PIT

becomes applicable and reduces the effective tax rate at all levels of income as the minimum wage is deducted from the PIT income base. The effective tax rate has decreased in real terms as well, implying that the minimum wage revisions have been greater than inflation.



17. Over the last decade, the minimum wage has been the most important factor in reducing effective tax rates. It has a more significant impact than the recent headline reform, which decreased the PIT rate to 1 percent for low-income taxpayers from 2019. Given the effectiveness of deductions, the government may consider using expanded deductions to further target tax breaks. Many countries use expanded deductions based on, for example, marital status or household size or composition; currently in Kazakhstan, all taxpayers are allowed the same deduction.

Expanding the Tax Base

18. More effectively taxing higher income individuals will require expanding the tax base. Increasing the PIT rate at high income levels may not yield much benefit as high income individuals may arrange not to receive most of their income as wages. Additionally, the tax and contribution burden on employees is already high, and any rate increase may further burden those who are now paying high taxes. The PIT base may be expanded instead by taxing non-wage sources of personal income, including capital income from interest, dividends, and capital gains. These income sources are more likely to be received by high income individuals. Currently in Kazakhstan, although some capital income is taxable, exemptions allow most of it to go untaxed. Dividends that are not already exempt are taxed at a lower 5 percent rate.

19. An additional advantage of taxing capital income is in tax administration requirements. Capital taxes may be withheld and reported by third parties—either by the institution paying the income (in case of interest and dividends) or by the institution processing or registering the transactions (capital gains).

Box 1. Tax Exemptions for Interest, Dividends, and Capital Gains

A wide-range of capital income is exempted in Kazakhstan.

Interest income is exempted:

- On deposits in banks licensed by the National Bank of Kazakhstan, debt securities, securities issued by the government of Kazakhstan.

Dividends are exempted if they are:

- Paid on securities officially listed on the Kazakh stock exchange;
- Paid by a Kazakh legal entity, except petroleum and mining firms, provided that ownership stake has been held for more than three years.

Capital gains that are exempted from PIT include:

- Sale of securities issued by the government of Kazakhstan;
- Income from an investment deposit placed with the Islamic bank;
- Gains from sales of ownership stakes in Kazakh legal entities, except petroleum and mining firms;
- Gains from a sale of stocks or bonds officially listed on the Kazakh stock exchange.

Enhancing Information Reporting

20. Kazakhstan has successfully leveraged third-party information for reporting and withholding by employers to collect taxes and contributions from employees. The authorities also have access to other information sources that could be used to address evasion. The government will gradually implement a universal income and property declaration. To be effective, the declaration should be combined with a credible corrective action, if evasion is found. Taxpayers will be more likely to accurately report their income and property if they know their reported information will be cross-verified from other sources. Cross-checking the information from declarations with other sources such as vehicle registration, property registration, and credit information will allow the government to identify and catch potential evasion.

21. Third-party reporting and withholding should also be incorporated in other transactions in the economy. Capital income, as mentioned earlier, should be reported to the revenue committee, even if it remains untaxed. At a minimum, this would allow the government to more accurately measure the size on income streams and their potential as sources to expand the tax base. Increased use of debit cards, credit cards, and online portals for payment allows for greater information reporting and cross-checking with income declarations. Many countries require payment card companies to report aggregate transaction volumes using point-of-sale (POS) machines. Better reporting will prevent evasion from firms exploiting turnover-based special tax regimes.

Combatting Evasion

22. Some aspects of the current tax regime may create incentives for evasion.

- While most capital income is currently exempt, some dividends are taxed at 5 percent. Varying tax rates across sources of capital income may encourage arbitrage among different capital income streams. Therefore, a single tax rate on all forms of capital income is preferred.
- The income threshold for the 1-percent PIT rate currently applies *separately* to multiple jobs. Individuals can limit taxation by splitting their reported income across multiple jobs. For example, individuals earning KZT 126,250 would have a PIT liability of KZT 7,113; however, if they collude with their employers to instead report two jobs paying KZT 63,125, their tax liability would drop to KZT 286. To discourage such evasion, the lower threshold should apply to the sum of all employment income. Moreover, the threshold for the 1-percent rate currently applies to *monthly* income. Individuals can evade taxes by splitting their reported income across multiple months. Thus, it is worth considering having the threshold apply to the equivalent annual income of employees.
- There is a tax "notch"—a jump in the tax liability and a drop in after-tax income—at the income threshold between 1 percent and 10 percent PIT rate. An individual earning KZT 63,125 has a tax liability of KZT 143, whereas an individual earning just 1 more Tenge has a tax liability ten times higher (KZT 63,126 has a tax liability of KZT 1,431). This creates strong evasion incentives to report income just below the notch. To reduce such evasion, the notch should be eliminated i.e. the 10-percent PIT rate should only apply to the part of the income in excess of the threshold to prevent the jump in tax liability at the threshold.

References

- Francesca Castellani, Marcelo Olarreaga, Ugo Panizza, and Yue Zhou, 2018, "Investment Gaps in IDB Borrowing Countries", Graduate Institute of International and Development Studies, Working Paper No. HEIDWP03-2018, Geneva Switzerland.
- Deloitte (2018), "International Tax - Kazakhstan Highlights 2018", available at <https://dits.deloitte.com/#TaxGuides>.
- Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review, 105(10), 3150-3182, available for download at www.ggdcc.net/pwt.
- International Monetary Fund, 2015, "Making Public Investment More Efficient." IMF Policy Paper, Washington, D.C.
- International Monetary Fund (2019), "Promoting Inclusive Growth in the Caucasus and Central Asia", MCD Department Paper, Washington, D.C.
- Ivanova, A., Keen, M., & Klemm, A. (2005), "The Russian 'flat tax reform'", Economic policy, 20(43), 398-444.
- Keen, M., Kim, Y., & Varsano, R. (2008), "The "flat tax(es): principles and experience", International Tax and Public Finance, 15(6), 712-751.
- [Republic of Kazakhstan](#), Ministry of Justice (2018), "On taxes and other obligatory payments to the budget (Tax Code) - Code of the Republic of Kazakhstan of December 25, 2017", No 120-VI.
- Slemrod, J. (2018), "Tax compliance and enforcement", (No. w24799), National Bureau of Economic Research.

Appendix I. Preliminary Quantification of Kazakhstan's Government Investment Gap

This appendix attempts to quantify Kazakhstan's government investment gap visible in Figure 1 Panel 4. Preliminary estimates suggest that there is a gap of 2–3 percent of GDP (purchasing power parity (PPP) adjusted) in annual government investment relative to the level needed to raise Kazakhstan's total investment (20 percent of GDP) to the average of top 30 richest countries (28 percent of GDP), given current level of per capita income and economic structure.¹

The empirical analysis draws on government investment and capital stock data from the IMF Investment and Capital Stock Dataset (2017 vintage), gross output and value-added share of major production sectors and population from the United Nations, growth and GDP from World Economic Outlook, and nominal share of total investment from Penn World Table 9.1. All series are transformed into five-year averages with non-overlapping time windows during 1990–2015 to capture medium-term changes. The model is estimated within two ways to capture economic structure: Specification I uses share of major sectors (agriculture, manufacturing, and construction)² in gross output, while Specification II uses share in value-added. The reported predicted value of government investment to GDP uses all coefficient estimates, yet excluding insignificant variables does not significantly change the outcome.

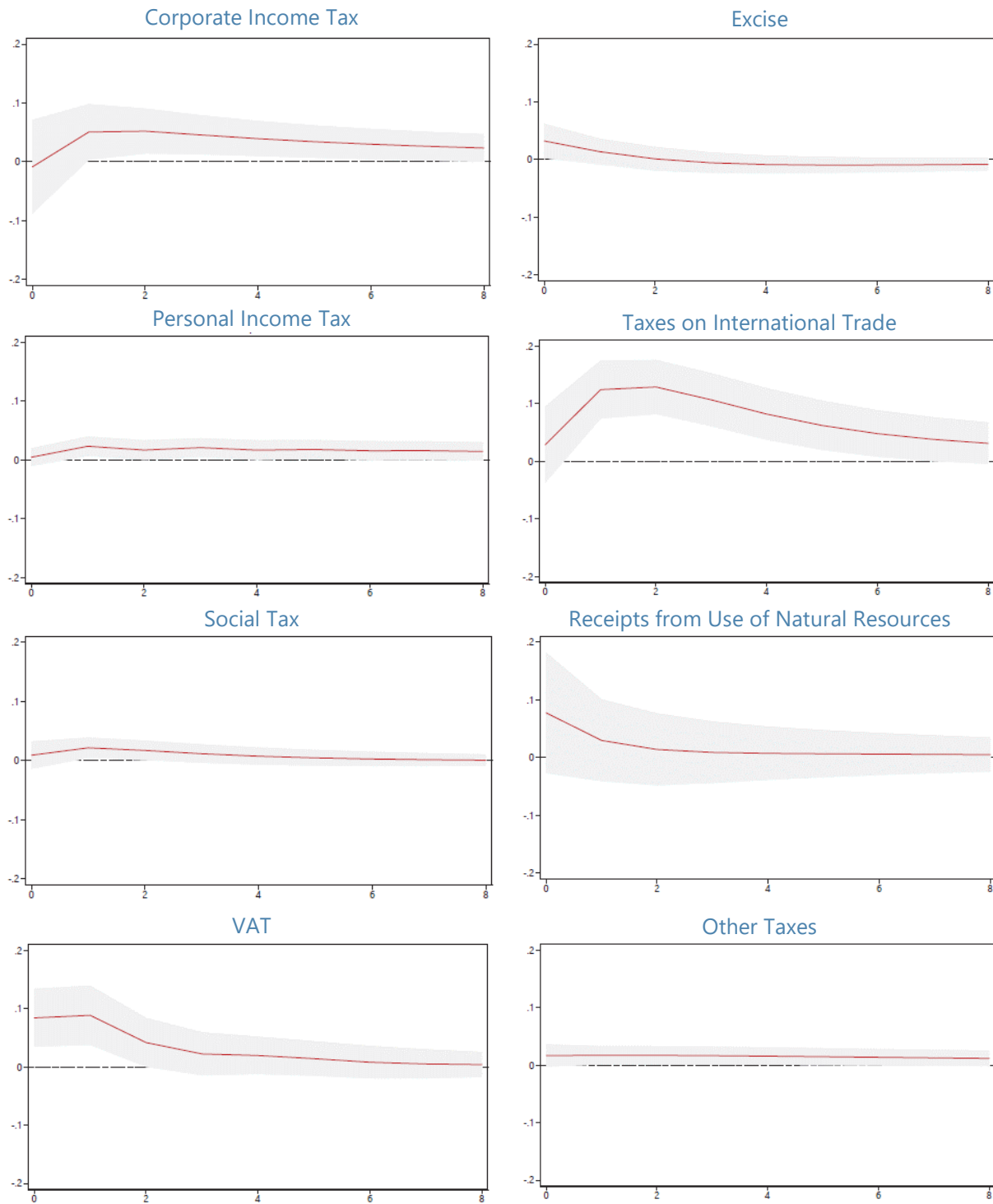
| Table 1. Kazakhstan: Government Investment Gap | | |
|--|------------------------|-----------------------|
| <i>(In percent)</i> | | |
| Government investment to GDP, PPP-adjusted | | |
| | I | II |
| Actual, 2015 | 2.9 | 2.9 |
| Predicted | 5.0 | 5.7 |
| <i>Underlying Panel Regression</i> | | |
| <i>Per capita GDP, log</i> | 1.2950** (0.0182) | 0.9322* (0.0652) |
| <i>Total investment to GDP</i> | 0.0991*** (0.0000) | 0.0951*** (0.0000) |
| <i>Share of: agriculture</i> | 0.0789* (0.0824) | 0.0462 (0.1457) |
| <i> manufacturing</i> | 0.0214 (0.3724) | -0.0039 (0.9011) |
| <i> construction</i> | 0.2065*** (0.0000) | 0.2473*** (0.0000) |
| <i>Constant</i> | -12.4059** (0.0249) | -8.0829 (0.1070) |
| <i>Country fixed effect</i> | YES | YES |
| <i>Observations</i> | 512 | 557 |
| <i>R-squared</i> | 0.1880 | 0.1780 |
| <i>Number of countries</i> | 120 | 129 |
| Sources: IMF Investment and Capital Stock Dataset (2017), United Nations National Accounts, World Economic Outlook, Penn World Table version 9.1, and IMF staff estimates. | | |
| Note: Specification I uses sector share in gross output, while specification II uses sector share in value-added. P-values are in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Predicted value holds per capita GDP and sector shares at their latest available values while assumes that total investment to GDP converges to average of top 30 richest countries (28 percent). | | |

¹ For comparison, Global Infrastructure Outlook 2017 report estimates that the annual infrastructure gap in Kazakhstan is around 1.2 percent of GDP.

² All the other sectors are aggregated into a service sector, which is not included as the regression includes a constant.

Appendix II. Impulse Response Functions

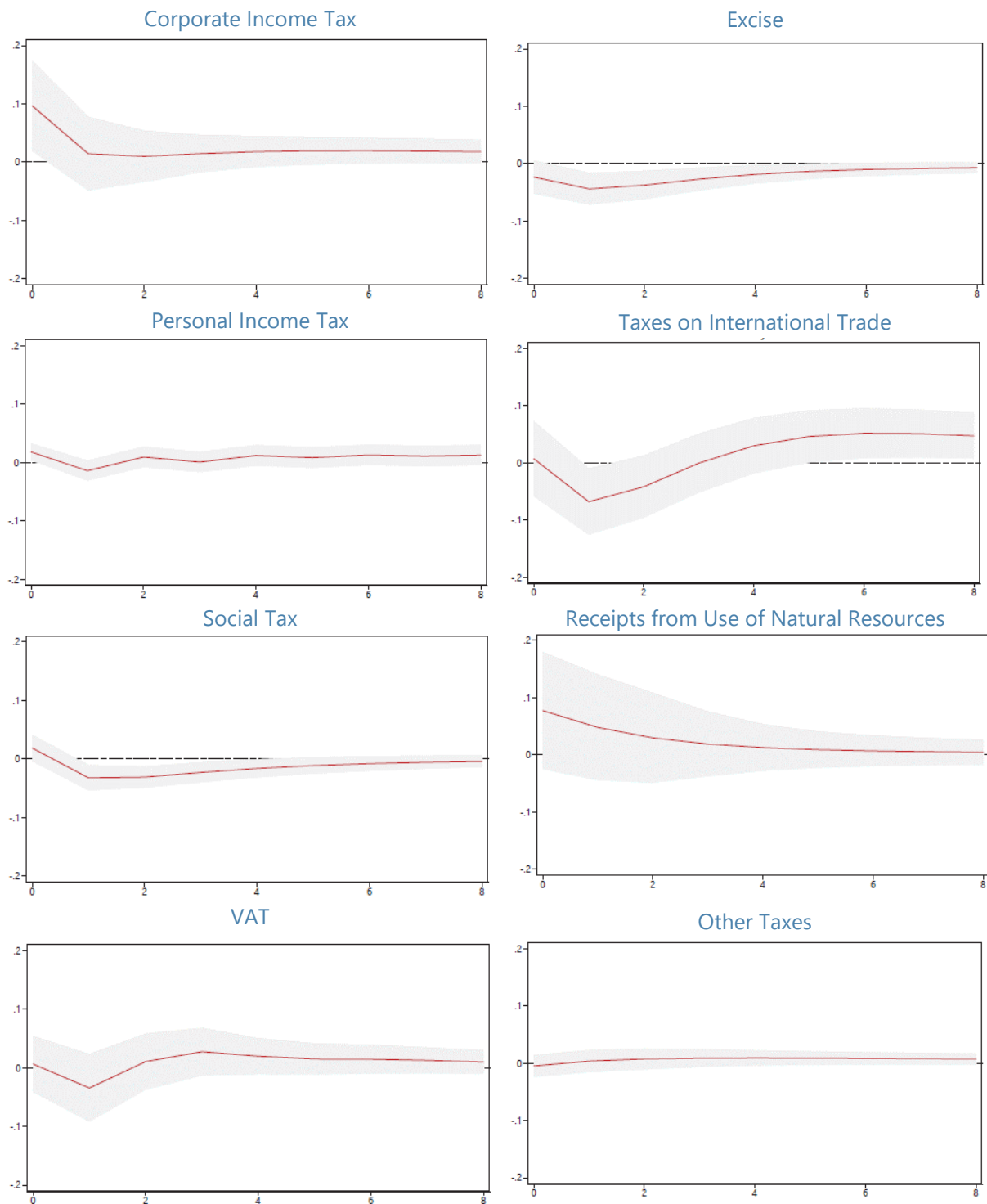
Figure 1. Kazakhstan: Impulse Response to International Oil Price



Sources: National authorities, IMF Primary Commodity Price System, Haver Analytics, and IMF staff estimates.

Note: Orthogonalized impulse response functions are shown in red with shaded area illustrating the 95-percent confidence interval. Number of quarters are illustrated on the horizontal axis.

Figure 2. Kazakhstan: Impulse Response to Domestic Oil Production



Sources: National authorities, IMF Primary Commodity Price System, Haver Analytics, and IMF staff estimates.
 Note: Orthogonalized impulse response functions are shown in red with shaded area illustrating the 95-percent confidence interval. Number of quarters are illustrated on the horizontal axis.

INFRASTRUCTURE INVESTMENT AND FIRM PERFORMANCE: EVIDENCE FROM KAZAKHSTAN'S "NURLY ZHOL" PROGRAM¹

Infrastructure investment can facilitate export diversification and boost economic growth, but the overall impact of large and costly infrastructure projects is context specific. Given the significant resources involved, it is important to analyze the effects of infrastructure investments on economic outcomes. This note examines differences in firm performance arising from exposure to roads and railroads built under Kazakhstan's "Nurly Zhol" program. Results suggest that increased exposure to transport projects is associated with a rise in firm revenues and profits; the effect on employment is not significant. The results can be used to inform future decisions on investment projects.

A. Introduction

1. **Investment in infrastructure can be an important lever for promoting economic diversification and inclusivity and raising growth potential.** In the short term, infrastructure investment can boost domestic demand and in the long run, it may enhance the economy's productive capacity and potential growth. Transport infrastructure plays a special role, as the density and quality of the road and railroad networks are directly linked to the cost of trading (travel time, fuel use, vehicle maintenance). In addition to reducing costs and facilitating access to markets, increased connectivity may improve labor mobility and support regional development and social inclusion.
2. **However, the overall economic impact of infrastructure projects is context specific.** Research suggests that many factors influence the impact of infrastructure investment initiatives. These include the type of infrastructure built—railroads (Atack et al., 2009, Donaldson 2018), electrical grids (Dinkleman, 2011), or mobile phone towers (Jensen, 2007)—as well as factor mobility (Banerjee et al., 2012) and the timeframe, with immediate benefits if the infrastructure removes bottlenecks (Jensen, 2007) and longer-term impact from urbanization (Jedwab and Moradi, 2016). However, there may also be political economy issues. Warner (2014) finds a weak association between investment spending and growth and attributes it to debt financing, poor project selection, and incentive problems. In some cases, large infrastructure projects have contributed to the rapid accumulation of domestic and external debt, raising fiscal sustainability concerns.
3. **Efficiency is key to maximizing benefits from investment.** Investment inefficiencies are prevalent in developing countries. The gap between the unadjusted and efficiency-adjusted public capital stock can be quite large, implying significant potential gains by closing it (Gupta et al., 2014; Crivelli, 2017). The issue seems more acute at times of investment booms when absorptive capacity

¹ Prepared by Faizaan Kisat and Rossen Rozenov.

constraints, manifested in declining marginal returns to investment, become an important factor. Studies suggest that in periods of sharp scaling up of public investment, projects undertaken are less likely to be successful (Presbitero, 2016).

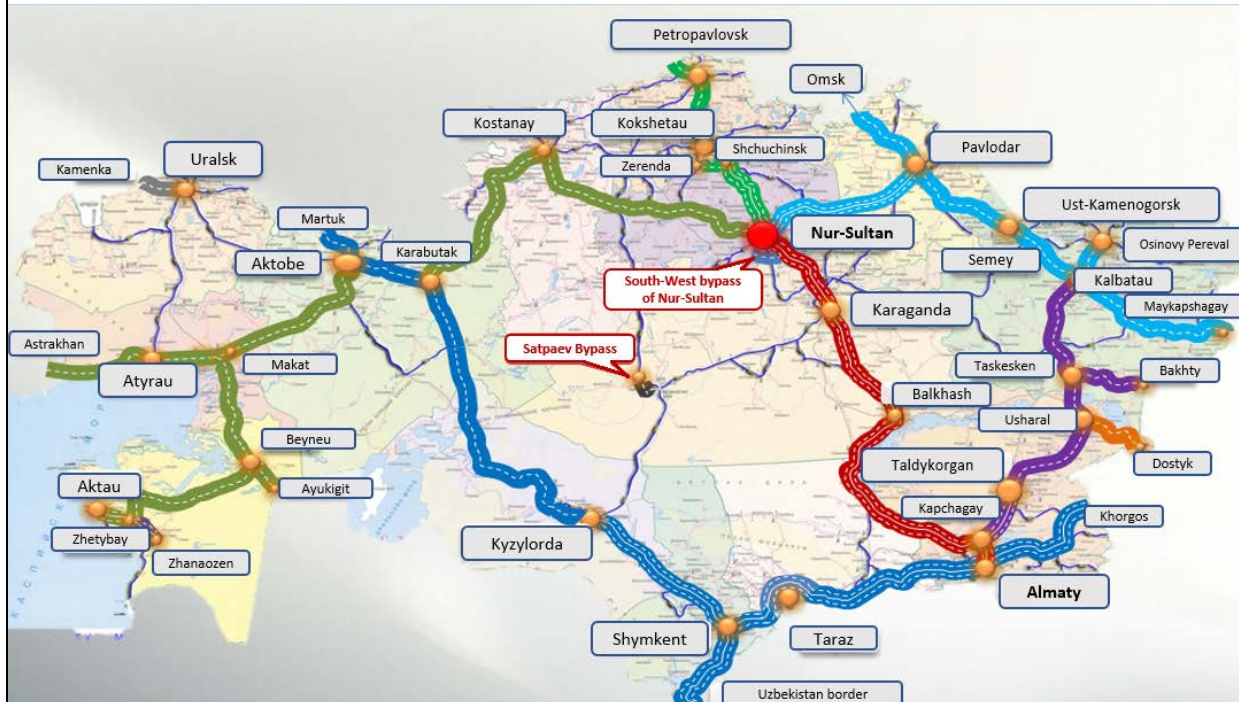
4. Kazakhstan has large infrastructure needs. The country's vast territory and relatively small population present major challenges to building and maintaining an adequate transport network, but the proximity of two large markets—China and Russia—creates opportunities. Infrastructure development features prominently in the authorities' main strategic plan, "Kazakhstan 2050", which identifies two main goals: (i) integration of the national economy into the global economy; and (ii) increased connectivity among regions within the country. These high-level goals were operationalized in early 2013 in a detailed State Program for Transport Infrastructure Development 2020 (SPTID-2020), spanning 2014–20. The program set specific (and ambitious) targets for increases in cargo and passenger transportation (81 percent and 85 percent over 8 years) and outlined measures to achieve them, including scaling up of public investment and increased participation of the private sector.

B. Overview of "Nurly Zhol"

5. In 2015, the government of Kazakhstan launched a large fiscal stimulus package, "Nurly Zhol," as a countercyclical measure. Similar to other countries in the region, Kazakhstan was hit by adverse external shocks in 2014. Growth decelerated noticeably following a steep decline in oil prices and slowdown of external demand, and imbalances emerged. Since shocks were perceived to be long lasting, the authorities responded by launching a sizeable stimulus program. The program combined anti-crisis and structural measures aimed at supporting specific sectors of the economy—providing affordable housing, modernizing infrastructure, promoting entrepreneurship, and increasing the competitiveness of domestic firms. Financing was secured mainly from the National Fund of the Republic of Kazakhstan (NFRK), with an allocation of \$9 billion for 2015–17. Other sources of funding included central government and local budgets, borrowing from international financial institutions, and funds from state companies.

6. A major component of "Nurly Zhol" was upgrade of the transport infrastructure. Analysis revealed significant constraints to transportation among regions, creating bottlenecks for cargo traffic and limiting labor mobility. It was recognized that a forward-looking approach to the provision of necessary infrastructure would also need to take into account important trends, in particular, Kazakhstan's growing population and urbanization. Thus, the infrastructure component of "Nurly Zhol" was centered around the idea of macro regions, with large cities serving as hubs (Almaty, Nur-Sultan, Aktobe, Shymkent, and Ust-Kamenogorsk). Increasingly, resources (capital, human) and economic activity would be concentrated in these cities, and accordingly, they would receive more of the infrastructure investment. Implementation of "Nurly Zhol" would seek synergies with other state programs (e.g., SPTID-2020) and China's Belt-Road Initiative.

Figure 1. Kazakhstan: Map of “Nurly Zhol” Road Projects



Source: KazAutoZhol.

7. Selection of “Nurly Zhol” projects was based on the “ray” principle. Kazakhstan’s road and railroad networks were largely designed and built during the Soviet period and aimed at connecting the North with the South of the country, and as a result, transport links between other regions remained underdeveloped. Consistent with the concept of developing hub cities, transport infrastructure projects under “Nurly Zhol” were selected on a “ray” principle, whereby roads between hubs and roads connecting hubs with other large cities received priority. Projects involved major upgrades and expansion of existing roads or construction of new ones where warranted.² As a result of the program implementation, the average travel time between hub cities was targeted to decrease by over one-third.

C. Empirical Strategy and Data

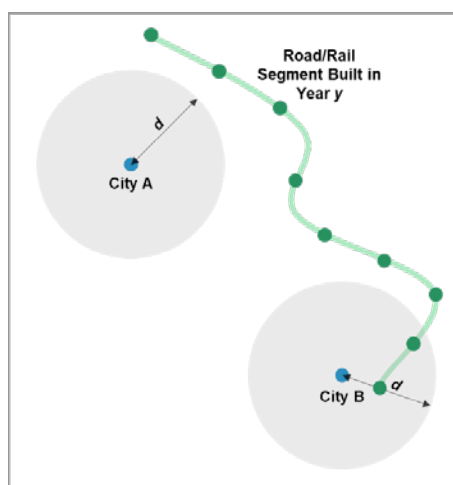
8. In view of the sizable resources dedicated to the implementation of “Nurly Zhol,” it is important to evaluate its impact on economic outcomes. Specifically, it is of interest to explore whether the construction of new roads and railroads has had a significant effect on output, employment, and firm profits. The timing and distribution of transport infrastructure projects create significant differences in the exposure of cities to the program. This makes it possible to exploit

² For example, construction of a new direct road from Nur-Sultan to Aktobe was estimated to reduce travel time by 7 hours compared to an existing road passing through Kostanay.

spatial variation in access to new infrastructure in a difference-in-difference design. The expectation is that during the sample period, the performance of firms situated in cities closer to completed infrastructure projects would differ from that of firms operating in more remote or less exposed locations.

9. Analysis is based on micro-level data. A balanced panel of 1,379 firms (anonymized survey data sourced from the National Bank of Kazakhstan) containing location and quarterly data on operating revenue, cost of sales, assets, and employment was used to evaluate performance over the sample period Q1:2014–Q1:2019. The firms in the sample comprise about 5 percent of total employment and value added in Kazakhstan and provide a sufficiently-broad geographical coverage. Firms operating in the oil sector were excluded, given their size and the industry specifics. Sources of (annual) data on road and railroad projects commissioned under “Nurly Zhol” through 2018 are the Kazakhstani road agency KazAutoZhol and the Ministry of National Economy, respectively. In total, 1,769 km of roads and 1,376 km of railways were included in the analysis.

10. Road and railroad information was used to construct an exposure variable. As a first step, Google Earth was used to geo-code points 10 kilometers apart along a newly renovated or constructed road and rail segment. Then, for each city where a firm was located, the distance to the geo-coded point was calculated (see text figure). A city c is considered to be exposed to the project if it is within d kilometers of any point along the segment, where three different values are tried for d —50 km in the baseline and 25 km and 100 km in alternative specifications. In general, a location may be exposed to more than one road/railroad project p , so the cumulative exposure variable across all years y of the “Nurly Zhol” program is defined as:



$$RoadExpd_{c,y} = \sum_p 1\{City\ c\ within\ d\ km\ of\ Project\ p\ completed\ by\ year\ y\} \quad (1)$$

The rail exposure variable ($RailExpd_{c,y}$) is defined in a similar way. These exposure variables vary by year and location. The main explanatory variable of interest, transport exposure ($TransExpd_{c,y}$), is obtained as the sum of the road and rail exposures. An alternative approach is also considered, where a binary (non-time dependent) variable is introduced, which takes the value of one if a location has ever been exposed to any project during the sample period and zero otherwise:

$$TransEverExpd_c = 1\{TransExpd_{c,2018} \geq 2\}^3 \quad (2)$$

Table 1 illustrates these definitions using the example of the city of Uralsk, and Figure 2 shows

³ The definition is based on the median transportation exposure in 2018 which is 2.

the evolution of exposure across regions and over time. There is significant variation in the cumulative transportation exposure, with Pavlodar and Nur-Sultan being exposed to 8 and 4 projects by 2018, respectively, while no major infrastructure upgrades have taken place near Shymkent or Taraz (Figure 3).⁴

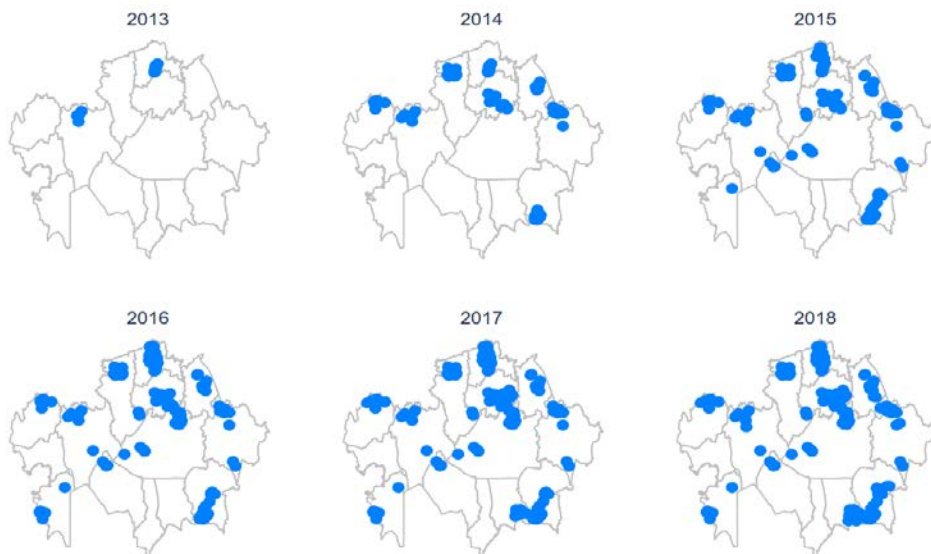
Table 1. Kazakhstan: Uralsk—Transportation Exposure Variables

| City | Year | RoadExp50 | RailExp50 | TransExp50 | TransEverExp50 |
|--------|------|-----------|-----------|------------|----------------|
| Uralsk | 2014 | 1 | 0 | 1 | 1 |
| Uralsk | 2015 | 1 | 0 | 1 | 1 |
| Uralsk | 2016 | 1 | 0 | 1 | 1 |
| Uralsk | 2017 | 2 | 0 | 2 | 1 |
| Uralsk | 2018 | 3 | 0 | 3 | 1 |
| Uralsk | 2019 | 3 | 0 | 3 | 1 |

Source: IMF staff.

The table presents the evolution, over time, of the main transportation variables of interest, for a distance $d = 50$ km.

Figure 2. Kazakhstan: Transportation Exposure: Evolution over Time

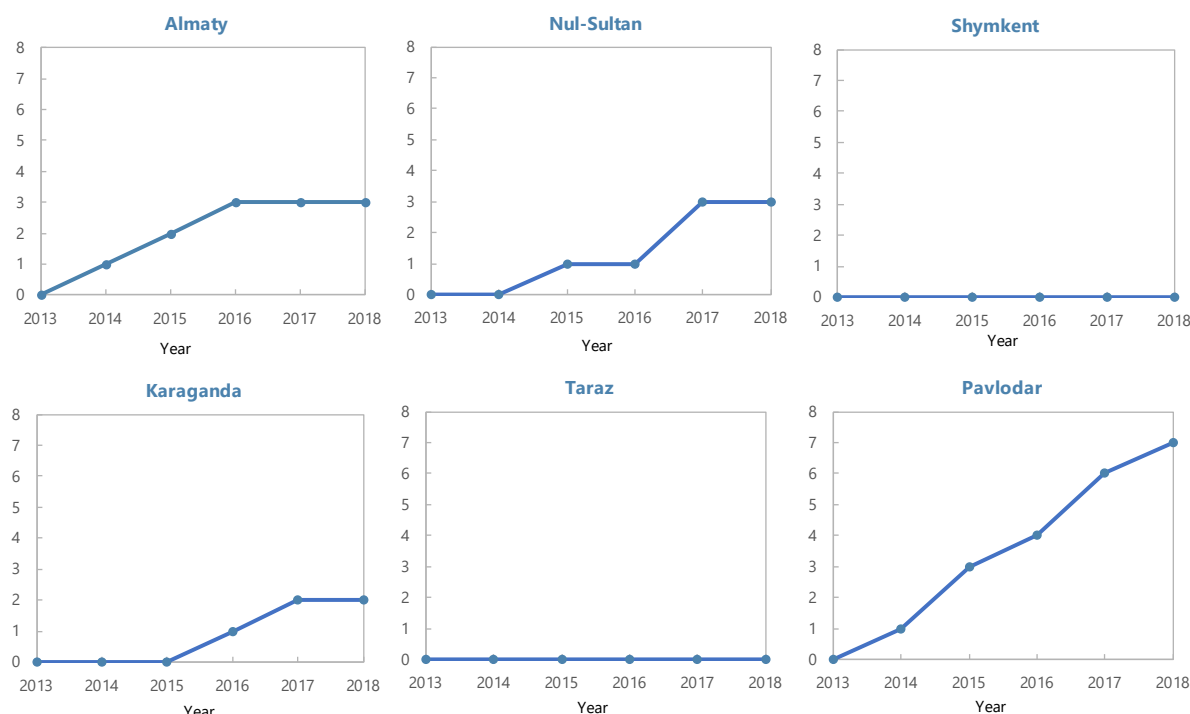


Source: IMF staff calculations.

The figure plots whether a location was exposed to at least one transportation project by a given year. Each point represents a city that was exposed to at least one newly constructed transportation project by year y , where exposure is an indicator variable that equals one if a city was located within 50 km of a transportation project.

⁴ In fact, at the time of the launch of “Nurly Zhol”, the reconstruction of the road connecting Shymkent to Aktobe had already been completed as part of the project Western Europe-Western China, and work was ongoing on the road from Shymkent to Almaty.

Figure 3. Kazakhstan: Cumulative Transportation Exposure: Evolution over Time for Selected Cities (50 km Definition)



Source: IMF staff calculations.

D. Discussion of Results

11. Various empirical specifications were estimated. The baseline empirical specification involves a regression of the outcome variable of interest (output, gross operating profit or employment) on the (one period) lag of the cumulative exposure variable with $d=50$ km, a firm fixed effect (α_f) and a time fixed effect ($\mu_{q,y}$)⁵.

$$Y_{f,c,q,y} = \beta TransExp_{c,y-1} + \alpha_f + \mu_{q,y} + \varepsilon_{f,c,q,y} \quad (3)$$

12. Since the information on roads and railroads commissioned is available only at the annual frequency, the lag of the exposure variable ensures that the project is completed before the results are measured. An alternative specification involving the binary exposure variable defined in (2) was estimated as well. This specification is completely non-parametric in that it compares the relative performance of firms that were ever exposed to a transportation project to firms that did not receive one, without considering the total number of projects that “treated” firms were exposed to. Therefore, this approach addresses concerns that results may be overly influenced by firms located in certain cities where a

⁵ q indexes quarter and y indexes year.

disproportionate number of roads or railways were built.

$$Y_{f,c,q,y} = \sum_{q,y} \beta_{q,y} TransExp_c \times 1\{Period = q, y\} + \alpha_f + \mu_{q,y} + \varepsilon_{f,c,q,y} \quad (4)$$

13. The identifying assumption behind these empirical specifications is that in the absence of the infrastructure projects, firms in both exposed and unexposed cities would have followed the same trend. This assumption could be violated if, for instance, the decision to launch an infrastructure project in a particular location was endogenously linked to that location's higher growth potential. Two considerations mitigate potential endogeneity concerns. First, most of the road projects under Nurlı Zhol involved renovating existing, Soviet-era roads that were built prior to Kazakhstan's independence.⁶ Second, the analysis is not limited to the main cities that were connected by a new transportation project, but rather includes all smaller cities that happen to be along the project's route. It is unlikely that road building decisions factored in the economic potential of these en route cities.

14. Results suggest significant impact on output and profits and no effect on employment. The baseline regression reveals a significant relationship between a firm's proximity to a major transport infrastructure project being completed and its sales revenue and gross profits (Table 2). As reported in column (1), being exposed to an additional transportation project is associated with a KZT 63 million increase in revenues and a KZT 22 million increase in gross profits, which represents a 4 percent and a 10 percent increase relative to the mean, respectively. Employment, on the other hand, does not seem to react to the construction or upgrade of roads and railways. This could be a timing issue but also could signal structural problems with labor mobility. Results from the alternative specification (4) suggest that the impact of transport infrastructure exposure tends to increase over time (Figure 4).

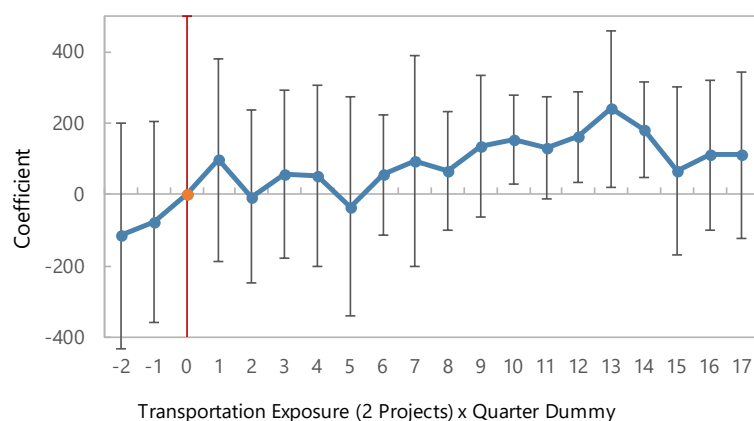
⁶ Nurlı Zhol's rail projects mainly consist of a more than 1,000 km railway line built through the sparsely populated center of the country. Rail exposure is therefore zero for most of the firms in the sample, and therefore its (potential) endogenous placement is not likely to bias the results significantly.

Table 2. Kazakhstan: Transportation Exposure (Lagged) and Firm Performance

| VARIABLES | (1) Revenue | (2) Employment | (3) G. Profit |
|--|-------------------|-------------------|---------------------|
| Transportation Exposure: 50km (Lagged) | 62.98* (36.59) | 0.115 (3.176) | 21.69*** (6.632) |
| Observations | 28,959 | 28,959 | 28,959 |
| Clusters | 210 | 210 | 210 |
| Mean Dep Var | 1689 | 299 | 420 |
| Firm FE | Yes | Yes | Yes |
| Period FE | Yes | Yes | Yes |

Source: IMF staff estimates.

Note: The table presents results from estimating equation (4). The sample consists of a balanced panel of firms from Q1 2014–Q1 2019. Revenues and gross profit are in KZT million. All dependent variables are winsorized at the 1 percent level. Robust standard errors (reported in parentheses) are clustered at the city level. ***, **, and * indicate statistical significance at the 1 percent, 5 percent and 10 percent levels, respectively.

Figure 4. Kazakhstan: Estimated Impact of Transport Infrastructure Exposure on Revenue


Source: IMF staff calculations.

15. The results are robust to alternative distance bandwidths. Using the same specifications as above but with different criteria for proximity ($d=25$ km and $d=100$ km) provides a useful test of the sensitivity of results under the baseline. In fact, the effects on revenue or profits are stronger when a shorter cut-off value for exposure is applied. For example, the point estimate of the coefficient in the revenue regression increases from 63.0 in the baseline to 108.2 when the 25 km benchmark is used, and it is significant at the 1 percent level. Moving to $d=100$ km, the effect disappears, suggesting that firms that are relatively far from new infrastructure do not react much in terms of output.

E. Conclusion

16. Overall, the transport infrastructure component of the “Nurly Zhol” program appears to have yielded positive short-term results. Firms have benefitted from improved connectivity and reduced transportation costs, which are manifested in revenue, and especially, in profit increases. As a rule, the closer a firm is to major new roads and railways, the larger the effect. Also, firms operating in locations where a larger number of projects has been completed seem to gain more. While facilitating labor migration has been one of the goals of the program, there is not enough evidence to support the conclusion that firms in exposed locations hire more workers. This could be due to the fact that most of the projects have been completed only recently, and more time is needed for the effects on employment to materialize. It might, however, be an indication of constraints on the labor supply side, reflecting factors other than cost of travel, e.g., traditions, underdeveloped housing markets, bureaucratic restrictions or obstacles, or skills shortages. More targeted policies would be needed in this case to promote the movement of people.

17. Increasing the efficiency of infrastructure investment would help to achieve better results within a given resource envelope. IMF analysis suggests that countries lose on average about 30 percent of the returns on their investment due to investment inefficiencies (IMF, 2015). In this regard, strengthening public investment management at all stages of the investment process is key. Project proposals should be subject to rigorous appraisal and decisions should be made based on sound economic and financial analysis and assessment of risks. This is particularly true when choosing among competing projects. In addition, putting in place effective and transparent procurement systems would reduce costs and improve the quality of implementation. Project management, oversight and *ex post* evaluations are also important to ensure that projects are delivered on time and on budget and to provide insights for future investment decisions. The IMF’s Public Investment Management Assessment (PIMA) framework provides a useful tool for assessment of the processes and institutions related to the provision of infrastructure assets.

18. Increasing private sector involvement in infrastructure could generate benefits but also entails risks. Both “Nurly Zhol” and SPTID-2020 envisage private sector participation in infrastructure provision and maintenance, mainly through public-private partnerships (PPPs). Many countries have resorted to this vehicle, including as a way to address tight fiscal constraints. If designed and implemented well, PPPs can offer advantages in terms of efficiency in use of resources, technology, and quality of service, in addition to budget savings and risk-sharing. However, weak PPP designs can unduly expose public finances to risks and result in substantial costs if, for example, contracts were based on overly optimistic assumptions about service usage or guarantees were provided by the government. PPPs are becoming increasingly utilized in Kazakhstan, with KZT 570 billion contracted from private investors and government obligations close to KZT 178 billion.⁷ This calls for a careful assessment and management of risks. PFRAM—an analytical tool, developed by the IMF and the World Bank—could be useful in evaluating fiscal costs and risks arising from PPPs.

⁷ As of early September 2019, according to information of the Kazakhstani Public-Private Partnership Center (<https://kzppp.kz/>).

References

- Atack, J., Bateman, F., Haines, M. and R.A. Margo (2010), "Did Railroads Induce or Follow Economic Growth? Urbanization and Population Growth in the American Midwest, 1850-1860", *Social Science History*, Vol. 34, No.2, pp. 171–197.
- Banerjee, A., Duflo, E. and N. Qian (2012), "On the Road: Access to Transportation Infrastructure and Economic Growth in China", *NBER Working Paper* No. 17897.
- Crivelli, E. (2017), "Efficiency-Adjusted Public Capital, Capital Grants, and Growth", *IMF Working Paper* WP/17/168.
- Dinkelman, T. (2011), "The Effects of Rural Electrification on Employment: New Evidence from South Africa", *American Economic Review*, 101, pp. 3078–3108.
- Donaldson, D. (2018), "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure", *American Economic Review*, 108 (4-5), pp. 899–934.
- Gupta, S., Kangur, A., Papageorgiou, C., and A. Wane (2014), "Efficiency-Adjusted Public Capital and Growth". *World Development*, Vol. 57, pp. 164–178.
- International Monetary Fund (2015), "Making Public Investment More Efficient", IMF Policy Paper, Washington D.C.
- Jedwab, R. and A. Moradi (2016), "The Permanent Effect of Transportation Revolutions in Poor Countries: Evidence from Africa", *The Review of Economics and Statistics*, 98(2), pp. 268–284.
- Jensen, R. (2007), "The Digital Divide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector", *The Quarterly Journal of Economics*, Vol. 122, No. 3, pp. 879–924.
- Presbitero, A. (2016), "Too Much and Too Fast? Public Investment Scaling-up and Absorptive Capacity", *Journal of Development Economics*, No. 120, pp. 17–31.
- State Program for Infrastructure Development "Nurly Zhol" for 2015-2019, (in Russian), <http://economy.gov.kz/ru/pages/gosudarstvennaya-programma-infrastrukturnogo-razvitiya-nurly-zhol-na-2015-2019-gody>.
- State Program for Transport Infrastructure Development of the Republic of Kazakhstan till 2020, (in Russian), <http://aviation.miid.gov.kz/ru/pages/gosudarstvennaya-programma-razvitiya-i-integracii-infrastruktury-transportnoy-sistemy-0>.
- Warner, A. (2014), "Public Investment as an Engine of Growth", *IMF Working Paper* WP/14/148.

THE FISCAL FRAMEWORK¹

In a major address in September, President Kassym-Jomart Tokayev called for a review of the budget process at all levels, to strengthen monitoring, analysis, and forecasting and to ensure the efficient use of public funds. In recent years, the Kazakhstan authorities have implemented a number of major reforms to the country's fiscal framework to bring it further in line with best international practices and address the challenges that large, volatile, and time-limited oil revenues pose to fiscal management. Reflecting a range of concerns, the authorities intend to upgrade the fiscal framework in the next few years. This paper focuses on key areas of the fiscal framework where additional improvements would strengthen fiscal management, contribute to the public's understanding of fiscal conditions and policies, and bolster the effectiveness of fiscal policy.

A. Introduction

1. **Kazakhstan's fiscal framework incorporates elements of a rules-based system and has a clear forward-looking orientation.** The framework includes rules aimed at achieving key fiscal objectives, for example rules on fiscal balances, on the minimum stock of assets of the National Fund of the Republic of Kazakhstan (NFRK), and on measures of public debt. A medium-term budget framework (MTBF) is intended to incorporate policy objectives and guide expenditure beyond the initial budget year. Macroeconomic forecasts covering five years are produced at least once a year.
2. **The NFRK is a fundamental component of the fiscal framework.** The fund receives the bulk of fiscal oil revenues and makes transfers to the budget. Over time, the fund has accumulated substantial assets, equivalent to approximately 32 percent of GDP at end-2018.
3. **The authorities intend to upgrade the fiscal framework, including the system of fiscal rules.** While the framework has served Kazakhstan well by helping maintain strong financial buffers and providing guidance on policies, the authorities acknowledge that the current system has shortcomings and faces challenges that should be addressed. Their reform objectives include reducing procyclicality, decreasing the nonoil deficit, improving the system of NFRK transfers, and enhancing fiscal planning. Upgrading the fiscal framework would also help bring Kazakhstan's institutional arrangements and practices more in line with key comparator countries, an important objective of the authorities. Initial inter-agency discussions are under way. A reformed framework is expected to be put in place in the medium term.
4. **This paper describes and assesses key features of Kazakhstan's fiscal framework and provides preliminary recommendations for its enhancement.** It aims to provide a strategic overview of key issues and is therefore selective in coverage and depth. In particular, it does not provide a comprehensive in-depth assessment of institutional, legal, and public financial management (PFM) issues or gaps in practices that would need to be addressed to effectively

¹ Prepared by Rolando Ossowski.

support an upgraded rules-based framework. A fuller assessment and recommendations in these and other areas of fiscal management to provide assurances for the upgraded system would benefit from an IMF Fiscal Transparency Evaluation (FTE) with the resource revenue management pillar, and IMF technical assistance (TA).² Section B focuses on the system of fiscal rules. Section C discusses selectively a number of fiscal transparency topics. Section D offers some initial suggestions for the next steps. Section E concludes.

B. The System of Fiscal Rules

Main Features of the Fiscal Rules

5. Kazakhstan’s fiscal framework incorporates key elements of a rules-based system and has evolved over time. Following earlier concepts for fiscal management, a Presidential Decree in 2013 set rules on the state budget’s overall balance (a medium-term fiscal objective) and on debt.^{3 4} The framework was significantly upgraded with the Presidential Decree on the Concept for the Formation and Use of the Funds of the NFRK in 2016 (hereinafter, the 2016 decree), which set additional rules on the Republican Budget balance, debt, and minimum assets of the NFRK, and changed the system of NFRK transfers to the budget (Box 1). The fiscal rules apply to the national definitions of budget and debt aggregates, which in some cases differ from the IMF’s 2014 *Government Finance Statistics Manual* (GFSM 2014).

Box 1. Kazakhstan’s System of Fiscal Rules and NFRK Operational Rules

The decree “On the Concept for a New Fiscal Policy,” No. 590 (2013) established a budget balance rule and two debt rules. One of the debt rules was with immediate effect, while the budget balance rule and the second debt rule took the form of medium-term fiscal objectives.

- The state budget deficit was to be reduced to 1 percent of GDP from 2018.
- State debt (i.e., central and local governments and the NBK) and debt of quasi-sovereign entities was to be kept below 60 percent of GDP.
- From 2020, state debt and central government debt should not exceed 27 percent of GDP and 25 percent of GDP, respectively.

The decree “On the Concept for the Formation and Use of the Funds of the National Fund of the Republic of Kazakhstan,” No. 385 (2016) added four fiscal rules and two operational rules for NFRK transfers to the budget.

² FTEs have been completed for numerous resource-rich countries—including Russia—and several countries in the Caucasus and Central Asia region, including Armenia, Georgia, and Uzbekistan. They provide an important benchmarking of policies and institutions against good practices and a road-map for future reforms.

³ A 2010 Presidential Decree on the Concept for the Management of the NFRK set a limit on debt service of the budget as a share of budget revenue over a 10-year rolling period, a target for the nonoil deficit from 2020, a minimum balance for NFRK assets equivalent to 20 percent of GDP, and a fixed annual guaranteed NFRK transfer to the budget of US\$8 billion. This was amended in 2012.

⁴ The state budget comprises the Republican Budget (i.e., budgetary central government) and the local budgets. The consolidated budget comprises the state budget and the NFRK.

Box 1. Kazakhstan’s System of Fiscal Rules and NFRK Operational Rules (concluded)

- The nonoil deficit of the Republican Budget as a share of GDP was made subject to annual limits, on a declining path, set through 2025.
- Government debt (including government-guaranteed debt) and the external debt of the quasi-sovereign entities was to be kept below the foreign exchange assets of the NFRK.
- Debt service of the Republican Budget was to be kept below 15 percent of budget revenue.
- Assets of the NFRK were to exceed a floor of 30 percent of predicted GDP at the end of the year.
- Operational rule for annual NFRK guaranteed transfers: a declining path for the maximum annual size of NFRK transfers for 2017–19, set in local currency, rather than U.S. dollars, followed by an annual limit of KZT 2 trillion from 2020 onward.
- Operational rule for targeted NFRK transfers: targeted transfers can be allocated only by Presidential decision to finance anti-crisis programs during economic downturns or slowdowns in economic growth, and significant national projects where no alternative sources of financing are available.

6. The framework pursues several objectives. The fiscal rules, which limit budget deficits and various dimensions of government debt and place a floor on NFRK financial assets, have gross and net debt sustainability objectives and, by limiting the nonoil deficit, also aim at delinking expenditure from oil revenues in the short run. The channeling of the bulk of oil revenues to the NFRK combined with a fixed transfer to the budget aims to limit the effect of oil revenue volatility on the budget and contribute to fiscal discipline, although additional “targeted transfers” for specific purposes are permitted. Whether government net financial wealth is passed on to future generations, however, will depend on the relationship between the accumulation of financial assets in the NFRK and the path of gross government debt.

7. Two fiscal rules and the operational rule on NFRK guaranteed transfers were changed through amendments to the 2016 decree in 2018–19. Both ceilings and definitions were changed. Specifically, the nonoil deficit limit for 2019 was relaxed, and coverage of the rule that limited debt to the foreign assets of the NFRK was narrowed to cover only the government’s external and guaranteed external debt, excluding domestic debt. The nominal limits on NFRK transfers to the budget for 2019–21 were increased, and the medium-term nominal limit of KZT 2 trillion that was to apply from 2020 onwards was replaced by a commitment that the transfer will be gradually reduced beginning in 2022. No official explanations accompanied the amendments. Further changes to the ceilings on the guaranteed transfers are expected to be introduced in the near future.

8. Compliance with the rules has been mixed. For example, the nonoil deficit of the Republican Budget was not observed in 2017; the state budget deficit in 2018 and the projection for 2019 exceed the relevant rule. Amendments to the 2016 decree relaxed some rules, including the nonoil deficit ceiling in 2019. The decrees do not have built-in, formal enforcement procedures.

Desirable features of rules-based systems

9. Fiscal rules are lasting constraints on fiscal policy through predetermined limits on aggregate fiscal indicators. Rules are generally defined as fixed numerical limits (floors or ceilings) on fiscal variables set in legislation and binding for at least three years. They are widely used internationally as institutional mechanisms that clarify objectives and constrain fiscal policy discretion. More than 90 countries use fiscal rules. Their main goals are to commit policymakers to fiscal sustainability, to enhance transparency, and to signal to financial markets the course of fiscal policy. Rules can also help achieve broad consensus on sound fiscal strategies.⁵

10. Rules aim at improving incentives in policy making, while supporting fiscal discipline and the credibility of the fiscal framework. Factors that might argue for constraining government discretion include the “deficit bias”—the tendency to run too frequently deficits that are not consistent with sustainability of public finances, given time inconsistency and common-pool problems;⁶ a bias towards procyclical fiscal policies (e.g., increasing fiscal spending or cutting taxes during economic upturns); and the reality that financial markets often do not impose discipline on governments—until they do, limiting access to financing at times of heightened needs.

11. Recent IMF work suggests that to be effective fiscal rules should have several key properties, notably simplicity, broad coverage, flexibility, and enforceability. It is challenging to achieve all these properties at the same time; for example, there may be tradeoffs between simplicity and flexibility. The weight assigned to various objectives will depend on the specific country authorities’ views on the tradeoffs and country circumstances.

12. Simplicity. Fiscal frameworks should generally include a debt anchor establishing a medium-term objective, together with one or two operational rules under policymakers’ control to guide annual fiscal policy.

- Commodity exporters should consider a comprehensive indicator of government net wealth, including estimated resource wealth to derive a long-term fiscal sustainability benchmark (a sustainable nonoil primary balance (NOPB)), as a simple debt indicator may not provide sufficient guidance. The fiscal benchmark arising from a long-term sustainability exercise provides important information for strategic choices. However, it cannot be the sole consideration for the formulation of medium-term fiscal policy—and no country does so at present. For example, the operational rule so derived may be inappropriately loose, inject

⁵ See Eyraud and others (2018), Schaechter and others (2012), and Corbacho and Ter-Minassian (2013).

⁶ Time inconsistency refers to the incentives that may exist for policymakers to deviate from previous commitments that were internalized by economic agents; for example, engaging in excessive and opportunistic spending during electoral periods or when under acute political or social pressures. The common pool problem is the failure of diverse groups such as line ministries, levels of government, coalition parties, or special interest groups to internalize the overall budgetary impact and cost to society of their competing demands on the government’s revenue pool. This can contribute to expenditure drift. See Eyraud and others (2017).

excessive resources in the economy, lead to the buildup of debt, and/or prevent the formation of financial buffers. In addition, long-term wealth estimates are highly volatile and uncertain.

- Therefore, the operational rules must also be set in the context of medium-term macroeconomic projections, and considering the absorption capacity of the economy, the efficiency of public spending, the volatility of oil revenue, the resulting fiscal stance, and the implications for the government's debt and financial assets.
- In addition, limits on government debt and/or floors on the net financial assets of the government would usually be advisable to prevent excessive debt accumulation and promote the formation or protection of financial buffers to help shield the budget against fiscal vulnerabilities. Indeed, fiscal rules and fiscal institutions can play an important role in determining the proper size of financial buffers and managing well the buffers in the NFRK to help the government address the volatility and uncertainty of revenue flows.

13. Broad coverage. Successful fiscal rules generally have broad institutional coverage and broad coverage of the targeted fiscal aggregates. This reduces the risk of, and incentives for, shifting fiscal operations to areas of the public sector not covered by the rules or engaging in other forms of creative accounting. Such practices can reduce transparency, impede decision-making, generate fiscal risks, and over time undermine the credibility of the rules. In practice, decisions about the coverage of fiscal rules must consider the timely availability of reliable data, and the feasibility of enforcement.

14. Flexibility. An appropriate degree of flexibility in fiscal rules is necessary to support the robustness of the rules to shocks and changing environments. Indeed, the higher a country's exposure to unpredictable and large exogenous shocks, the greater the case for flexibility. Lack of flexibility can lead to breaching the rules (especially during shocks), and hence losing credibility, or complying with rules that prevent legitimate responses to shocks. Flexibility does not mean or imply "weak" or "loose" rules. Well-designed and clearly explained flexibility features in a rules-based system can actually raise the credibility of the rules, because they reduce the risk of the government not complying with the rules in order to avoid procyclical fiscal adjustments during bad times.

- Transparent and well-specified "escape clauses" that allow for short-term relaxation or suspension of rules in case of unpredictable, large, and temporary shocks (such as recessions or natural disasters) with provision of explanation provide an element of flexibility. The escape clauses should be clearly specified. The reasons for use of the escape clause should be explained, along with the authorities' plans for adjustment and return to the rule.
- Revision clauses that allow formal, periodic reconsideration of the targets, and review clauses to periodically assess the functioning of the framework, can also help provide appropriate flexibility. Again, explanation to the public and markets for the review or revision is key to credibility.

- Expenditure rules that allow the operation of automatic stabilizers on the revenue side can be seen as a design of rules that provides some flexibility. Allowing automatic stabilizers to operate can reduce the need to rely on escape clauses, which should be invoked rarely.

15. Enforceability and fiscal transparency. Compliance with the rules can be promoted by raising the reputational costs for noncompliers and creating benefits for compliers, including the political and reputational rewards for policymakers who stick to desirable policies, and the potential reward of lower sovereign spreads as the government’s commitment to prudent policies evidenced by compliance is more credible—rather than relying on the threat of sanctions that may lack credibility. Self-imposed sanctions are unlikely to be implemented by policymakers (Eyraud and others, 2018). Examples of countries with fiscal rules that rely solely on reputational incentives include Australia, India, New Zealand, and the United Kingdom. Enforcement is critically linked to fiscal transparency and correction mechanisms.

- A comprehensive, clear, reliable, and timely reporting of public finances and of performance against the rules is an essential requirement for effective oversight—including by parliaments, financial markets, and the public. Supreme audit institutions and independent fiscal institutions (IFIs) such as Parliamentary Budget Offices or independent fiscal councils that play a “watchdog” function can provide additional assurances of integrity and help raise the reputational costs of noncompliance—making them more effective—while adding useful analysis. IFIs can play a useful role in assessing the reasons for any noncompliance with the rules, and support the government on the use of escape clauses if appropriate.
- Correction mechanisms are often incorporated in rules-based frameworks to enhance enforceability and credibility. These mechanisms typically entail explicit requirements to correct deviations from the targets, should those occur, within a reasonably short, pre-specified period.

Assessment of Features of Kazakhstan’s Rules System and Suggestions for Enhancement

16. The 2016 decree introduced important improvements into the fiscal framework and strengthened transparency. In particular, the nonoil deficit—a key indicator in countries dependent on oil revenues—was included as a target in the fiscal rules. The NFRK was no longer allowed to directly finance extrabudgetary spending, which had been substantial in some previous years—all transfers (guaranteed and targeted) must go to the budget—and the fund cannot invest in domestic financial instruments. These reforms were fundamental steps to strengthen the fiscal framework and the integrity of the budget. The decree also introduced stronger reporting requirements on NFRK operations.

17. At the same time, there is scope for improvement in several areas. As discussed below, the system of fiscal rules and operational NFRK rules is complex and should be reformed and simplified. Coverage should be extended. Elements of flexibility should be introduced. Communication, transparency, and monitoring arrangements should be strengthened and correction mechanisms introduced to promote compliance, help public understanding, and increase

the chances of success. The aim should be to avoid frequent amendments to enhance credibility. The new framework should be accompanied by supporting PFM reforms.

18. Once again, the recommendations here are strategic in nature. Specific actions—including definition, calibration, and specification of rules (e.g., deficit, spending levels, or debt) and institutional reforms needed to implement and communicate on them—would usefully be guided by an IMF FTE and IMF TA.

The Design and Implementation of the Fiscal Rules and Operational Rules for NFRK Transfers

19. Kazakhstan’s system of fiscal rules is complex and characterized by redundancy and overlaps. The system involves seven fiscal rules and two operational rules for NFRK transfers.⁷ Frameworks with such a multiplicity of rules are difficult to manage, as an overdetermination of targets and transfers can complicate fiscal management without delivering clear benefits, but hampering public understanding of objectives and performance. Accordingly:

- The fiscal rules should be reformed and streamlined. Parsimonious frameworks are more easily managed, monitored, and communicated to the public. Simplification should be a key reform objective.
- Consideration should be given to systems that include only one or two rules to guide annual fiscal policy such as, for example, a NOPB rule and/or an expenditure rule informed by long-term sustainability estimates and medium-term considerations, and a floor on government net financial assets and/or a constraint on government debt.⁸ Annex 1 discusses the pros and cons of the NOPB and expenditure as targets of fiscal rules.⁹ Annex 2 provides information on the wide variety of fiscal rule systems implemented by resource producing countries.
- The targets for the fiscal rules in a revised system should be appropriately calibrated in light of medium- and long-term fiscal objectives and analysis. The calibrations should take into account fiscal risks, including macroeconomic risks.

20. The definition of government debt to be kept below NFRK foreign assets was recently narrowed to external debt. While it is acknowledged that tenge-denominated debt has a different risk profile than external debt, this change weakened a rule that was originally closer to a rule on the net financial assets of the government. The change may also provide incentives for the accumulation of domestic debt for reasons unrelated to optimal government debt management. While this may

⁷ Specifically, two fiscal balance rules with different bases and institutional coverage, four rules targeting various dimensions and coverage of government debt, a rule on minimum NFRK assets, and operational rules for NFRK guaranteed and targeted transfers.

⁸ The precise nature of the rules would ideally be the subject of future IMF TA.

⁹ Overall, primary, or current balance rules would not be recommended. Balance rules are procyclical everywhere, and in countries heavily dependent on oil revenue this is exacerbated by the transmission of revenue volatility to the economy.

seem to be limited by a deficit rule, domestic debt may also be acquired via occasional, large operations (e.g., assuming debt obligations from non-government borrowers).

- As noted, consideration should be given to a net government financial assets rule.

21. The 2016 decree has already been amended several times. The reasons for the amendments were not publicly explained. Introducing frequent amendments goes against the intended lasting nature and durability of the rules, affecting the predictability of fiscal policy, and ultimately undermining the credibility of the fiscal framework. The Accounts Committee (AC) of Kazakhstan has expressed concern about frequent amendments and compliance.

- The success of a revamped rules-based system will depend critically on consensus and high-level political commitment to the rules-based framework, and on the commitment of the participants in the budget planning, execution, accounting, and reporting process, including the presidential administration, cabinet, the ministries of National Economy and Finance, and line ministries and spending agencies, as well as the AC in its oversight role.

22. The operational rule on the NFRK's guaranteed transfer to the budget is not working well.

- Under the initial design in the 2016 decree, nominal limits to the annual transfers were specified for several years, without any clear reference to macroeconomic, fiscal, or asset-liability management objectives, or allowing flexibility to deal with developments. While there may have been attraction in setting a fixed amount in advance, the challenges inherent in setting a rigid, multi-year rule for the transfers materialized shortly after the system was put in place. The maximum levels initially set for the guaranteed transfer were raised by means of amendments to the 2016 decree. Importantly, this revealed to financial markets and the public that the guaranteed transfer can be changed as circumstances and objectives change, undermining the objective of the rule. Changes to the NFRK transfer rules were also common under the transfer systems prior to the 2016 decree. Further changes to the limits to the guaranteed transfers are expected to be introduced shortly.
- In addition, there is scope to use discretionary targeted transfers and these were used in 2017 (2.9 percent of GDP) and so far in 2019 (0.6 percent of GDP). The targeted transfer provisions provide some flexibility but at the cost of less certainty and predictability and greater discretion.

23. Therefore, in practice, the constraints on the total size of the annual transfer are not firm. However, the changes to the transfers that were introduced entailed potentially significant reputational and credibility costs for the fiscal framework and for the standing of the NFRK in the framework.

24. The rationale for the simultaneous use of fiscal rules and limits on the NFRK transfers should be reviewed. What do the limits on the transfers add to the achievement of the framework's objectives if fiscal policy is already constrained by overall fiscal rules? The system seems

overdetermined. While the potential benefits from this overdetermination are unclear, the limits can complicate fiscal and asset-liability management and impede financing strategies. For example, the limit on the transfer may force the government to borrow when this may not be the best course of action, all things considered. In any event, currently a fiscal rule targets the minimum level of NFRK assets, which provides some additional assurance.

- The design of the NFRK transfers should be considered in the context of the overall fiscal framework. An upgraded rules-based framework will include fiscal rules aimed at achieving the broad fiscal policy objectives sought by the current fiscal rules, including delinking expenditure from the volatility of oil revenues, promoting sustainability, and possibly establishing a floor on NFRK assets. Since fiscal policy would be constrained by these fiscal rules, consideration could be given to a flexible transfer system, as in Chile and Norway and as recommended by the IMF.¹⁰ In both those countries, fiscal policy is constrained by fiscal rules, and there are no specific, additional limits on the transfers from their sovereign wealth funds to the budget.
 - In Norway, the fund receives all the net oil revenue from the budget and automatically finances the budget's resulting nonoil deficit.
 - In Chile, the stabilization fund broadly receives budget surpluses. If the budget has a deficit, the ministry of finance decides flexibly on the transfer from the fund considering macroeconomic and fiscal conditions and asset-liability management objectives.¹¹

25. Earmarking parts of the NFRK's guaranteed transfer to specific expenditures would not be advisable. The 2016 decree allows the earmarking of parts of the NFRK's guaranteed transfer for socially significant and infrastructure projects by presidential decision.

- Earmarking can be beneficial and justified when there is a direct link between the taxes and levies earmarked and the expenditures and services delivered. Frequent examples include social benefits financed by earmarked social contributions, and road maintenance financed by road taxes or levies. However, these potential advantages of revenue earmarking are not present in the case of transfers from the NFRK.
- Earmarking is not recommended because it would introduce rigidities into the Republican Budget, complicating budget management. Moreover, a key principle of good budgeting is that all spending needs should compete for scarce public resources in the budget process. Why should some expenditures be protected from competing? Furthermore, the earmarking could generate, through demonstration effects, requests and pressures for looser definitions or earmarked financing by other sectors. In addition, if too much is earmarked relative to needs,

¹⁰ The IMF has recommended that the accumulation of financial assets in a fund for self-insurance and/or intergenerational objectives should be derived from actual fiscal surpluses and the government's cash management strategy (IMF, 2012; IMF, 2015).

¹¹ For example, in recent years the government chose to finance budget deficits mainly by issuing debt rather than by drawing from the stabilization fund.

there are no incentives to use resources efficiently, and waste can ensue and/or unused or idle deposits build up. If too little is earmarked, worthy needs may go unmet.

Broad Coverage

26. Institutional coverage of fiscal rules in Kazakhstan is relatively narrow. In particular, the overall balance rule applies to the state budget, which comprises the Republican Budget (i.e. budgetary central government) and local budgets, and the nonoil balance rule applies to the Republican Budget. The coverage of the balance rules therefore excludes nonmarket extrabudgetary units at the central and local levels—which would be included in general government—and public corporations. Similarly, the coverage of the debt rules is narrower than general government or nonfinancial public sector debt.

27. Extrabudgetary units and public financial and nonfinancial corporations carry out a wide range of activities for public policy purposes. For example, much of the support to the banking system in recent years has been off budget.¹² Part of the support to housing is provided through interest rate subsidies and construction managed off budget by subsidiaries of a national management holding company. Similar arrangements are in place for agriculture. Some social and infrastructure projects are funded by state enterprises and national holdings rather than the budget. A distinction should be made between extrabudgetary activities that are compensated through budget transfers, and activities that are not or not fully compensated by the budget in a direct manner (i.e., quasi-fiscal activities).

28. Narrow coverage of rules may provide incentives to shift expenditures to the rest of the public sector, undermining the objectives of the rules. The ability of a nonoil primary balance rule or an expenditure rule to force discipline and decouple spending from oil revenues can be weakened by the existence of non-covered or extrabudgetary activities, particularly those of a quasi-fiscal nature.

29. The objective should be coverage of general government under the fiscal rules.¹³ There is a need to extend institutional coverage of fiscal reporting to have a more comprehensive view of fiscal policy and allow broadening the coverage of fiscal rules over time.¹⁴ There is time until the introduction of the new system of rules for the necessary preparatory work. This involves proper identification of the institutional sector (“sectorization”) of extrabudgetary units, setting appropriate reporting requirements for the units as needed, and extending the coverage in fiscal reports (see Section C below).

¹² Future TA would provide recommendations on fiscal rules and assistance to the banking sector.

¹³ The general government comprises budgetary and extrabudgetary central government, budgetary and extrabudgetary local governments, and social security funds at the central and local levels.

¹⁴ An additional argument for general government coverage is the need to cover public-private partnerships (PPPs), which are significant at the local government level (see Section C).

Flexibility

30. Kazakhstan’s fiscal rule system should include clearly-specified flexibility elements to make the rules more resilient. They include:

- Escape clauses that allow for a properly-justified short-term relaxation or suspension of the rules in case of large, unpredictable, and temporary shocks. The conditions to invoke the escape clause should be clearly and comprehensively specified *ex ante* and be verifiable on the basis of measurable variables outside the government’s control, so that they are used only in well-specified exceptional circumstances. Annex 3 provides examples of escape clauses from several countries.
- Periodic revision clauses to deal with the potential need to address significant and long-lasting changes in circumstances. Rules should be valid for extended periods of time. But over the medium- and long-term, countries undergo or introduce structural changes relevant for fiscal policy, such as the discovery of additional oil reserves, large migration into the country, or beneficial structural reforms with short-term fiscal costs. The inclusion of a provision for periodic reviews and, if appropriate, revisions to the rules’ targets provides a reasonable balance between discipline and flexibility.

Enforceability and Transparency

31. The upgraded framework should be supported by strong fiscal transparency and robust communication of plans, implementation, and compliance. These are necessary conditions for success. Addressing the current framework’s shortcomings in reporting on the fiscal rules and on compliance with the targets in budget documentation and fiscal reports would significantly strengthen the rules-based system. This will require an upgrading of analytical and communication capacity, ideally with supporting IMF TA.

32. Transparency should be enhanced by improving the quality of reporting on fiscal policy objectives and performance. Currently, the fiscal rules and performance against them are not easily visible to stakeholders. The 2013 and 2016 decrees may not be widely known and are not easily referenced in the websites of the Ministry of National Economy (MNE) or the Ministry of Finance (MoF), including in English. The report “Forecast for Social and Economic Development” (FSED) that accompanies budget submissions to Parliament is a good document, but it does not provide clear information on the fiscal rules and outcomes, including to readers unfamiliar with the rules.

- The FSED should be enhanced to systematically explain the variables targeted by the fiscal rules, performance against the rules, and factors that affected performance, and show that the proposed annual and medium-term budgets comply with the rules. Similarly, the Explanatory Notes that accompany budget submissions and annual execution reports do not provide needed information on the fiscal rules. Budget documents and annual budget execution reports

should provide information on whether the outturns for the relevant fiscal variables targeted by fiscal rules were consistent with the targets and limits.¹⁵

33. Correction mechanisms to deal with deviations from the rules should be specified.

These would be set in the legislation and would prescribe the actions to be taken if fiscal outturns are not in line with the fiscal rules. Some frameworks rely on detailed (or automatic) correction mechanisms, while others take more procedural approaches (see Annex 4 for country examples).

34. The availability of reliable fiscal data subject to effective external scrutiny is essential for fiscal transparency—including the transparency of rules-based systems.

The quality of financial statements of the government would usefully be improved to support fiscal management and external scrutiny adequately. Compliance with numerical and procedural fiscal rules should be subject to continuous monitoring. This includes external audit of government financial statements and fiscal accounts and certifying legal observance with the legislation for the fiscal rules. As regards the integrity of the data, the AC should be required by statute to undertake analysis of the reliability of accounting information and provide formal opinions on the compliance with the relevant accounting and reporting instructions of annual reports required by the fiscal rules system. The AC would assess the government's compliance with formal fiscal rules and issue an opinion on whether the rules were observed.

35. The potential role of a parliamentary budget office (PBO) could be looked into. Such an office could provide, for instance, regular assessments of macroeconomic and fiscal forecasts, reviews of fiscal policy, and analyses of compliance with fiscal rules. For example, Georgia and Armenia have PBOs.

Public Financial Management Reforms

36. In its TA, the IMF has stressed that satisfying PFM preconditions is vital for the success of fiscal rules.

Indeed, a rules-based system raises the bar for the required strength of PFM institutions, given the potential reputational and financial costs that noncompliance with the rules may entail (Corbacho and Ter-Minassian, 2013). Annex 5 sets out important PFM requirements for effective fiscal rules. This paper does not provide a thorough assessment of Kazakhstan's PFM system or its ability to support a system of fiscal rules fully effectively, and only provides selected specific PFM recommendations. It would be important to conduct a comprehensive assessment and identify reform priorities and key PFM areas that need upgrading, with help from IMF TA.

Comprehensive Reform Strategies, Implementation, and Communication

37. The authorities should consider the options carefully and comprehensively. Changing the system of rules and enhancing the fiscal framework is complex and multidimensional and will involve significant preparatory work to bring Kazakhstan in line with best practices. There would also

¹⁵ Producing the FSED, the Explanatory Notes, and other relevant materials in English for international audiences would be helpful.

be merit in testing the new systems internally during a transition period and making any needed adjustments before formal implementation.

38. There is merit in implementing reforms to the fiscal rule system through a comprehensive strategy rather than an incremental or piecemeal approach. International experience suggests that incremental reforms have often made rules systems more complicated to operate, whereas in Kazakhstan the direction of change should be toward greater simplicity and effectiveness. Implementing a comprehensive strategy that ensures, among other things, internal consistency among the rules would be advisable.

39. To avoid a situation where changes to the fiscal rules might be interpreted as a weakening of the fiscal framework, it would be important to put in place an effective communications strategy. For example, the government could restate its commitment to fiscal discipline. It could communicate a clear and simple message on the objectives and key features of the revamped fiscal framework. The message could emphasize the benefits the new system would bring about—for instance, greater fiscal discipline, containing spending pressures, enhanced predictability and ability to deal with shocks, and reducing vulnerabilities—and the elements of the existing framework that have been kept. The strategy should avoid fragmentation of communication and focus on audiences and communication products.

40. Embedding the upgraded system of fiscal rules within a legal framework subject to parliamentary review and approval would make it more binding and credible. So far, the fiscal targets have been adopted by presidential decrees. The decrees have been amended several times and could be amended again. Fiscal rules should be set so as to enhance implementation and provide strong longer-term guidance to fiscal policy. International experience shows that the bulk of national fiscal rules around the world are enshrined in statutory norms; in some countries, fiscal rules are embedded in higher-level legislation or the Constitution (Lledó and others, 2017). Therefore, consideration should be given to embedding the fiscal rules, as well as the monitoring, reporting, external scrutiny, and flexibility and enforceability mechanisms in a legal framework. reviewed and approved by parliament.

C. Selected Topics in Fiscal Transparency

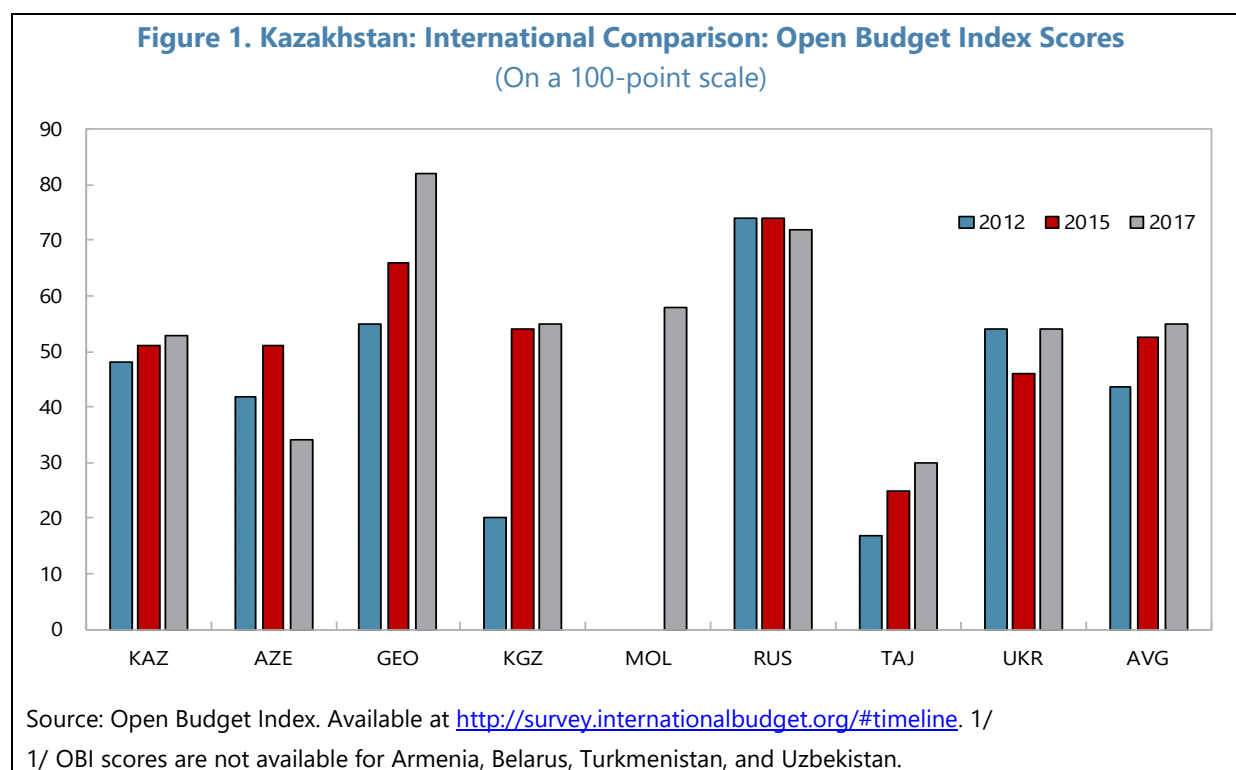
41. Fiscal transparency plays a critical role in a rules-based framework. Parliament, citizens and markets need to be provided with accurate and reliable information on fiscal developments under the fiscal rules, including to strengthen the accountability of the government for fiscal management. It is therefore desirable to review Kazakhstan's fiscal transparency comprehensively—ideally in the context of an IMF FTE—before introducing the upgraded rules-based framework.

42. This section provides a preliminary evaluation and recommendations on selected fiscal transparency topics. It does this under the main headings of fiscal reporting, fiscal forecasting and budgeting, fiscal risk analysis and management, and the transparency of the NFRK. The section does not cover all the transparency dimensions that require analysis, nor does it provide a comprehensive

discussion of the areas covered. An FTE would provide a full assessment and specific recommendations.

43. Kazakhstan has made progress in recent years in improving its fiscal transparency. For example, the FSED that accompanies budget submissions has been gradually expanded to include more information and analysis; Explanatory Notes to budget submissions and budget execution reports are being published; Citizen's Budgets are being produced.

44. This said, the upgrading of the fiscal framework should include wide-ranging measures to strengthen fiscal transparency. In the Open Budget Index—an independent, comparative measure of central government budget transparency—Kazakhstan ranks about average among regional peers, and progress, as assessed by average scores in the last few years has been moderate (Figure 1).



Selected Topics in Fiscal Reporting

45. The institutional coverage of fiscal reports should be extended. Currently, national fiscal reporting is limited to the consolidated budget and its components.¹⁶ The authorities should clarify the boundary between general government, the rest of the public sector, and the private sector, and

¹⁶ The authorities report Government Finance Statistics (GFS) data to the IMF for the budgetary central government, budgetary local governments, the NFRK, and the State Social Security Fund. The institutional coverage of GFS reporting is being expanded to include the Compulsory Health Insurance Fund in the Social Security Funds subsector in the 2018 GFS. The Problem Loans Fund is expected to be included in 2020.

expand the institutional coverage of fiscal reports. The 2018 Public Expenditure and Financial Accountability Assessment (PEFA) estimated on the basis of available information that expenditure outside fiscal reports in 2017 could have amounted to the equivalent of close to 11 percent of Republican Budget expenditure, or 2.25 percent of GDP (PEFA, 2018).

46. The proper sectorization of public sector units is a matter of high priority. It is necessary to correctly allocate particular extrabudgetary units and state enterprises to the general government or as public corporations in the nonfinancial public sector based on their economic nature, applying GFSM 2014 criteria.

- Sectorization will allow the expansion of the coverage of the general government sector to include nonmarket nonfinancial state-owned enterprises. This is needed to provide a more complete picture of government activity. Some current state enterprises might fall under the definition of an extrabudgetary general government unit. If these entities are classified correctly, they will impact fiscal statistics, budget presentation, legal status (a corporate form suitable for commercial entities may not be suitable for non-commercial ones), governance arrangements, accounting and reporting (the separate financial statements of non-commercial entities should be subject to public sector standards rather than private sector standards), and treasury coverage.
- The exercise requires inter-agency cooperation. As recommended by the IMF TA, the sectoral classification of state unitary enterprises and national holding companies and their subsidiaries should be a priority.
- Reporting standards for the extrabudgetary units should be established as needed and enforced, to be in a position to generate timely fiscal reports for the general government.

47. The authorities should make progress to bring the budget classification in line with GFSM 2014. A resolution issued by the MoF in 2014 established the budget classification system; a single budget classification is used at all levels of the budget system. However, the budget classification is not in line with GFSM 2014 in a number of respects. The authorities are encouraged to make the classification system consistent with GFSM 2014, with assistance from the IMF.

48. More information on the nonoil balance should be provided in budget documentation and fiscal reports. The nonoil balance should be explicitly defined, consistent with IMF advice, and its derivation from the fiscal accounts should be shown in the FSED, budget documentation, and fiscal reports, preferably by means of sufficiently-detailed derivation tables. This critical indicator should be reported and discussed assiduously, irrespective of whether it would be a fiscal rule target.¹⁷

¹⁷ Normalization by nonoil GDP would avoid problems associated with the volatility of oil prices and revenues and therefore total GDP.

49. Budget expenditure presented according to the economic classification should be publicly disclosed. Expenditure in the annual budget and the MTBF submitted to Parliament is broken down by administrative, functional, and program classifications, but does not include an economic classification. In-year and annual budget execution reports do include an economic breakdown of expenditure but there is no possibility of comparison to the original budget. The inclusion of an economic classification in budgets and the MTBF would be desirable.

50. Improvements are needed in the consolidated financial statement of the budget. The report to Parliament on the execution of the 2018 budget included for the first time a pilot consolidated financial statement for the Republican Budget. The AC plans to audit the consolidated financial statement for the execution of the 2019 budget and present a formal opinion to Parliament. It would be important to continue to work on improving on the first consolidated financial statement—a fundamental item for a future consolidated balance sheet of the public sector.

51. The coverage of the public debt statistics should be extended. The government publishes quarterly statistics on government and state debt. The statistics cover the debt of the central government, the aggregate debt of the local governments, the debt of NBK, and state-guaranteed debt. The debt is broken down into external and domestic debt. The coverage of the debt statistics should be extended to include the debt of extrabudgetary units and public corporations. The information is internally available. Information on the assets and liabilities of the major national management holding companies is available in the financial statements of the individual companies, but public debt statistics for the public sector are not produced.

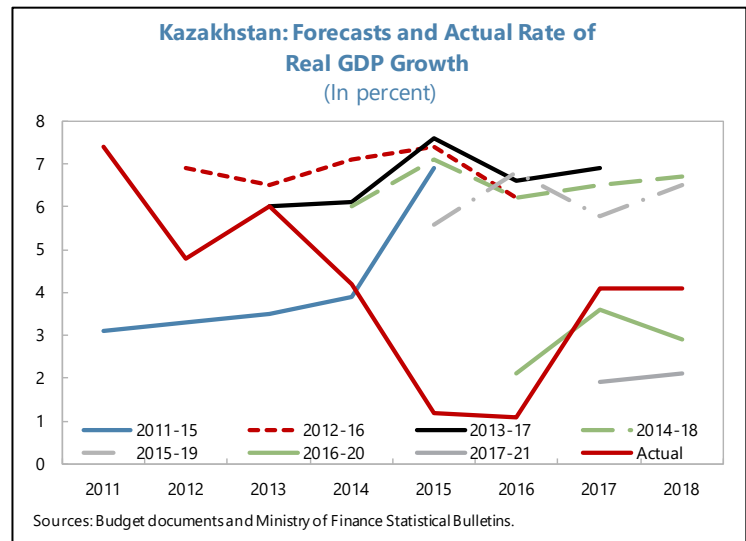
- Many comparator countries regularly publish public sector debt statistics. For example, Peru's Annual Report on the Public Debt includes data on, and discussion of, the external and domestic public debt, broken down by central government, subnational governments, and public enterprises. It also provides information on guarantees and contingent liabilities related to public-private partnership (PPP).

Selected Topics in Fiscal Forecasting and Budgeting

52. The MNE prepares the Forecasts for Economic and Social Development (FSED) at least annually. The FSED sets out economic objectives and policies for the next five-year period and fiscal objectives for the next three years. Following its approval by government, the FSED is submitted to Parliament together with the budget (or supplementary budget). The FSED is published. In recent years the MNE has been expanding the coverage of topics and the analysis included in the FSED.

53. The FSED includes a rolling five-year macroeconomic forecast. The forecast takes into account the strategic and program documents and the annual presidential message on the economy and the main directions for economic policy. It includes five-year projections for GDP, production by sector, the price of oil, inflation, monetary and balance of payments indicators, state and government debt, and social indicators.

54. The forecast for the growth of real GDP one year ahead seems unbiased. The absolute mean forecast error one year ahead in 2011–18, however, was 2 percent (Figure ‘Kazakhstan: Forecasts and Actual Rate of Real GDP Growth’). Adjusted for Kazakhstan’s highly volatile economy, the absolute forecast error is higher than in European countries, but broadly similar to countries such as Colombia, Georgia, and Mexico. Growth in the second and third years of the forecast tends to be overestimated. The variability of macroeconomic forecasts in recent years may be partly explained by the large and unforeseen oil price shock of 2014–15 and its consequences.



55. The presentation and discussion of the macroeconomic forecasts in the FSED could be strengthened.

- The performance of key macroeconomic and fiscal variables in the last few years should be presented and comprehensively discussed, to provide an appropriate context to the forecasts. The forecast tables would usefully include outcomes for the three previous years, including the forecast for last year.
- While the key assumptions underpinning the forecasts are disclosed in the FSED, the explanation accompanying them, including description of the key drivers and relationships, is limited. The disclosure of forecasting methods and greater information on the assumptions used in making the forecasts can show that the estimates are based on credible projections of macroeconomic developments.
- A comparison with other external forecasts could be included in the FSED. Several institutions produce macroeconomic forecasts for Kazakhstan, including regional and international financial institutions and rating agencies.

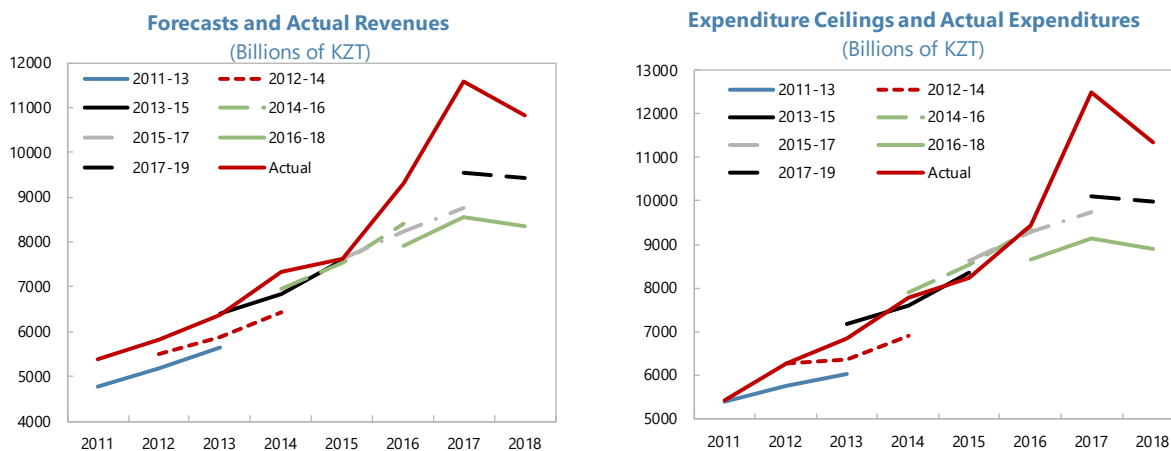
56. Kazakhstan has a MTBF that covers budget parameters for the budgeted year and two forward years. The MTBF is presented at the time of budget submissions to Parliament for the Republican Budget, the local budgets, and the NFRK, which together comprise the Consolidated Budget. The expenditure ceilings for the two outer years in the MTBF are indicative rather than binding commitments.

57. State budget revenue is frequently underestimated. The evidence for 2011–18 shows that actual state budget revenue was higher on average by 1.4 percent of GDP than the initial forecast for the budget year, and by 2.2 percent of GDP and 2.6 percent of GDP for the second and third years of the MTBF respectively (Figure 3). This is not directly due to the usual underestimation

of the oil price in the forecasts (see below), because the budget is shielded in the short run from the oil revenue volatility, which is absorbed by the NFRK.

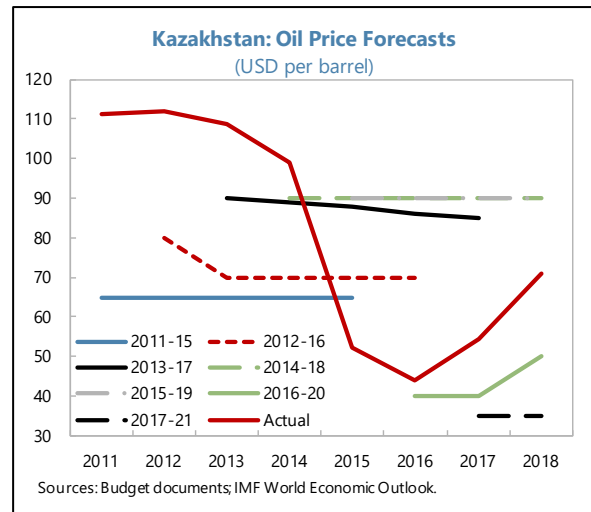
58. Expenditure tends to be underestimated in the outer years of the MTBF. The evidence for 2011-18 shows that actual state budget expenditure has been close to 10 percent higher on average than the initial estimate for the second year, and close to 14 percent higher than the initial estimate for the third year—or by 1.7 percent of GDP and 2.3 percent of GDP respectively (Figure 2). The ceilings for the outer years are routinely adjusted at the time of the next budget cycle. Large revisions to outer years’ budget spending ceilings limit the ceilings’ effectiveness in setting credible and predictable medium-term constraints and their ability to discipline expenditure. The implementation of a rules-based system as discussed in the previous section could help strengthen the medium-term expenditure ceilings.

Figure 2. Kazakhstan: State Budget Revenue Forecasts and Expenditure Ceilings, 2011–18



Sources: Budget documents and Ministry of Finance Statistical Bulletins.

59. The oil price projections are conservative by design. The MNE uses a variety of sources of information from international agencies' forecasts for the five-year forecast of the Brent oil price in the FSED and applies a discount factor of varying size to introduce an element of safety into the forecasts. Partly as a result of the conservative approach, the average error of the initial forecast for the budget year in 2011–18 was 24 percent (and the absolute mean error 35 percent). For the second forecast year, the forecast errors were 26 percent and 53 percent respectively (Figure 'Kazakhstan: Oil Price Forecasts').



60. Safety from oil price risk should not be sought from artificially low oil price projections compared to current market expectations but by budgeting prudently and setting contingencies. The practice of projecting oil prices “conservatively” can generate uncertainty as Parliament and economic agents may have learned from experience about the existence of the downward bias but may be uncertain about its size in the absence of information (see below). It can reduce the credibility of the forecasts underlying the budget, and hence of the consolidated budget itself. A downward bias in oil price forecasts can also generate pressures for supplementary budgets when actual oil prices turn out to be higher than forecast, a phenomenon likely to occur given the bias. In any event, the NFRK shields the budget in the short term from oil price volatility.

- Protection from oil price risk can better and more transparently be sought by planning spending prudently, putting in place formal or explicit budget contingencies of adequate size, and including safety margins—specifically, the targeted medium-term nonoil fiscal policy should ensure that the net financial assets of the government remain above the floor with a high probability.¹⁸ Advanced countries and regions such as Alberta (Canada), Australia, and Norway use market forecasts, futures prices, and expert analysis to make their resource price forecasts. Other countries with the practice of using artificially low oil price projections have frequently amended budgets or rules, underscoring that they provide limited discipline.

61. The FSED should provide information on the oil price forecasts. It should include the methodology used to produce the forecasts, the sources of information and the external projections used, the calculations, and the discount factor applied. For example, in Mexico the methodology to project the oil price in the budget is set in law, and the budget document equivalent to the FSED provides ample information on the calculations used for the oil price forecasts and the size of the discount factor.

¹⁸ This would be similar to targeting a debt level lower than the statutory ceiling in other countries, so that there is a high probability of remaining below the ceiling.

62. The FSED should include an analysis of differences from macroeconomic and fiscal forecasts. This analysis is already done internally. It is a form of quality control that helps avoid recurrent or systematic errors in the forecasts and can improve the quality of the forecasts and, as a result, their credibility. The inclusion of a reconciliation in the FSED with a clear explanation of differences and the reasons for them would help establish credibility of the MNE and MoF forecast assumptions and methodology. For example, the Office for Budget Responsibility in the United Kingdom produces a “Forecast Evaluation Report” that examines how its forecasts compare to subsequent outturn data and distills lessons for future forecasts; Australia and New Zealand also offer model approaches to analyzing differences between forecasts and actuals.

63. The FSED would usefully include a forecast reconciliation. It would be helpful to include an explanation of the differences between successive forecasts in the FSED and other budget documents. What has changed from the previous forecast? This would increase the credibility of the forecasts underlying the budget. Examples of countries publishing forecast reconciliations include Finland and Romania.

64. The introduction of an upgraded system of fiscal rules must be closely coordinated with the ongoing efforts to introduce accrual budgeting. This concerns, inter alia, the accounting basis of the fiscal aggregates used in the fiscal rules. Given the importance of transparency and accurate accounting for the success of the upgraded rules-based framework, both reforms should be tightly coordinated.

65. The annual budget is frequently amended through the enactment of one or more supplementary budgets (SBs). For example, the 2019 budget was amended twice through SBs that raised expenditure relative to the original budget by about 1.5 percent of GDP. The limit on the nonoil deficit of the Republican Budget for 2019 in the 2016 decree was raised from 7.2 percent of GDP to a range of 7–8.5 percent of GDP through an amendment to the decree, to accommodate the higher spending. The Budget Code (Article 107) sets the conditions for submitting SBs and limits their number to one a year, but there are exceptions to this principle, including if there is a need to implement instructions from the President. Overuse of the SB practice can affect the credibility of the budget and the predictability of fiscal policy.

66. The main reasons for SBs should be unexpected macroeconomic developments, new emergency policy priorities, and spending included in the medium-term budget which cannot be accurately costed at the time of annual budget preparation. SBs should be rare and limited in size (typically less than 3 percent of the budget), prescribed in advance. A good budgetary practice is to require a formal midterm review of budget execution by the legislature, which may, or may not, lead to a SB and recourse to the budget’s contingency reserve. Limiting revisions to the budget to one at the mid-year point—while allowing a SB to be adopted at other times in exceptional circumstances— would increase fiscal transparency and accountability. Setting aside an unallocated contingency reserve that can be used to fund unanticipated spending pressures without recourse to a SB is also good practice that can provide appropriate flexibility during budget execution. In Kazakhstan, the budgetary reserves set aside in the Republican Budgets for 2019 and 2020 were equivalent to 1–1.5 percent of expenditure, or 0.2–0.3 percent of GDP. The reserve can be allocated

by government resolution during budget execution. Supplementary budgets such as those in 2017 and 2019, however, raised expenditure by more than these amounts.

Selected Topics in Fiscal Risk Analysis and Management

67. In a resource-rich economy like Kazakhstan there is a need for a risk-based fiscal policy framework. Well-designed fiscal rules and fiscal institutions, informed by analysis of fiscal risks, can provide for long-term guidance on the appropriate fiscal stance, the proper size of financial buffers, and the level of savings from resource revenues.

68. Fiscal risk management in Kazakhstan was discussed in a recent Selected Issues Paper (IMF, 2018a). This subsection will provide a highly selective complement to the information and analysis contained in that paper. It focuses on macroeconomic risks, long-term fiscal sustainability analysis, and specific fiscal risks from public corporations and PPPs.

69. The existence of significant fiscal risks in Kazakhstan, including those related to the financial sector and public corporations, highlights the importance of strengthening analysis, management, and disclosure. Major fiscal risks materialized frequently in the last decade and entailed sizable fiscal costs. For example, IMF staff estimated the public funds injected in the banking sector in 2008–14 at over 5 percent of 2014 GDP. Support to banks since 2017 amounted to a further 8 percent of GDP. Support to KazMunaiGas in 2015 to make external debt payments was equivalent to close to 2 percent of GDP.

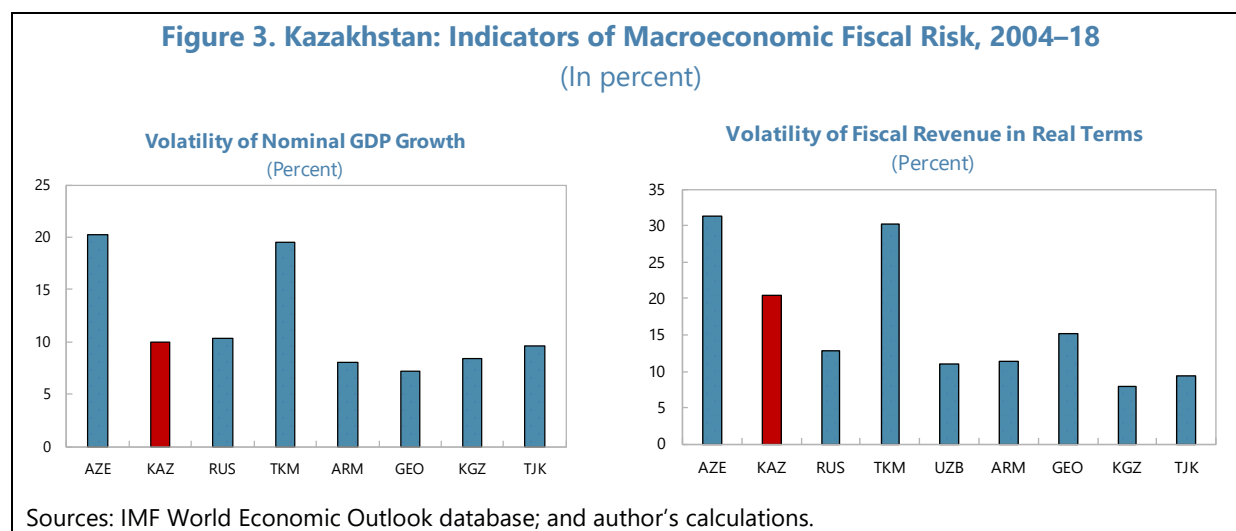
70. The provision of a Fiscal Risk Statement to Parliament is planned. This is a welcome intention. It will require a phased approach, allocation of risk management and reporting responsibilities as needed, and significant further preparatory work, which could be supported by TA from the IMF. Georgia, for example, publishes an assessment of the impact of alternative macroeconomic scenarios and of the main specific fiscal risks to public finances and the likelihood of their materialization. Russia has started publishing a report on fiscal risks.

71. Stronger analysis, quantification, and disclosure of fiscal risks can help improve Kazakhstan's fiscal management and address spending pressures. It would place fiscal policy in a better position to address potential shocks and materialization of risks and boost its ability to respond to them. Moreover, the public scrutiny that comes with the quantification and disclosure of fiscal risks can create pressure to ensure that they are contained and well managed. There may be less pressure for procyclical fiscal policies during booms, for example, if there is a clear analysis of what such policies would imply for fiscal vulnerability to shocks.

Macroeconomic Risks

72. Kazakhstan has a relatively volatile economy by regional standards, and fiscal revenue volatility is very high. Macroeconomic volatility (measured by the standard deviation of the annual percentage change of nominal GDP) is similar to the volatility in Russia. It is lower than in Azerbaijan and Turkmenistan, but higher than in the countries not heavily dependent on petroleum exports in

the region (Figure 3). The volatility of Kazakhstan’s consolidated budget revenue is among the highest in the region (Figure 3). The volatility and uncertainty associated with revenues from oil generates significant short- and medium-term risks.



73. The analysis of macroeconomic risks in the FSED and the discussion of the sensitivity of forecasts to shocks should be strengthened. The FSED for 2020–24 highlights macroeconomic risks deriving from oil prices, exchange rates, and external demand. However, the discussion of sensitivity is very limited, and the only variation summarily reported is the consolidated budget balance if the oil price is slightly higher than in the baseline scenario. A deeper discussion of the sensitivity of fiscal forecasts to major macroeconomic assumptions would usefully be included in the FSED. Internal work in the MNE is already available. Examples of countries that publish the results of sensitivity analysis on the fiscal forecasts include Armenia, Brazil, Colombia, Georgia, Lithuania, Peru, and the Philippines.

- It would be useful to examine the impact of changes in variables such as real GDP growth, the oil price, and depreciation or appreciation of the currency on the baseline fiscal forecasts (revenue, expenditure, balances, financing), NFRK assets, and government debt. The shocks to the value of each macroeconomic aggregate could be based on their historical volatility, or one standard deviation, or historical forecast errors.

74. The scenario analysis provided in the FSED could similarly be strengthened. The FSED for 2020–24 provides three scenarios (optimistic, baseline, and pessimistic) depending on the world economy, the price of oil, and world financial markets. There is a brief discussion of the implications of the scenarios for GDP growth, exports in 2024, and NFRK assets in 2022, and some broad policy implications are derived for the pessimistic scenario, but without quantification. No other quantitative indicators for the alternative scenarios are presented. The MNE already does scenario analysis internally. Highlighting the impact of different scenarios in more detail would provide additional valuable information to policymakers. Scenario analysis is presented in the budget documentation of countries such as Georgia, New Zealand, and Peru.

- The presentation and discussion of scenarios in the FSED can be expanded. It could provide quantification and discuss the implications of the scenarios for the fiscal projections, NFRK assets and government debt, and the main transmission channels and potential policy adjustments.

75. Debt sustainability analyses (DSA) should be published. DSA is already done internally in the MNE and the MoF. The Budget Code requires the FSED to provide assessments of the sustainability of public finances, and the document includes some limited discussion. A more fully developed DSA should be published; it could be included in the FSED or issued as a separate annual report, with the highlights included in the FSED. It would usefully include the description of the current debt stock and recent developments; the baseline medium-term macroeconomic and fiscal scenarios; the debt projections; and stress tests, including the sensitivity of the debt to higher fiscal deficits. Many countries publish DSAs on a regular basis.

76. The government could usefully publish its debt management strategy. The last debt management strategy was incorporated in a document produced jointly by the MNE, the MoF, and the NBK for the period 2013–15. The document set out the objectives of public debt management and possible debt management models; it incorporated assessments of the state and local government’s debt portfolios and provided an overview of potential debt sources taking into account costs and risks, as well as forecasts of basic macroeconomic indicators and a section on contingent liabilities. An updated strategy is currently under preparation.

Long-term Fiscal Sustainability Analysis

77. Doing long-term fiscal sustainability analysis (LTFSA) is becoming more urgent. A long-term fiscal outlook is needed for an informed consideration of the prospects for the public finances and as an input to the calibration of fiscal rules, as discussed above, in the face of growing challenges, particularly as Kazakhstan is subject to significant long-term fiscal risks. These include decarbonization; technological change in the energy sector; future decommissioning costs in the oil sector; and aging-related challenges, including future budget support to the pension system and rising health costs. In the region, Armenia and Russia produce LTFsAs.

- A recent study by the EBRD, for example, estimated the significant potential impact on Kazakhstan’s fiscal revenues from a long-term “green” scenario, in which there is a worldwide transition to a green global economy, with global carbon emissions and fuel use consistent with achieving the goals of the Paris Agreement and the Sustainable Development Goals (EBRD, 2018).

Public Corporations

78. Given its size, complexity, and links to government, the quasi-government sector represents a major source of fiscal risks. Kazakhstan has a vast quasi-government sector that includes public corporations (PCs) under GFSM 2014 definitions. Adverse developments in revenue and spending of PCs can impact fiscal outcomes and the value of the enterprises. In addition, PCs

undertake considerable quasi-fiscal activities (QFAs) on behalf of the government. The external debt of quasi-government institutions at end-2018, which are reported to hold the bulk of the external debt, amounted to close to US\$20 billion, or about 11.5 percent of GDP.

79. The government's explicit contingent liabilities are small. The annual budget law limits the outstanding stock of government guarantees; the budget for 2020 sets a limit on guarantees of 1.25 percent of GDP. The debt formally guaranteed by the government at end-2018 was equivalent to 0.9 percent of GDP. Therefore, explicit guarantees do not pose a substantial fiscal risk to the government, though the situation might change in the future.

80. Of greater concern are the government's implicit contingent liabilities. Significant fiscal risks arise from the implicit liability of the government to provide financial support to PCs in distress—as was the case with KazMunaiGaz in 2015. Indeed it might be problematic for the government to avoid responsibility for the debts of companies and holdings that run into financial difficulties when their boards include government ministers, their activities include carrying out QFAs mandated by the government (such as providing subsidized services or loans to borrowers who may not be able to repay), and when they may publicize their links to government as a signal of their credit standing. Financial markets and rating agencies understandably see the government as standing behind such PCs and holdings.¹⁹

81. The QFAs carried out by PCs are a fiscal policy practice that merits reconsideration. The use of PCs to carry out government policies whose costs are partially compensated or uncompensated by the budget raises PFM and fiscal transparency issues. The practice implies that a part of fiscal activity lies outside Parliament's scrutiny, a problem aggravated by the lack of public information. QFAs also do not need to compete for scarce public resources in the budget process. At times of fiscal stress, and depending on circumstances, they might also be more protected from fiscal adjustment than budget expenditures.

82. There are options to deal with quasi-fiscal activities. It would be best to bring QFAs fully onto the budget (that is, to "budgetize" the QFAs). This would make the fiscal aggregates more transparent and predictable, thereby facilitating the operation of a rules-based framework. Alternatively, they should be transparently compensated from the budget. The government should provide guidelines to public corporations on measuring the cost of QFAs (not always straightforward) and ensure full and timely reimbursement through budget subsidies and transfers.²⁰ At a minimum, regular reports should be issued with the nature and cost of QFAs. These measures, however, are not a substitute for the needed sectorization of extrabudgetary units discussed earlier.

83. The impact of transparent compensation of QFAs on the budget may be lower than might appear. Currently, QFAs are compensated non-transparently and indirectly. The budget is

¹⁹ For example, in assigning a credit rating of Ba1 in 2018 to KazAgro, one of the major national holding companies, Moody's indicated that it "believes the Kazakhstan government would provide financial support to the holding company, if it were necessary (...)"

²⁰ See Ter-Minassian (2017).

already “paying” the cost of the QFAs in part through lower dividends and profits received from public corporations and the NBK. In addition, the extrabudgetary entities doing the QFAs may finance them partly through borrowing, which generates contingent liabilities for the budget, or building up fewer financial assets than would otherwise be the case and running down public sector capital that will require investment in the future, with potential calls on the budget.

84. Recent measures have strengthened the government’s control over the borrowing of national holdings. A decree issued in 2017 established procedures for the coordination of foreign borrowing by quasi-sovereign entities within the debt limits established in the 2016 decree. In particular, the government establishes annual limits for the borrowing of each national holding company; the holding’s management, in turn, assigns the borrowing room available among the companies under the holding.

85. The government does not disclose aggregate information on the operations, financial performance, and financial position of PCs, or on the nature and cost of QFAs. The lack of aggregate information on the PC sector hampers adequate and comprehensive fiscal analysis. This said, all PCs report at least annually to their sponsoring ministries as well as to the MNE and to the State Property and Privatization Committee. The MoF and the MNE regularly monitor the finances of PCs, including their borrowing. The availability of internal information suggests that it should be possible to compile and publish aggregate information on the PC sector.

86. The government should publish at least annual reports on the aggregate performance of the PC sector, including estimates of the QFAs undertaken. The report should include the government’s objective for each PC (or at least for the larger PCs) as well as key performance indicators (KPIs). It should present data for the whole PC sector and for the PCs belonging to each sector ministry and include debt statistics. It should also provide information on the financial links between the government and PCs, including capital injections, subsidies, loans, dividends, and guarantees.

- Many countries produce annual monitoring reports on the financial and operational performance of PCs and the fiscal risks they create (see Allen and Alves, 2016). For example, Armenia produces a semiannual monitoring report on the financial performance of PCs, with aggregate and company-level data for most PCs. Georgia’s annual reports on the financial performance of most PCs include aggregated summary income and balance sheet indicators for PCs comprising about three quarters of the PC sector. In Russia, work to strengthen the financial oversight of PCs is underway; statistics on the consolidated PC sector are expected in the early 2020s.

87. The risk analysis undertaken on the PC sector at the central level should be strengthened. The MNE should enhance its financial oversight of PCs as needed to allow undertaking regular assessments of PC performance and potential risks. Common risk indicators should be defined and applied to PCs. PCs should be required to report their QFAs, costing them with methodologies set by the MNE.

Public-Private Partnerships

88. The legal and institutional framework for PPPs comprises a Law on Concessions (2006), the Law on PPPs (2015), and regulations. Some questions have arisen in implementation regarding the interaction of the two laws and their scopes of application. Given the interpretation issues and overlap, the authorities are working on a single integrated PPP legal framework.

89. Special institutions support the preparation and review of PPP projects. The Kazakhstan Project Preparation Fund LLP, a subsidiary company of the national management holding company Baiterek, provides support to government agencies for the commissioning of studies, and technical and financial assistance for the design of project documentation for PPP projects. The Kazakhstan Public-Private Partnership Center (KPPPC), which operates under the MNE, evaluates PPP projects proposed by ministries.

- Proposed PPPs should be subject to a robust appraisal process to ensure that efficiencies can be achieved and that risks are properly assigned to the party that can best manage them. Projects should be subject to fiscal risk assessments. For example, the legislation in Colombia mandates the assessment of project-specific risk and the estimation of potential future expenditures for each proposed contract and requires their reporting as part of budget documentation.

90. Limits are set on the stocks of PPP liabilities at the central and local levels, and debt service flows at the local level. The annual budget law sets limits on the total liabilities under PPPs at the Republican Budget level. The budget for 2020 submitted to Parliament limits these liabilities to KZT 2.1 trillion, or about 3 percent of GDP. For local budgets, the limit on PPP liabilities is 20 percent of own revenues, and, on a flow basis, local budget PPP-related annual service of concessional obligations is limited to 10 percent of revenues in the budget year.

91. There is centralized monitoring of PPPs. All PPP contracts must be registered with the Treasury Committee at the MoF. The Committee is charged with checking that the liabilities associated with future payments do not go beyond the limits.

92. The total value of PPP contracts signed so far is equivalent to about 2.5 percent of GDP. There has been rapid growth in the signing of PPPs in recent years, following the enactment of the PPP Law in 2015 and the implementing regulations in 2016. The vast majority of PPP contracts (662 out of 671) have been signed by local authorities, with a total contract value of 1.5 percent of GDP. A majority of these contracts are in social infrastructure areas, such as pre-school education and health care. Nine central-level PPPs have been signed with a contract value of 1 percent of GDP.

93. It is becoming increasingly important to include information on PPP liabilities in debt statistics, budget documentation, and fiscal reports. While the KPPPC maintains a database of PPP projects and publishes aggregate data and detailed information on a project-by-project basis, explicit PPP liabilities should be included in the government debt statistics. Contingent PPP liabilities should be disclosed in budget documents and the future fiscal risk statement. Prospective developments highlight the importance of disclosing explicit and contingent PPP liabilities.

Specifically, the FSED for 2020–24 indicates that, to facilitate PPPs, the government intends to provide contractual protection of currency risk in concession agreements. Given the floating exchange rate regime and Kazakhstan’s exposure to major and recurrent external shocks, the provision of exchange rate guarantees could entail a substantial risk for the government.

- Budget documentation should disclose all rights, obligations (including contractual contingent liabilities), and other exposures under PPP contracts, and the expected annual receipts and payments over the life of the contracts, to ensure the transparency of PPP arrangements. For example, Chile publishes an annual statement of contingent liabilities that includes revenue guarantees given to public works concessions; it shows several measures of the costs and risks of the guarantees.
- The medium-term budgets should consider the potential implications of PPPs on public finances.

94. More information on the PPP contracts should be made available. PPP contracts should be published, possibly with omissions of the kind permitted by freedom-of-information laws, so that observers can assess them (Irwin and others, 2018). Guidelines on project disclosure developed by the World Bank Institute could provide useful input for an upgraded approach in this area (World Bank Institute, 2013). Local jurisdictions in Australia, Brazil, and Canada, and governments in Chile, India, Peru, South Africa, and the United Kingdom publish PPP contracts.

The NFRK: Selected Transparency Issues

95. The NFRK’s governance arrangements and operational rules are specified in legislation. The fund was founded in 2000 by Presidential Decree. The fund has stabilization and savings objectives. The NFRK’s Management Council is chaired by the President. The Management Council’s functions are specified in the Budget Code (art. 25). According to a government resolution of 2001, the NBK is the fund’s trust manager, and is in charge of implementing the fund’s asset investment strategy. The latest NFRK operational rules for transfers to the budget were set out in the 2016 decree, with amendments.

96. The NFRK’s investment strategy is published. The list of eligible financial instruments that the fund is allowed to invest in is set out in a government resolution. The investment guidelines are approved by the Board of the NBK and published; they were last changed in 2019.

97. The fund’s foreign currency portfolio has two sub-portfolios.

- The stabilization portfolio is aimed at maintaining a sufficient level of liquidity in the fund. It is capped at US\$10 billion and must be held in liquid assets (money market instruments and fixed income securities). At end-2018, the stabilization portfolio amounted to US\$9.2 billion, or 16 percent of the foreign currency portfolio.
- The savings portfolio aims at saving funds for future generations and ensuring long-term returns subject to maximum risk levels. The strategic asset allocation in the savings portfolio until

recently comprised bonds (80 percent, to be invested in sovereign bonds and high-quality corporate bonds) and shares (20 percent). The 2016 decree mandated a gradual shift of the strategic allocation of the savings portfolio to achieve an allocation of 60 percent in bonds and 35 percent in shares and allow up to 5 percent of the portfolio to be invested in alternative instruments, such as private equity. An amendment subsequently reduced the allocation in shares to 30 percent, to make room for up to 5 percent of the portfolio to be invested in gold. The transition began in 2017 and the targeted allocation was to be achieved 3–5 years later. At end-2018, the savings portfolio amounted to US\$48.8 billion, or 84 percent of the foreign currency portfolio.

98. The NFRK holds a residual domestic portfolio. The portfolio was formed at the time when the fund was allowed to engage in policy-oriented extrabudgetary spending and lending, prior to 2017. It includes bonds issued by national management holding companies. The portfolio is not actively managed by the National Bank.

99. Information on the NFRK is available from the MoF, the NBK, and the government. The fund's monthly and annual accounts and a succinct summary annual report are published by the MoF. The NBK's Annual Report has a section on the management of the NFRK's assets that includes summary information on investment objectives, the purposes of the stabilization and savings portfolios, the total asset market value and the values of the sub-portfolios, annual and cumulative returns since inception, and a comparison of the returns on the sub-portfolios with the returns on benchmark portfolios. Legislation and regulations are available at the MoF, NBK, and government websites. The annual financial statements are externally audited by international audit companies selected based on tenders but have not been published.

100. There would be merit in producing comprehensive “one-stop” quarterly and annual reports on the fund's activities and finances and providing the fund with a dedicated website. This would address the issue faced by observers of having to look for information on the fund in various places and would provide more information than is currently available. Many resource funds publish regular and comprehensive reports, with the audited financial statements attached, and have dedicated websites. Examples include the funds in Alberta (Canada), Alaska (U.S.), Australia, Azerbaijan, Chile, Mexico, Norway, Panama, Timor Leste, and Trinidad and Tobago.

- The reports could provide information on the fund's governance, transparency and accountability (containing references to the relevant legislation, regulations, and inter-agency agreements); the management of the fund; and its operating rules. The regular provision of this information is particularly helpful to new readers. The reports could include a narrative on the national economy and the fund; the fund's revenues and expenditures; its investment strategy and performance; the investment portfolio including breakdowns by various asset classes; the returns on the portfolio and comparisons to the benchmarks; the fund's risk profile and risk management; and the fund's budget and its execution. The externally-audited financial statements and the auditors' opinions should be attached to the annual reports.

- The dedicated website could include the laws, decrees, regulations, guidelines, management agreements, and codes of conduct; monthly accounts; and the quarterly and annual reports and financial statements.

D. Next Steps

101. The sequencing and prioritization of the reforms to the fiscal framework would benefit from IMF TA. The authorities could focus initially on specifying the objectives they wish to achieve, which may include tradeoffs, and the shortcomings of the current framework they want to address; examining options for the design of the upgraded fiscal rules and of the flexibility and enforcement mechanisms that will support them; building internal consensus; and building on efforts already under way to strengthen fiscal transparency further.

102. It would be advisable to review fiscal transparency and PFM comprehensively with TA support and introduce priority improvements before implementing an upgraded rules-based fiscal framework. This sequencing is important given the key role of transparency for a rules-based fiscal framework. Several steps arising from this initial assessment could be taken in the short term to strengthen fiscal transparency—in a number of cases, internal work and information are already available:

- improving reporting on the fiscal rules;
- broadening the coverage of the FSED and providing more information and analysis;
- making progress toward the proper sectorization of extrabudgetary units. This work should be high priority; sectorization is necessary to have a more comprehensive view of the public finances and to extend the institutional coverage of fiscal rules.
- extending the coverage of the published public debt statistics;
- developing a strategy to deal with QFAs;
- designing a strategy and assigning responsibilities to produce a fiscal risk statement, with IMF TA;
- making progress toward the publication of a periodic report on PCs, starting with the largest ones;
- assigning institutional responsibilities and setting up a schedule to produce a comprehensive periodic report on the NFRK; publishing the audited financial statements; and setting up a dedicated website for the fund.

E. Conclusion

103. Implementation of the recommendations in this paper would bring about a number of benefits. An upgraded rules-based system with stronger fiscal transparency and supporting PFM measures backed by strong political commitment would help strengthen fiscal discipline, increase predictability, guide medium-term fiscal policy more effectively, and help focus more attention on fiscal risks. It would also help contain spending pressures and address the deficit bias more effectively than at present, thus contributing to better fiscal outcomes. The authorities' efforts would benefit from an IMF FTE as well as TA on PFM, and on the fiscal framework and fiscal rules.

Annex I. Pros and Cons of Non-oil Primary Balance Rules and Expenditure Rules

Nonoil Primary Balance Rules

A rule on the NOPB could be defined in nominal terms (which is rare) or as a share of GDP or (preferably) nonoil GDP, which is less volatile than total GDP. The targeted NOPB will have to be translated into a NOPB ceiling expressed in nominal terms. This nominal ceiling, together with the nominal nonoil revenue projections, generates a nominal expenditure ceiling, which provides binding guidance to the annual budget planning process.

Pros

- Setting fiscal policy based on the NOPB helps insulate it from volatile resource revenues and delink expenditure from those revenues.
- The NOPB is a reasonable proxy for the injection of oil revenue into the economy.
- By excluding oil revenue and interest, the NOPB is largely under the control of the government.
- The NOPB is a reliable indicator of the fiscal stance.
- The NOPB is directly linked to medium- and long-term fiscal sustainability analysis.

Cons

- The NOPB can be procyclical, especially when nonoil revenue is strongly correlated with oil revenue.
- Incentives for off-budget operations and creative accounting.
- Can be vulnerable to the political economy of spending during resource booms.

Expenditure Rules

Expenditure rules can be expressed in nominal levels, or in terms of a (nominal or real) growth rate, or as a ratio of (actual or potential) GDP or (actual or potential) nonoil GDP. Total, primary, or current expenditure may be targeted. There may be adjustors to the rule for structural nonoil revenue measures. Each of these options (definition and economic coverage of the rule, and any adjustors) has pros and cons. Regardless of the methodology, the expenditure rule will have to be translated into an expenditure ceiling expressed in nominal terms, which in turn provides binding guidance to the annual budget planning process.

Pros

- Address expenditure pressures directly—especially important during booms when revenues can be very buoyant.
- Clear operational guidance.
- Relatively simple to implement, easy to monitor.
- Economic stabilization function (revenue downturns do not need to be adjusted for).
- Reasonable second best to structural budget rules if capacity is limited or the cycle is not well defined.
- May help achieve size of government objectives.
- May provide incentives for expenditure prioritization and efficiency.
- Reduction of expenditure volatility.

Cons

- No direct link to debt sustainability—revenue side not constrained. Hence, often combined with a debt or fiscal balance rule.
- In principle, no scope for discretionary expenditure stimulus in downturns, but escape clauses can be used in severe downturns.
- Is the level of expenditure “locked in” right? This can be addressed by periodic reviews.
- Difficult to implement in economic settings involving significant structural change.
- Incompatible with extensive revenue earmarking or minimum spending requirements.
- Incentives for tax expenditures.
- As in the case of NOPB rules, incentives for off-budget operations and creative accounting.
- As in the case of NOPB rules, can be vulnerable to the political economy of spending during resource booms

Annex II. Fiscal Rule Targets in Resource-Producing Countries

The design of fiscal rules in resource-producing countries has varied greatly. A few countries have targeted a single fiscal indicator, but many others have targeted two or more indicators. The following fiscal targets or combinations of fiscal targets are currently being targeted by the countries indicated.

Fiscal Rule Systems Involving a Budget Balance Aggregate

- **Overall balance:** Nigeria
- **Overall balance and debt:** Indonesia, Niger (West African Economic and Monetary Union convergence criteria), Papua New Guinea, East African Monetary Union convergence criteria (prospective producers Kenya, Tanzania, Uganda; debt in PV terms)
- **Overall balance and expenditure:** Mexico (only a part of expenditure is covered)
- **Overall balance, debt, and expenditure:** Peru (also structural balance published for informational purposes).
- **Overall balance with adjustment for resource revenues, and debt:** Central African Economic and Monetary Community's fiscal convergence criteria (Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon). Equatorial Guinea also has a national current expenditure rule.
- **Overall balance with adjustment for resource prices, debt, and expenditure:** Mongolia
- **Structural balance with adjustment for resource prices:** Chile, Colombia
- **Primary balance at fixed benchmark resource price:** Russia
- **Nonresource primary balance and expenditure:** Azerbaijan
- **Nonresource current primary balance and debt:** Botswana (for future implementation)
- **Nonresource structural primary balance:** Norway

Fiscal Rule Systems Not Involving a Budget Balance Aggregate

- **Expenditure:** Australia
- **Expenditure (target) and debt:** Botswana (with floor on development spending)
- **Current expenditure and debt:** Ecuador (only a part of expenditure is covered), Malaysia
- **Debt:** Kyrgyz Republic

Annex III. Escape Clauses: Country Examples

Brazil (since 2000): Real GDP growth below 1 percent over four quarters, and natural disaster but can only be invoked with Congressional approval.

Colombia (since 2011): In case of extraordinary events threatening the macroeconomic stability of the country, enforcement of the fiscal rule may be temporarily suspended, subject to the favorable opinion of CONFIS (an internal fiscal council headed by the Finance Minister).

Germany (since 2010): Natural disasters or unusual emergency situation which are outside government control and have major impact on the financial position of the government. Absolute majority of parliament is needed to trigger the escape clause. Parliament must approve an amortization plan with a specified timeframe for reducing the accumulated deviation. Until 2010, escape clause in case of a "distortion of the macroeconomic equilibrium."

Jamaica (since 2010): The targets may be exceeded on the grounds of national security, national emergency, or such other exceptional grounds, as the Minister may specify in an order subject to affirmative resolution.

Mauritius (since 2008): Temporary deviations in case of emergencies and large public investment projects.

Mexico (since 2006): If non-oil revenues are below their potential due to a negative output gap, there can be a deficit equivalent to the shortfall.

Panama (since 2008): If real GDP grows by less than 1 percent, the non-financial public sector deficit ceiling can be relaxed to 3 percent of GDP in the first year, followed by a gradual transition to the original ceiling (1 percent of GDP) within 3 years.

Peru (since 2000): If real GDP declines or in case of other emergencies, declared by the Congress at the request of the Executive, the deficit ceiling can be relaxed up to 2.5 percent of GDP. The Executive must specify deficit and expenditure ceilings to be applied during the exception period. In both cases a minimum adjustment of 0.5 percent of GDP is required until the 1 percent deficit ceiling is reached.

Romania (since 2010): In case of a government change, the new government will announce whether its program is consistent with the Medium-Term Budgetary Framework (MTBF) and if not the Ministry of Finance will prepare a revised MTBF, to be approved by parliament and subject to the review and opinion of the Fiscal Council.

Slovakia (since 2012): Escape clauses for a major recession, banking system bailout, natural disaster, and international guarantee schemes.

Spain (since 2002): In case of natural disasters, exceptional slowdown, exceptional budget deficits are accompanied by a medium-term financial plan to correct this situation within the next 3 years (to be approved by a majority vote by the parliament).

Switzerland (since 2003): The government can approve by supermajority a budget deviating from the BBR in "exceptional circumstances," which are defined in Budget Law as natural disaster, severe recession, and changes in accounting methods.

EU member states/euro area (since 2005): An excessive deficit procedure may not be opened when the 3 percent deficit limit is exceeded only temporarily and exceptionally, and the deficit is close to the deficit limit (both conditions need to apply). Deadlines for excessive deficit correction can be extended in case of adverse economic developments.

WAEMU (since 2000): Temporary and pronounced shortfall of real GDP (at least 3 percentage points below the average of the previous three years) and budget revenue (at least 10 percentage points below the average of the previous three years' average).

Source: IMF (2018b).

Annex IV. Correction Mechanisms: Country Examples

- **Within the EU**, the Fiscal Compact specifies the automatic correction mechanism. If the structural balance of a country deviates significantly from the medium-term objective or the adjustment path towards it, a mechanism will be automatically triggered to correct these deviations. The cumulated impact of deviations on government debt dynamics should also be automatically corrected. The common principles regarding the nature, size and time frame of the corrective action to be undertaken, also in the case of exceptional circumstances, have been determined by the European Commission.
- **The Swiss and German** structural budget balance rules contain automatic correction mechanisms known as “debt brakes.” In both countries, deviations from the structural budget balance rule (positive or negative) are stored in a notional account. When the accumulated deviation exceeds a threshold, improvements in the structural balance are required within a defined time frame to reverse the deviation. The main differences between the two countries are the thresholds (1.0 percent of GDP in Germany per ordinary law and 1.5 percent per constitution; and 6 percent of expenditures in Switzerland) and the type of deviation that needs to be corrected. In Germany, only those deviations that did not result from errors in real GDP growth projections enter the notional account, whereas in Switzerland all errors are tallied. The latter course is more transparent but provides less flexibility to accommodate errors outside the control of government. In Switzerland, the excess amount must be eliminated within the next three annual budgets. In Germany, overruns only need to be reduced during an economic recovery to avoid procyclical tightening and can be corrected via expenditure and revenue measures.
- **Poland’s and the Slovak Republic’s** debt rules, which set a 60 percent debt-to-GDP ceiling, include thresholds that trigger actions to prevent the rule from being missed. In the Slovak Republic, when the debt-to-GDP ratio reaches 50 percent, the minister of finance is obliged to explain the increase to parliament and suggest measures to reverse its growth. At 53 percent of GDP, the cabinet is required to pass a package of measures to trim the debt and freeze wages. At 55 percent, expenditures are to be cut automatically by 3 percent, and the next year’s budgetary expenditures would be frozen, except for co-financing of EU funds. At 57 percent of GDP, the cabinet must submit a balanced budget. Ideally, the later trigger points would not be needed if effective action is taken earlier.
- In **the United States**, a sequestration refers to automatic spending cuts that occur through the withdrawal of funding for certain (but not all) government programs if the Congress enacts annual appropriations legislation that exceeds pre-set caps on spending. Sequesters tend to have the disadvantage of creating a bias against capital spending, which is the easiest item to cut quickly, as experienced in the United States in the 1990s.

Source: IMF (2018b).

Annex V. Public Financial Management Requisites for Effective Fiscal Rules

Adequate PFM capacity and fiscal transparency are key requirements for a fiscal rule, given the credibility and reputational costs associated with ambiguity or noncompliance. Key PFM requirements, which range across the budget process, include:

- Elaboration of annual budgets and Medium Term Expenditure Frameworks based on detailed fiscal policy objectives consistent with the rule.
- Capacity to forecast revenues and the endogenous component of expenditures (or baseline estimates), and to prepare a realistic financing plan.
- A parliamentary approval process that prevents the introduction of amendments inconsistent with the fiscal rule.
- Capacity to ensure an appropriate execution of the budget, including effective expenditure control mechanisms and the ability to introduce intrayear corrections if needed—which requires the timely availability of reliable information on budget developments.
- Comprehensive and firmly enforced chart of accounts, accounting, and budget classification systems, and reporting requirements to forestall the use of accounting manipulation that would threaten and undermine the effective operation of the fiscal rule.
- Budget information mechanisms capable of generating timely (in-year and end-year) and reliable statistics and reports. In-year reports allow internal monitoring of the adherence to the rule and provide an opportunity to signal to policymakers in time if changes are needed. Fiscal data consistent with the budget reporting system should be publicly released in line with a pre-announced calendar to allow external monitoring of the rule.
- Effective independent external scrutiny, including external audit, to ensure that public resource use is fully accounted for.
- Enforcement and correction mechanisms.

In addition to the general PFM preconditions for fiscal rules just indicated, additional preconditions are important in resource-rich countries:

- A clear fiscal accounting distinction between resource-related revenues and expenditures, and other revenues and expenditures, and the capacity to monitor them with assurances of integrity, to avoid ambiguities and prevent misclassification.
- Significant budget flexibility and limited revenue earmarking or statutory minimum spending requirements. These budget rigidities can be inconsistent with the fiscal rule to a greater degree

than in other countries, because revenue earmarking and spending requirements can transmit significant resource revenue volatility and procyclicality to spending.

- Fiscal transparency in the provision of information on the resource sector and resource revenues.

Source: Based on Corbacho and Ter-Minassian (2013).

References

- Allen, R., and M. Alves, 2016. "How to Improve the Financial Oversight of Public Corporations." IMF Fiscal Affairs Department How To Note. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/external/pubs/ft/howtonotes/2016/howtonote1605.pdf>.
- Corbacho, A., and T. Ter-Minassian, 2013. "Public Financial Management Requirements for Effective Implementation of Fiscal Rules." In *The International Handbook of Public Financial Management*, ed. R. Hemming, R. Allen, and B. Potter. London: Palgrave Macmillan.
- European Bank for Reconstruction and Development (EBRD), 2018. "The Fiscal Implications for Kazakhstan of a Worldwide Transition To a Greener Global Economy." Available at: <https://www.ebrd.com/news/publications/special-reports/the-fiscal-implications-for-kazakhstan-of-worldwide-transition-to-a-greener-global-economy.html>.
- Eyraud, L. V. Duarte Lledó, P. Dudine, and A. Peralta, 2017. "How to Select Fiscal Rules." IMF Fiscal Affairs Department How To Note. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2018/03/15/How-to-Select-Fiscal-Rules-A-Primer-45552>.
- Eyraud, L., X. Debrun, A. Hodge, V. Duarte Lledó, and C. Pattillo, 2018. "Second Generation Fiscal Rules: Balancing Simplicity, Flexibility, and Enforceability." IMF Staff Discussion Note No. 18/04. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2018/04/12/Second-Generation-Fiscal-Rules-Balancing-Simplicity-Flexibility-and-Enforceability-45131>.
- IMF, 2012. *Macroeconomic Policy Frameworks for Resource Rich Developing Countries*. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Macroeconomic-Policy-Frameworks-for-Resource-Rich-Developing-Countries-PP4698>.
- IMF, 2015. "The Commodities Roller Coaster: A Fiscal Framework for Uncertain Times." Fiscal Monitor, October. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/FM/Issues/2016/12/31/The-Commodities-Roller-Coaster>.
- IMF, 2018a. "Fiscal Risk Management." In Republic of Kazakhstan: Selected Issues, IMF Country Report No. 18/278. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/CR/Issues/2018/09/14/Republic-of-Kazakhstan-Selected-Issues-46244>.
- IMF, 2018b. *Georgia—Technical Assistance Report: Enhancing the Fiscal Rules*. IMF Country Report No. 18/132. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/CR/Issues/2018/06/01/Georgia-Technical-Assistance-Report-Enhancing-the-Fiscal-Rules-45911>.

Irwin, T., S. Mazraani, and S. Saxena, 2018. "How to Control the Fiscal Costs of Public-Private Partnerships." IMF Fiscal Affairs Department How To Note. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2018/10/17/How-to-Control-the-Fiscal-Costs-of-Public-Private-Partnerships-46294>.

V. Lledó, S. Yoon, X. Fang, S. Mbaye, and Y. Kim, 2017. "Fiscal Rules at a Glance." IMF Background Note. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/external/datamapper/fiscalrules/Fiscal%20Rules%20at%20a%20Glance%20-%20Background%20Paper.pdf>.

PEFA, 2018. *Kazakhstan: Public Expenditure and Financial Accountability Assessment 2018*. Available at: <http://documents.worldbank.org/curated/en/376211553766763037/Kazakhstan-Public-Expenditure-and-Financial-Accountability-PEFA-Assessment-2018>.

Schaechter, A., T. Kinda, N. Budina, and A. Weber, 2012. "Fiscal Rules in Response to the Crisis—Toward the 'Next Generation' Rules. A New Dataset." IMF Working Paper WP12/187. Washington, DC: International Monetary Fund. Available at: <https://www.imf.org/external/pubs/ft/wp/2012/wp12187.pdf>.

Ter-Minassian, T., 2017. "Identifying and Mitigating Fiscal Risks from State-Owned Enterprises." IDB Discussion Paper No. IDB-DP-546. Washington, DC: Inter-American Development Bank. Available at: <https://publications.iadb.org/en/identifying-and-mitigating-fiscal-risks-state-owned-enterprises-soes>.

World Bank Institute, 2013. "Disclosure of Project and Contract Information in Public-Private Partnerships." Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16534>.