



SLOVAK REPUBLIC

TECHNICAL ASSISTANCE REPORT—PUBLIC INVESTMENT MANAGEMENT ASSESSMENT

October 2019

This Technical Assistance Paper on the Slovak Republic was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in February 2019.

Copies of this report are available to the public from

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

International Monetary Fund
Washington, D.C.

Slovak Republic

Public Investment Management Assessment

Yasemin Hürcan, Richard Allen, Imran Aziz, Willie du Preez, Karel Meixner



Technical Report

September 2019

CONTENTS

ABBREVIATIONS AND ACRONYMS	5
PREFACE	6
EXECUTIVE SUMMARY	7
I. PUBLIC INVESTMENT IN SLOVAKIA	11
A. Trends in Total Public Investment and Capital Stock	11
B. Composition and Financing of Public Investment	13
II. EFFICIENCY AND IMPACT OF PUBLIC INVESTMENT	18
III. PUBLIC INVESTMENT MANAGEMENT INSTITUTIONS	21
A. The PIMA Framework and Context	21
B. Overall Assessment	23
C. Investment Planning	23
D. Investment Allocation	33
E. Investment Implementation	41
IV. CROSSCUTTING ISSUES	46
BOXES	
1. Maintenance of Infrastructure in Slovakia	38
2. Planning and Management of National Infrastructure in the United Kingdom	39
FIGURES	
0.1. Strength of Public Investment Management Institutions	8
1. Public Investment	11
2. Investment and Capital Stock	11
3. Public Capital Stock, 2015	11
4. Public Investment in Selected EU Countries	12
5. Comparison of the Volatility of Public Investment, Average 2012–17	12
6. Debt and Deficit	12
7. Composition of the Deficit	12
8. Current vs. Capital Spending Average, 2011–15	13
9. Investment by Levels of Government (including SOEs)	13
10. General Government Spending by Level of Government	14
11. General Government Spending by Level of Government, 2015	14
12. Public Investment by Major Region	14
13. Slovakia Public Investment by Function	15

14. EU Public Investment by Function _____	15
15. Public Investment by Source of Financing (in percent) _____	16
16. Public Investment by Source of Financing (in millions) _____	16
17. Budget Execution _____	16
18. Comparison of Budget Execution _____	16
19. EU Funds Absorption Rates, 2007–15 _____	17
20. EU Funds Absorption Rates in 2015–18 vs. First 3 years of 2007–15 Cycle _____	17
21. EU Funds Absorption Rates, 2018 _____	17
22. EU Funds Absorption Rates by Operational Program, 2018 _____	17
23. PPP Capital Stock in Different Countries, 2014 _____	18
24. Measures of Infrastructure Access and Service Delivery, 2015 _____	19
25. Length of Motorway per capita _____	19
26. Perceptions of Infrastructure Quality (Slovakia and Peers) _____	19
27. Perceptions of Infrastructure Quality (Slovakia) _____	19
28. Structural Main Road Condition _____	20
29. Road Maintenance Cost _____	20
30. Railway Goods Transported _____	20
31. Railway Passengers Carried _____	20
32. Efficiency Frontier _____	21
33. Efficiency Gap _____	21
34. The PIMA Framework _____	22
35. Adherence to Fiscal Rules, 2002–18 _____	25
36. Medium-Term Capital Expenditure: Ceilings and Outturns _____	34

TABLES

1. Summary Assessment _____	9
2. Summary of Main Recommendations _____	10
3. Summary of the Main Rules Guiding Fiscal Policy in Slovakia _____	24
4. Fixed Assets of the Largest SOEs _____	32
5. Expenditure by Extra-Budgetary Entities, Budget 2019 _____	35
6. Deviations Between the Approved Budget and Actual Spending, 2013–18 _____	36
7. Routine and Capital Maintenance _____	37
8. Routine and Capital Maintenance of NHC _____	37
9. Public Procurement Procedures (2017) _____	41
10. Analysis of a Sample of Public Procurement Procedures _____	42
11. IT Systems Used for PIM _____	47

APPENDICES

I. Example of a Scorecard for Project Selection _____	49
II. Functions and Structure of a PIM Unit _____	50
III. Maintenance of Public Assets _____	51

ABBREVIATIONS AND ACRONYMS

ARDAL	Debt and Liquidity Management Agency
CBA	Cost-Benefit Analysis
CBR	Council for Budgetary Responsibility
DPMO	Deputy Prime Minister's Office
ESA	European System of Accounts
ESIF	European Structural and Investment Funds
EU	European Union
FAD	Fiscal Affairs Department
FRA	Fiscal Responsibility Act
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GG	General Government
HTUs	Higher territorial units
ICT	Information and Communication Technology
IPSAS	International Public Sector Accounting Standards
LG	Local Government
MoF	Ministry of Finance
MTBF	Medium-Term Budget Framework
MTFF	Medium-Term Fiscal Framework
NDP	National Development Plan
OP	Operational Program
PC	Public Corporation
PFM	Public Financial Management
PIM	Public Investment Management
PIMA	Public Investment Management Assessment
PPP	Public-Private Partnership
SGP	Stability and Growth Pact
SNG	Sub-National Government
SAO	Supreme Audit Office
SOE	State-Owned Enterprise
TSA	Treasury Single Account

PREFACE

In response to a request from the Ministry of Finance (MoF), an FAD mission visited Bratislava, Slovak Republic, during the period February 6–20, 2019 to undertake a Public Investment Management Assessment (PIMA). The mission comprised Yasemin Hürçan (FAD, head), Richard Allen, Imran Aziz, Willie du Preez, and Karel Meixner (all FAD experts). The tasks of the mission were to: (i) assess Slovak Republic’s public investment management framework using the IMF’s PIMA methodology; and (ii) advise the authorities on options to strengthen further the management of public investment.

Within the MoF, the mission met with: Mr. R. Kuruc, State Secretary; Mr. Š. Kišš, Director of the Value for Money Division; Mr. J. Šuchta, Head of the Fiscal Analyses Department; Mr. P. Ivánek, Director of the Overall State Reporting Department; Mr. J. Hatrík, Director of the Financial Management Coordination Department; Ms. M. Izakovičová, State Treasury; and the other senior staff members including Alexander Cirák, Zdenko Krajčír, Marek Hutko, and Lenka Ostrožlíková.

The mission also met with representatives of the Ministries of Economy, Transport and Construction, and Agriculture; the Supreme Audit Office; the Deputy Prime Minister’s Office for Investments and Information; the Slovak Council for Budget Responsibility (CBR); the Debt and Liquidity Management Agency (ARDAL); the Slovak Statistics Office; the Regulatory Authority for Communications and Postal Services; the Public Procurement Office (PPO); Slovak Railways; the Slovak Energy Grid Company (SEPS); Slovak Power Plants Company; the Banska Bystrica Regional Government; the Bratislava Municipality; and Ludmila Majlathová from the Representation of the European Commission.

The mission is grateful to the authorities for the frank, open and constructive discussions and close cooperation. The mission expresses its sincere appreciation to Juraj March, Matúš Lupták and Marián Bederka, of the Value-for-Money Division at the MoF, for the organization of the mission.

EXECUTIVE SUMMARY

Since 2016, the Slovak government has prepared several spending reviews with the aim of improving the efficiency of public expenditures, better serve citizens, and consolidate the public finances. Some of these reviews (e.g., transport) have included a strong focus on infrastructure investment. To further improve public investment management (PIM), the authorities requested that a Public Investment Management Assessment (PIMA) mission be conducted in parallel to the ongoing program of spending reviews.

Approximately two-thirds of public investment in Slovakia is financed through the EU Structural and Investment Funds (ESIFs). A primary purpose of these funds is to reduce economic, social, and territorial disparities across EU regions. Slovakia has the greatest regional economic and social disparities of any EU Member State, notably in the Eastern region. Disbursements to Slovakia under the ESIFs have been massive (equivalent to a total of 15 percent of GDP during 2007–15), with the bulk of this occurring at the end of the cycle, placing large stresses on the PIM system. This absorption pattern seems likely to continue in the current cycle, with less than a fifth of the funds spent after the first three years of the seven-year cycle.

The quality and public access to infrastructure is generally good but falls behind comparators in some key sectors—particularly roads. The coverage of Slovakia’s motorway network is one of the lowest in Europe. In most years since 2003, Slovakia’s public investment levels have been below regional peers and the capital stock has fallen to about 50 percent of GDP. The capital stock is now one of the lowest in the region.

Comparing the quality of infrastructure achieved for a given level of the public capital stock and income level, Slovakia’s investment efficiency gap is 23 percent, broadly in line with the EU average and other regional comparators. Improving PIM would enable Slovakia to further increase the efficiency of its infrastructure, improve the absorption of EU funds, and reduce regional economic disparities.

Slovakia’s public investment institutions in the three phases of the PIMA evaluation (planning, allocation, and implementation) generally perform well, especially in design. Specifically, design of all PIM institutions in implementation phase is very strong. The legal framework is comprehensive and uniform rules and procedures cover most investment whether financed domestically or by EU funds. Staff capacity is generally high, but more resources could be dedicated to analytical functions that support PIM.

The mission’s assessment is summarized in Figure 0.1 and Table 1, which highlights:

- **Planning phase:** Slovakia’s fiscal rules support fiscal sustainability and facilitate the medium-term planning of public investment. Major projects have been appraised on a standard methodology since 2017. However, there is room for improvement in the appraisal process and the strategic planning framework for public investment. There are many sector

strategies, which are not a part of a medium- or long-term national public investment plan and hampered by a weak results framework. The capital spending plans of subnational government (SNGs) are not discussed with the central government. There is a sound regulatory framework for economic infrastructure and PPPs, but MoF's role as a gatekeeper for PPPs and overseeing SOEs is weak.

- Allocation phase:** There is no central PIM coordination unit and no integrated pipeline of large infrastructure projects. The medium-term budget framework includes non-binding ceilings for the outer years. Appropriations for routine and capital maintenance are included in the budget, but the resources allocated are generally insufficient. Little data on the cost of major projects are published with the budget. The MoF has wide discretion to reallocate capital spending during the year, and to carry over funds from one year to the next. Capital spending generally exceeds the approved budget.
- Implementation phase:** The Treasury ensures timely cash availability for capital spending and there is an asset registry. Fixed assets are disclosed in the financial statements but are not subject to regular revaluation. There is room to improve the frequency and depth of external audits of procurement and the Public Procurement Office's reporting. To improve portfolio management and project implementation, the government should conduct regular ex post evaluations of major projects.

The report makes seven recommendations aimed at strengthening PIM institutions and reducing the identified efficiency gap (Table 2). These recommendations focus on key bottlenecks and challenges in the investment process. Issues that warrant the authorities' primary attention include introducing a strategic planning framework for public investment; developing a fully-operational pipeline of major projects, based on clear and robust selection criteria; improving the credibility of the annual budget and medium-term budget ceilings; making public procurement more efficient and transparent; increasing the MoF's oversight of SOEs' investment plans and fiscal risks; and ensuring that maintenance budgets for infrastructure are more realistic.

Figure 0.1. Strength of Public Investment Management Institutions

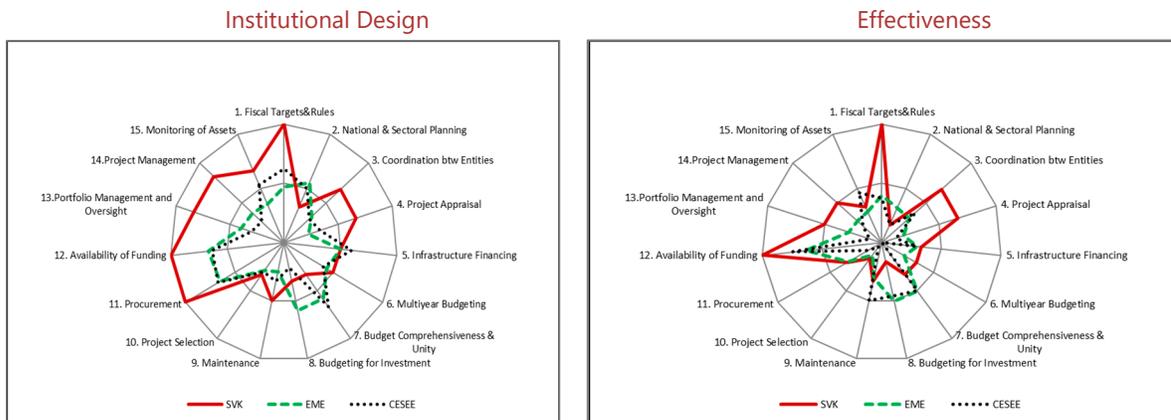


Table 1. Slovakia: Summary Assessment

Phase/Institution		Institutional Design	Effectiveness	Rec.	
A. Planning	1	Fiscal principles or rules	High: Fiscal rules provide a strong basis for planning and executing public investment and ensure debt sustainability.	High: EU fiscal rules are effectively applied, but the MoF is working on improvements (e.g., an expenditure rule).	
	2	National and sectoral plans	Medium: Strategic framework for public investment is largely missing, except ESIF, which represents two thirds of capital spending.	Low: Lack of coordination between regional and sectoral strategies during the investment allocation decision; lack of systematic costing, measurable outcome/output targets, and an adequate monitoring framework.	1
	3	Coordination between entities	Medium: Coordination is good in negotiating EU-funded programs, but not for coordination of SNGs' own investment plans with the CG.	Medium: Overview of large projects and planned sources of funding is available, but implementation plans are lacking, and financing is uncertain.	1
	4	Project appraisal	Medium: Major projects appraised on standard methodology but results not published. Risk assessments are conducted but mitigation measures not costed.	Medium: Some estimates used in CBA (e.g., traffic data) unreliable, and project costs underestimated. Contingencies are budgeted (typically 10 percent of project costs).	
	5	Alternative infrastructure financing	Medium: There is a sound regulatory framework for economic infrastructure and PPPs but MoF's role as a gatekeeper for PPPs and monitoring of SOEs is weak.	Medium: SOEs account for nearly 50 percent of public investment and are subject to limited financial oversight. No monitoring of PPPs' financing and risks in the MoF's PPP unit	2
B. Allocation	6	Multi-year budgeting	Medium: Multi-year horizon exists for capital spending disaggregated by ministry. Rolling 3-year MTBF for spending units and programs, with indicative ceilings. Detailed projection cost information on EU-financed projects but not for budget funded projects	Medium: The ceilings have been changed substantially in recent years. EU financed investment numbers change as information on specific projects and co-financing firm up during the year. Limited data published on project costs.	3
	7	Budget comprehensiveness and unity	Medium: Significant spending undertaken by SOEs and social security funds. Capital and recurrent budgets prepared together.	Medium: Lack of detailed information in budget documents at project level.	3
	8	Budgeting for investment	Medium: Spending authorized annually. MoF makes substantial in-year budget changes without legislative approval.	Low: Budget execution is loose, with excessive use of carryovers that are not transparently reported. Large deviations between budgets estimates and outturns (40 percent on average for capital spending over 5 years).	3
	9	Maintenance funding	Medium: Sector methodologies used to determine routine and capital maintenance costs, which can be identified in the budget.	Medium: Resources allocated for maintenance are less than required. 10 percent of all bridges in the network in a very bad state.	4
	10	Project selection	Medium: Major projects are reviewed by a central ministry, but no independent review. No published criteria for project selection.	Low: No integrated pipeline of appraised and approved major projects. No PIM unit to implement the task.	5
C. Implementation	11	Procurement	High: Most large procurements follow open, transparent procedures. Comprehensive procurement database. Complaints are reviewed fairly.	Medium: Uncompetitive practices still prevail. 45 percent of GG procurement procedures have less than 3 bidders and 45 percent include non-compliance (mainly in SNGs).	6
	12	Availability of funding	High: Cash availability is managed through a TSA, credible cash plans, and good cash and debt management coordination.	High: Treasury ensures timely cash availability for capital spending.	
	13	Portfolio management and oversight	High: All major projects (mainly EU financed) are centrally monitored, funds can be re-allocated between projects, and systematic ex-post reviews exist for EU financed projects.	Medium: Ministries monitor the projects but no central monitoring and rare ex-post reviews for budget funded projects.	7
	14	Project implementation	High: Standardized rules for cost adjustment is in place and used. Some projects are subjected to external audit.	Medium: Cost overruns between 4-10 percent and time overruns average 12 months. External audits for projects are limited.	7
	15	Management of public assets	Medium: A central electronic asset registry system exists but the register excludes data on the cost or physical condition of assets. The carrying value of nonfinancial assets and their depreciation are reported in the GG financial statements.	Medium: Financial statements make no adjustments for changes in the market value of assets.	

Table 2. Slovakia: Summary of Main Recommendations

No	Issue	Recommendation	Inst.
1	Multiple sectoral and regional plans with varying coverage and poor coordination	The MoF and the DPMO to finalize the strategic investment planning framework and translate it into a project pipeline. (See page 33)	2,3
2	The MoF exercises minimal oversight of SOE investments, operations and financial performance	Expand and strengthened financial oversight functions of the newly established SOE unit in the MoF. (See page 33)	5
3	No comprehensive information on public investment projects or in-year adjustments to the budget (carryovers and virements)	The MoF to include in the budget documentation information on: (i) in-year reallocations of spending (virements) and carryovers for both capital and recurrent spending, and analysis of the reasons for these changes, and (ii) all major capital projects—total construction costs, year-by-year breakdown of these costs, and sources of financing. (See page 40)	6,7,8
4	Inadequate funding for maintenance, and absence of a national strategy and norms to guide the preparation of maintenance budgets	The MoF in consultation with other ministries to establish a strategy, benchmarks and standards for routine and capital maintenance budgeting, including: (i) medium term increments for maintenance; and (ii) establishment of static weigh stations in strategic locations to eliminate overloading. (See page 40)	9
5	No consolidated project pipeline, or criteria for selecting projects to include in the pipeline. No Unit to manage the pipeline and provide advisory services on public infrastructure.	The MoF and the DPMO to establish (i) a unified pipeline of appraised major projects based on published selection criteria; and (ii) a Public Investment Unit (PIU) which would manage the pipeline, monitor implementation of the projects (through the integrated project database mentioned in Recommendation 7) included in it, and carry out other advisory functions related to efficient project implementation and infrastructure development. (See page 41)	10
6	Weak administrative capacity and anticompetitive practices continue to impact negatively on public procurement procedures	The SAO should consider performing thematic public procurement audits, followed up with corrective measures. The PPO can support this process by strengthening reporting on: (i) openness, (ii) depth of competition; (iii) results of PPO control activities; (iv) results of the complaints review process. (See page 46)	11
7	Room for improvement in portfolio management and oversight	The MoF and the DPMO to develop an integrated project database for both EU and budget funded projects, based on the project pipeline (Recommendation 5) that can (i) generate a consolidated report on portfolio oversight for all major projects; and (ii) flag potential risks to implementation of major projects and enable corrective action to be taken. (See page 47)	13, 14

I. PUBLIC INVESTMENT IN SLOVAKIA

A. Trends in Total Public Investment and Capital Stock

1. From 2006, public investment¹ levels have been consistently below regional peers, except for a spike in 2015, and the capital stock has fallen as a ratio of GDP.² Investment levels declined from 2002, and have remained generally below regional peers who also accessed the EU funds after 2000 (Figure 1).³ As a result, the capital stock followed a downward trend between 2000 and 2008, before levelling out (Figure 2) and is now one of the lowest in the region (Figure 3). The sharp spike of investment spending in 2015 reflected delayed spending of the EU programming cycle and accounted for almost 80 percent of investment spending that year.

Figure 1. Public Investment
(Percent of Total Expenditure)

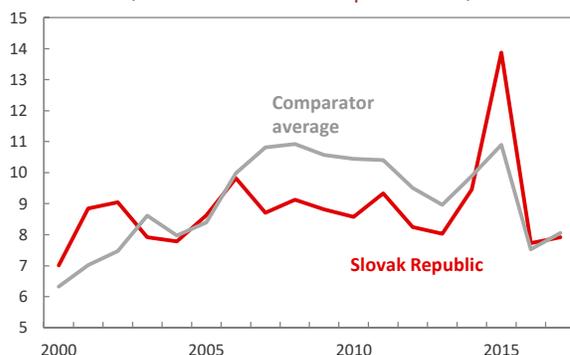


Figure 2. Investment and Capital Stock
(Percent of GDP)

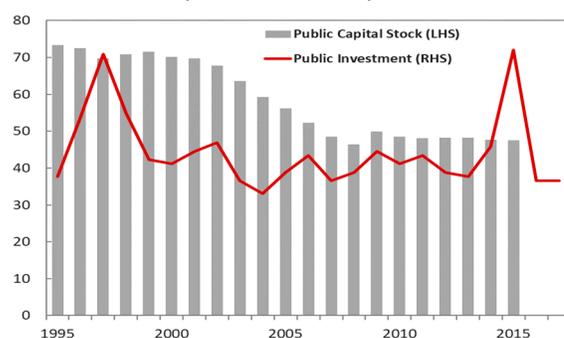
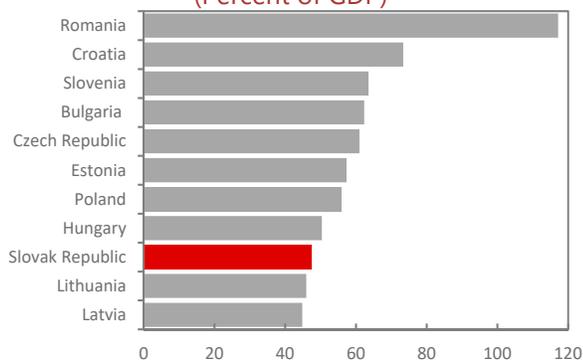


Figure 3. Public Capital Stock, 2015
(Percent of GDP)



Source: World Economic Outlook, Eurostat and staff estimates.

¹ Defined as gross fixed capital formation of the general government sector.

² The public capital stock is the accumulated value of public investment over time, adjusted for depreciation (which varies by income group and over time).

³ Regional peers are: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia.

2. Most public investment in Slovakia is financed by the EU's structural and investment funds (ESIFs), which are quite volatile. Figure 4 illustrates how several other EU member states follow a similar pattern of investment spending with increased spending at the end of the programming period, to use up available resources. The pronounced spike in public investment spending in Slovakia means investment spending has the second highest level of volatility amongst comparator countries (Figure 5).

Figure 4. Public Investment in Selected EU Countries (Millions of Euros)

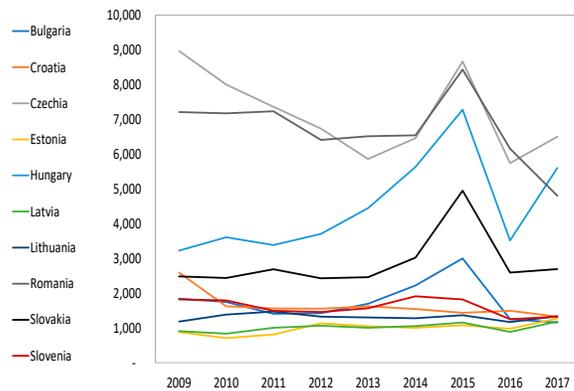
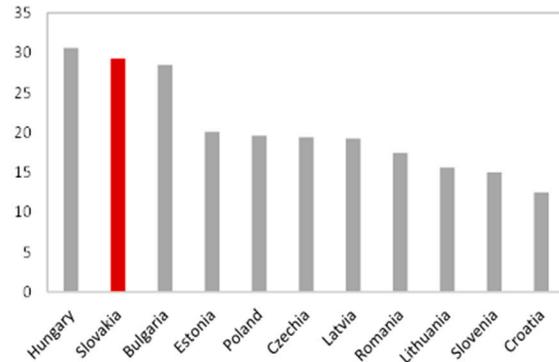


Figure 5. Comparison of the Volatility of Public Investment, Average 2012–17 (standard deviation*)



Source: Eurostat. *Volatility is calculated as the standard deviation of year on year growth of investment to GDP.

3. The government's efforts in recent years have been focused on reducing the fiscal deficit and stabilizing debt levels. Combined with rigidities in recurrent spending, this has left little room for increasing public investment in the short to medium term. Figure 6 illustrates the results of fiscal consolidation following the global financial crisis. By 2017, the deficit had been reduced by 7 percentage points of GDP, and gross debt stabilized at 50 percent of GDP. As part of the fiscal consolidation drive, levels of recurrent spending as a ratio of GDP, were initially reduced, before stabilizing, but at a higher level than regional peers (Figures 7 and 8).

Figure 6. Debt and Deficit (Percent of GDP)

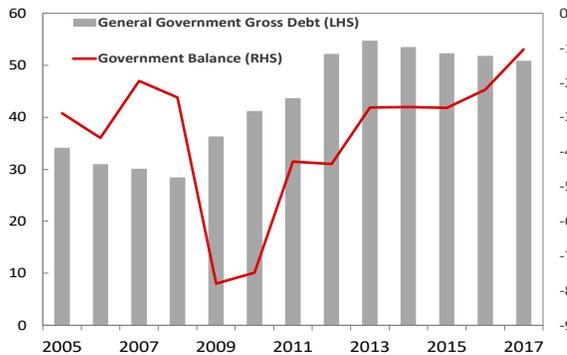


Figure 7. Composition of the Deficit (Percent of GDP)

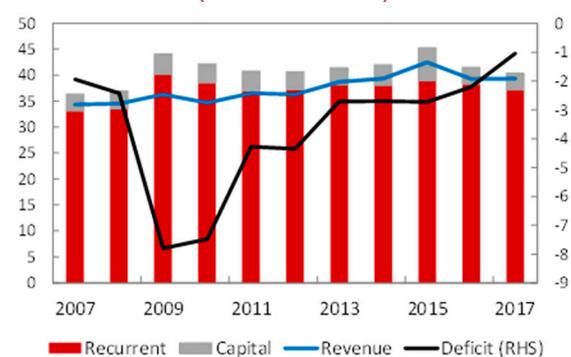
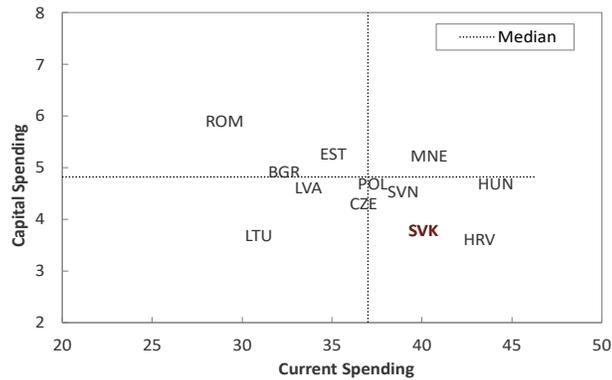


Figure 8. Current vs. Capital Spending Average, 2011–15
(Percent of GDP)

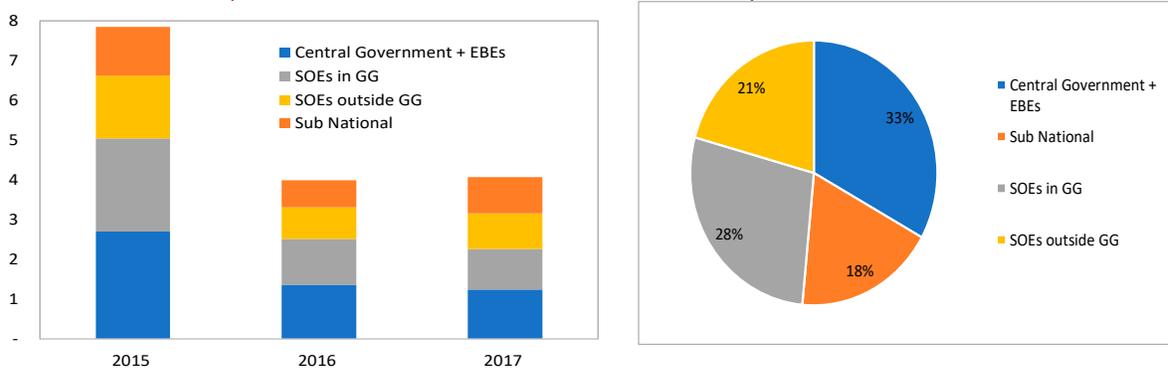


Sources: IMF World Economic Outlook Database 2018 and Eurostat.

B. Composition and Financing of Public Investment

4. Approximately half of Slovakia’s public investment is provided by SOEs, with central government contributing a further third, and local governments providing the rest. The distribution of total public investment has remained broadly stable since 2015 (Figure 9). The bulk of SOE spending comprises three enterprises that are classified as part of general government, and four large nonfinancial enterprises (e.g., energy generation) outside of the general government. Substantial investment is also undertaken by extra-budgetary entities (EBEs) such as hospitals and universities. Local governments are responsible for smaller-scale social investments and secondary roads.⁴

Figure 9. Investment by Levels of Government (including SOEs)
(in percent of GDP)



Source: Slovakia National Statistical Office. Central Government consists of state budget institutions and EBEs such as social and health insurance funds, hospitals, and universities. Subnational government (SNG) includes municipalities and higher territorial units (HTUs).

⁴ Institutions 3,5 and 7 provide more details of investment undertaken at different levels of government.

5. The share of investment spending by subnational governments (SNGs) grew substantially following a decentralization drive in the early 2000s but has flattened out since 2010. A constitutional reform in 2001 introduced three layers of government,⁵ and the parliament approved and extension of the role and responsibilities of the SNGs. Capital spending at regional and municipal levels subsequently increased to a peak of 46 percent of total general government investment by 2010 (Figure 10). The trend has reversed since, the ratio falling back to 23 percent in 2015, which places Slovakia as one of the least decentralized countries in the region (Figure 11).

Figure 10. General Government Spending by Level of Government
(Percent of total public investment)

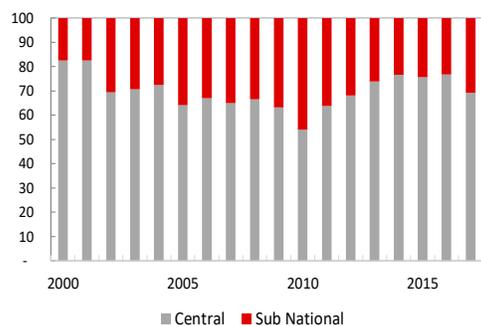
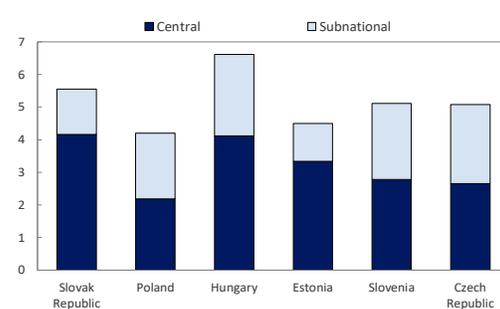
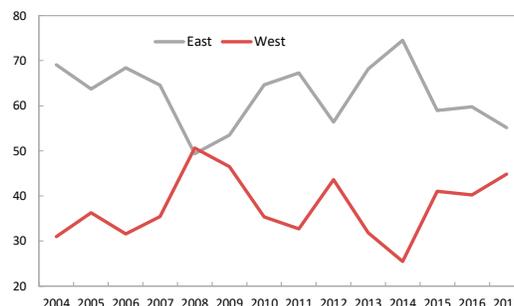


Figure 11. General Government Spending by Level of Government, 2015
(Percent of GDP)



6. Regional disparities of income in Slovakia are among the highest in the region and investment spending has, to some extent, attempted to equalize the East with the West of the country. In 2008, spending was split equally between East and West and a similar trend occurred in 2017 (Figure 12). But, on average, since joining the EU in 2004, the Eastern regions of the country have received approximately two-thirds of public investment spending, largely as a result of the EU cohesion policy that supports less developed regions.

Figure 12. Public Investment by Major Region
(Percent of total regional spending)

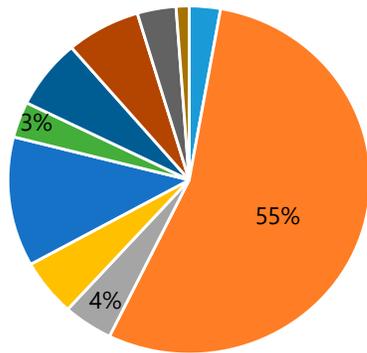


Source: Ministry of Finance. West comprises: (i) Bratislavský samosprávny kraj; (ii) Trnavský samosprávny kraj; (iii) Trenčiansky samosprávny kraj, and; (iv) Nitriansky samosprávny kraj. East comprises: (i) Žilinský samosprávny kraj; (ii) Banskobystrický samosprávny kraj; (iii) Prešovský samosprávny kraj, and (iv) Košický samosprávny kraj.

⁵ Central Government, Higher Territorial Units (regions), and Municipalities.

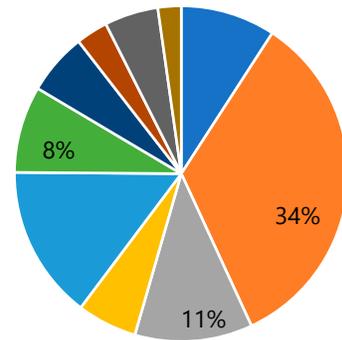
7. Slovakia invests more on economic infrastructure than other EU countries, but less on defense, education, and health (Figures 13 and 14). Since 2008, over 90 percent of spending on economic infrastructure has been devoted to transport, but the road network is still significantly smaller than in comparator countries. The education sector has experienced several financing and performance difficulties over the years and comparatively low spending on educational infrastructure is associated with poor outcomes in the sector.⁶

Figure 13. Slovakia Public Investment by Function
(Percent of total public investment)



5 Year Average 2012–16

Figure 14. EU Public Investment by Function
(Percent of total public investment)



- Defence
- Economic affairs
- Education
- Environment protection
- General public services
- Health
- Housing and community amenities
- Public order and safety
- Recreation, culture and religion
- Social protection

Source: Eurostat.

8. Domestic financing compensates for periods of under-execution of EU-financed spending (Figures 15 and 16). Between 2011 and 2015, EU funds, on average, accounted for approximately three-quarters of total investment spending (Figure 15).⁷ Due to slow execution rates early in the current programming period (2014–20), this share dropped to less than a half between 2016 and 2018, with domestic funding playing a much larger role.

⁶ Section II provide further analysis of outputs and outcomes in the transport and education sectors.

⁷ Member states are allowed three years at the end of each programming cycle to use up unspent funds (the “n+3” rule). Thus, spending under the 2007-2013 programming cycle continued until the end of 2015.

Figure 15. Public Investment by Source of Financing (in percent)
(Percent of total public investment)

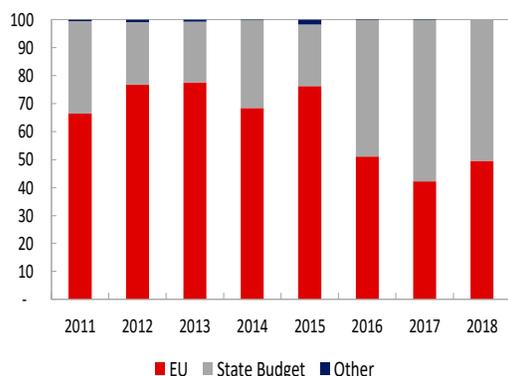
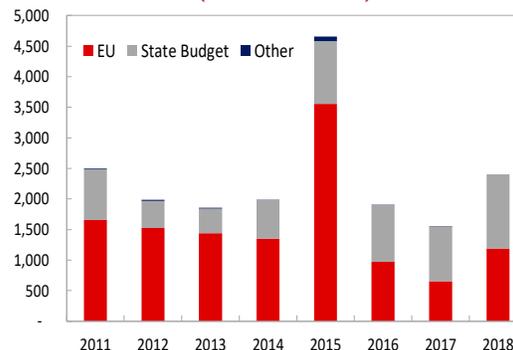


Figure 16. Public Investment by Source of Financing (in millions)
(Euro Millions)



Source: Ministry of Finance. EU includes co-financing and other includes support from other donors.

9. EU-financed capital spending is more volatile than investment financed from the state budget. Since 2011, apart from 2015, EU-financed investment spending has systematically underspent compared to the budget (Figure 17). The state budget has overspent in four of these years, largely because agencies, with the MoF’s permission, carried forward capital spending from one financial year to the next. Based on a five-year average, the absolute forecast error of budget outturns for capital spending one year ahead compared to forecasts is in the mid-range of comparator countries (Figure 18).⁸

Figure 17. Budget Execution
(Percent of budget spent)

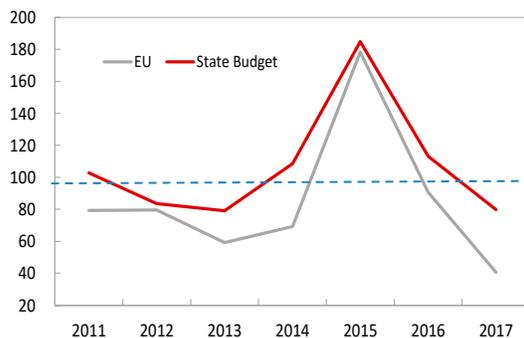
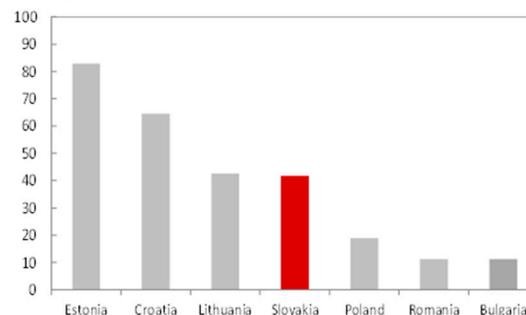


Figure 18. Comparison of Budget Execution
(Average of the absolute forecast error, 2010-15)^{1/}



Source: Ministry of Finance, IMF Staff estimates

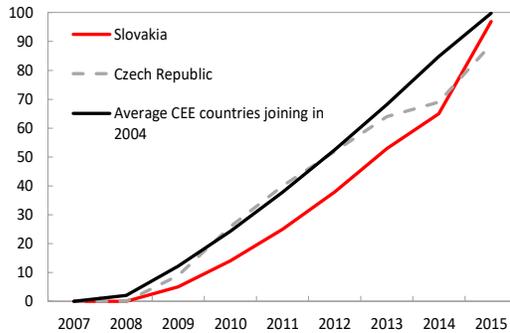
1/ The absolute forecast error is reflected as the absolute value of the difference between forecast and actual investment. This measure does not distinguish between over and under spending. The Slovakia average is for the period 2013-2017.

10. The rate of absorption of EU funds accelerated at the end of the programming cycle at a faster rate than comparator countries, with potential efficiency implications. Figure 19

⁸ The absolute forecast error is defined as the absolute value of the difference between forecast and actual investment spending on annual basis. This measure does not distinguish between over- and under-spending. Institution 6 provides further analysis of forecast errors on a multi-year basis.

illustrates that Slovakia spent at a slower rate than other Central and Eastern European (CEE) countries that joined the EU in 2004 until the end of the EU funds cycle. Figure 20 shows there has been the same pattern within the current EU fund cycle. Cross-country empirical research suggests that in cases of low absorptive capacity, the scaling up of public investment is less likely to be successful as projects are chosen due to the urgency to spend allocated funds, rather than by the quality of the projects.⁹

Figure 19. EU Funds Absorption Rates 2007–15



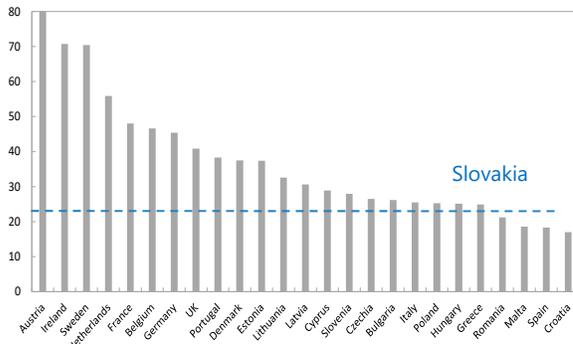
Source: European Commission and IMF staff calculation.

Figure 20. EU Funds Absorption Rates in 2015–18 vs. First 3 years of 2007–15 Cycle



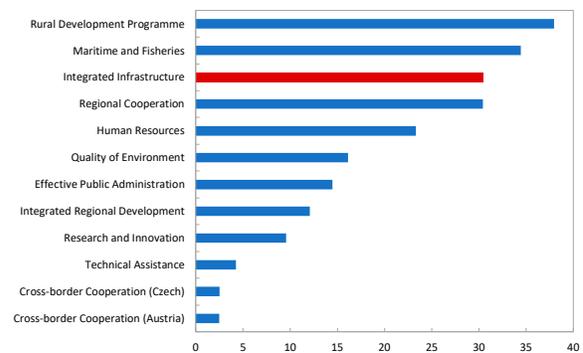
11. By the end of 2018, the overall absorption of EU funds in the current programming period was still lower than nearly all other EU countries (Figure 21). Reasons for low absorption include delayed spending at the end of the previous programming cycle, challenges in the implementation of the Operational Programs (OPs) due to weaknesses in planning, coordination, administrative capacity, and consequential delays in issuing the calls for projects. Absorption rates have varied widely among OPs. By the end of 2018 the Integrated Infrastructure OP (transport and energy) for Slovakia had spent about 30 percent of its planned allocation (Figure 22).

Figure 21. EU Funds Absorption Rates, 2018
(Percent of program allocation spent)



Source: European Commission. Spending by end of 2018.

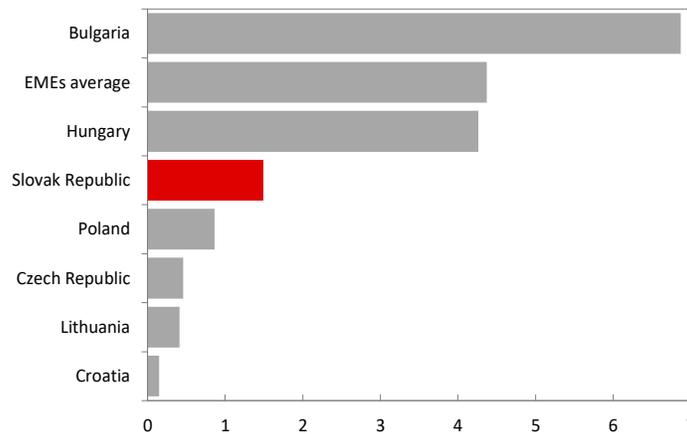
Figure 22. EU Funds Absorption Rates by Operational Program, 2018
(Percent of the annual budget spent)



⁹ See Presbitero 2016 and Berg et al. 2013.

12. The role of public-private partnerships (PPPs) in providing public infrastructure in Slovakia has been economically significant but limited mainly to a few large transportation projects. At the national level, there are currently three major active PPPs operating in the motorway and rail sectors, with fixed assets of approximately 3 percent of GDP (Figure 23).¹⁰ Smaller scale PPPs have been established at the sub-national level for services such as waste collection, public lighting and hospital services.

Figure 23. PPP Capital Stock in Different Countries, 2014
(Percent of GDP)



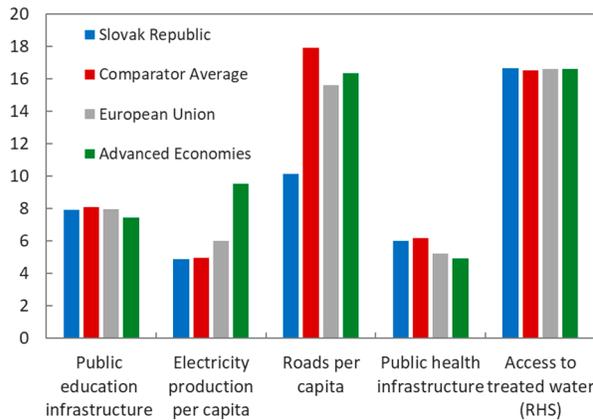
Source: World Bank PPI Database, Eurostat and IMF staff estimates. Slovakia based on 2016 estimates.

II. EFFICIENCY AND IMPACT OF PUBLIC INVESTMENT

13. The quality of Slovakia's infrastructure and citizens' access to services shows mixed results. It is slightly lower than the EU average and regional peers in most sectors, particularly roads. Access indicators relating to electricity production, health, education, and water are similar to the comparator countries' indicators, whilst indicators for roads perform less well (Figure 24). For example, the coverage of Slovakia's motorway network is one of the lowest in Europe (Figure 25).

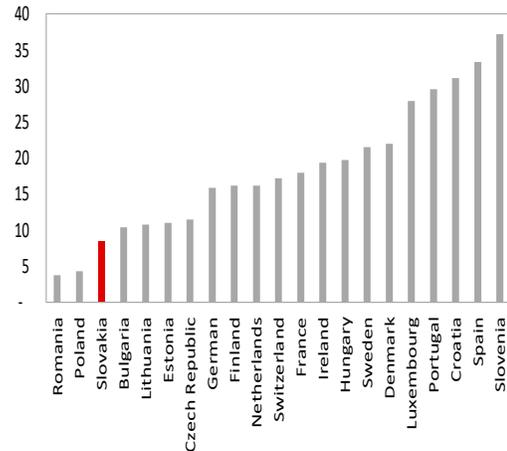
¹⁰ These are: (i) the R1 expressway; (ii) D4 motorway and R7 expressway, and (iii) the Žilina Intermodal Transport Terminal.

Figure 24. Measures of Infrastructure Access and Service Delivery, 2015



Source: World Bank World Development Indicators ^{1/}

Figure 25. Length of Motorway per capita (Km per 100,000 people)

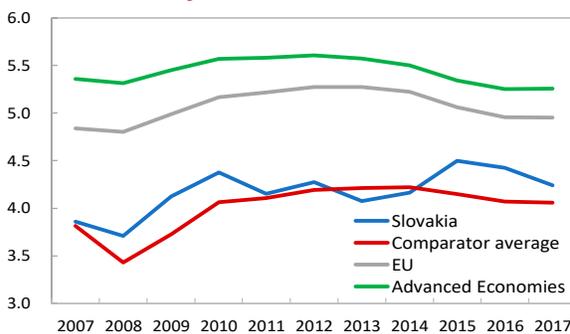


Source: Eurostat

1/ Left vertical axis of Figure 22: Public education infrastructure is measured as secondary teachers per 1,000 persons; electricity production per capita as thousands of KWh per person; total road network as kilometers per 1,000 persons; and public health infrastructure as hospital beds per 1,000 persons. Right vertical axis: Access to treated water is measured as the percent of population.

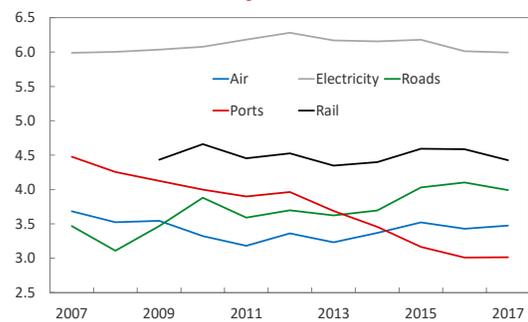
14. Perceptions of infrastructure quality in Slovakia are similar to regional comparators but significantly lower than the EU and advanced economy average (Figure 26). Against a generally stable or worsening trend for most categories of infrastructure, perceptions of air and road infrastructure have improved in recent years, partly reflecting the completion of several roads and motorway projects since 2013 (Figure 27). EU funding under the thematic area “bottlenecks in key network infrastructure” has contributed to transport infrastructure improvements such as the development of the Bratislava airport and the replacement of the rolling stock of trams and buses in Bratislava.

Figure 26. Perceptions of Infrastructure Quality (Slovakia and Peers)



Source: World Economic Forum

Figure 27. Perceptions of Infrastructure Quality (Slovakia)



15. To reach higher levels of infrastructure quality and support economic activity, several areas of inefficiency in the transport sector require addressing. In the roads sector the primary constraint concerns over-usage of the existing infrastructure network which is having an adverse impact on the quality of roads (Figure 28).¹¹ These problems have been compounded by low spending on maintenance (Figure 29). The use of the rail network for passenger and freight has been replaced by increased motor vehicle ownership and lorry usage over the past 20 years, yet the length of track is sizeable compared to other cohesion countries.¹² As a result, rail companies have to rely heavily on state subsidies and are unable to sufficiently reinvest in infrastructure.¹³ Figures 30 and 31 illustrate that Slovakia uses rail infrastructure comparatively less than most new member states and is not fully benefiting from neighboring freight corridors (TEN-T corridor) and connections with the River Danube.

Figure 28. Structural Main Road Condition
(Percent of network length)

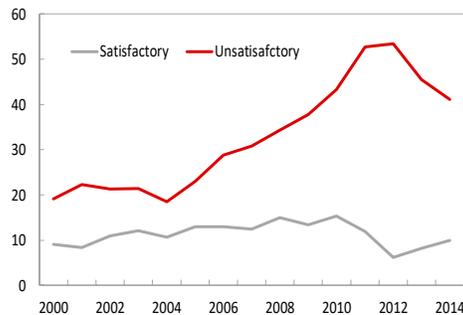


Figure 29. Road Maintenance Cost Comparisons (per square km. millions of Euro)

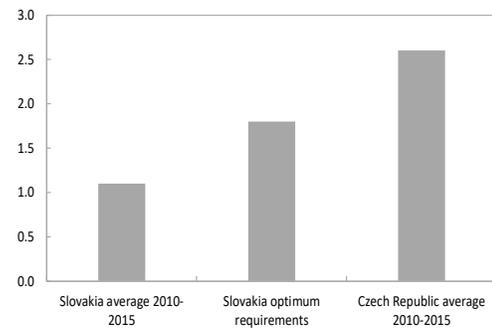


Figure 30. Railway Goods Transported
(Tons per km)

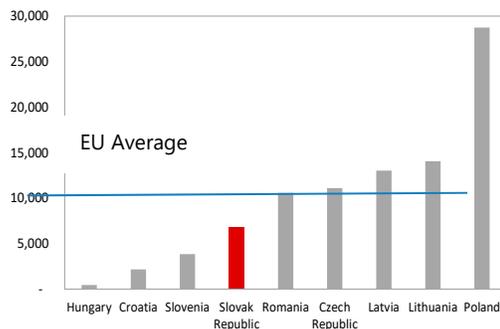
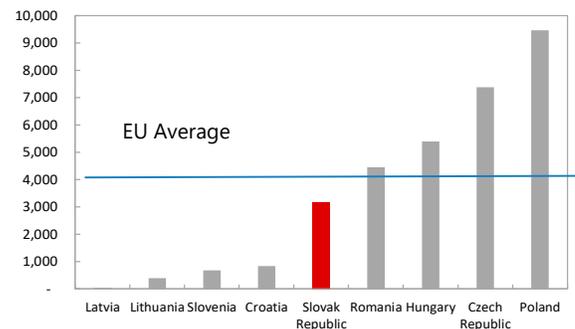


Figure 31. Railway Passengers Carried
(Passengers per KM)



Sources: Slovakia Transport Master Plan 2030, World Bank World Development Indicators and Ministry of Finance.

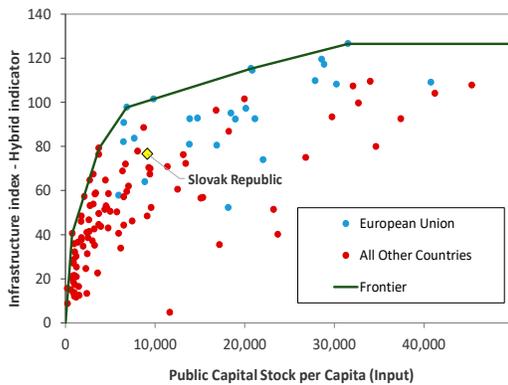
¹¹ Daily traffic volumes will be exceeded on the D1 motorway, especially the Bratislava urban zone and between Bratislava and Trnava. It is estimated that approximately 50 percent of first-class roads in the Trnava, Zilina, Trenčín and Banská Bystrica regions are heavily overloaded. See *Slovakia Strategic Transport Plan Phase II* (2015).

¹² The length of tracks was 3,600km in 2016, which places Slovakia in the mid-range of cohesion countries.

¹³ On average, between 2013 and 2015, railway subsidies accounted for Euro 500 million, roughly evenly split between the train (ZSR) and track (ZSSK) operators.

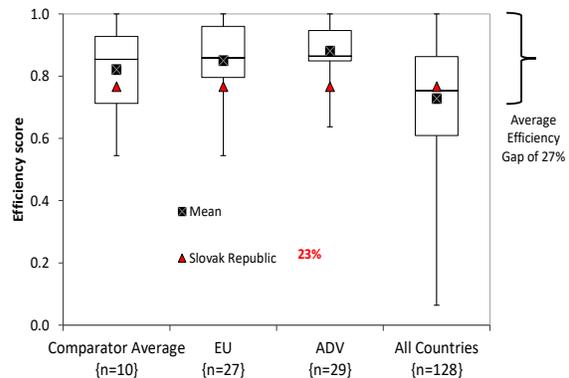
16. Slovakia's investment efficiency is broadly aligned with the global average but lower than in EU and other peer countries (Figure 32).¹⁴ The estimated size of the gap, approximately 23 percent, is largely due the lack of infrastructure investment in key areas such as transportation. It is higher than most EU countries (15 percent), advanced economies (12 percent) and the comparator average (18 percent) (Figure 33).

Figure 32. Efficiency Frontier



Source: IMF Staff estimates

Figure 33. Efficiency Gap



Source: IMF Staff Estimates

III. PUBLIC INVESTMENT MANAGEMENT INSTITUTIONS

A. The PIMA Framework and Context

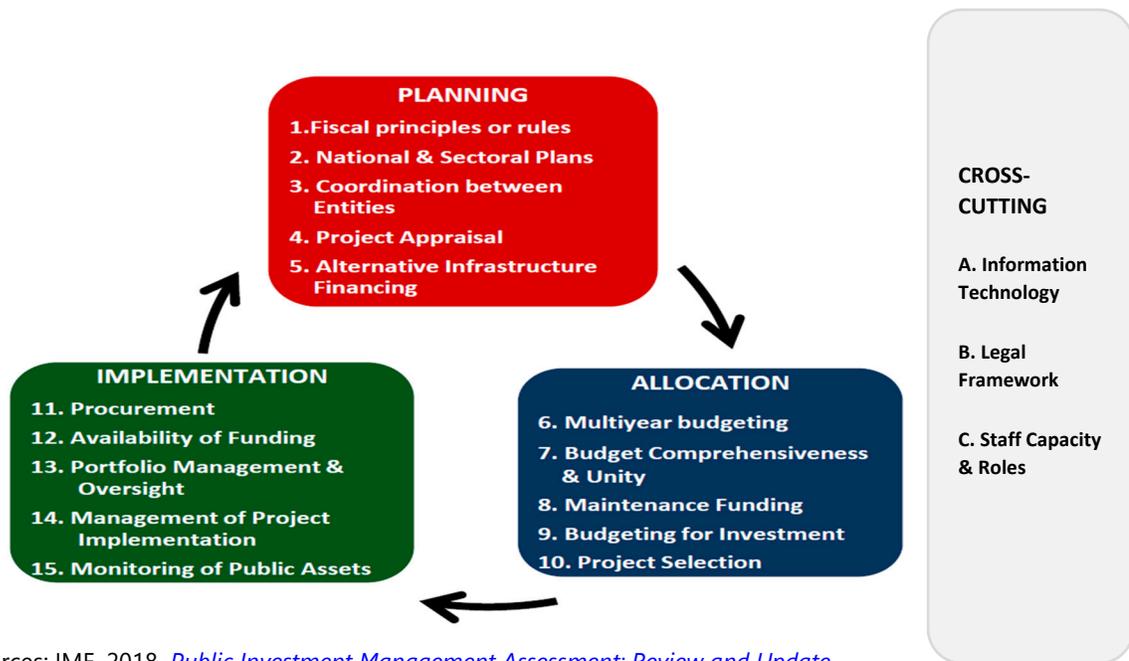
17. The IMF has developed the PIMA framework to assess the quality of the public investment management (PIM) of a country. It identifies the strengths and weaknesses of institutions and presents practical recommendations to strengthen these institutions and increase the efficiency of public investment.

18. The tool evaluates 15 sets of practices and procedures (called "institutions") that contribute to the three major stages of the public investment cycle (Figure 34):

- Planning of investment levels and projects for all public-sector entities to meet the government's objectives and ensure sustainable levels of public investment;
- Allocation of resources to appropriate sectors and projects; and
- Delivery of productive and durable public assets.

¹⁴ The methodology for these calculations is set out in IMF, 2015, *Making Public Investment More Efficient*. <https://www.imf.org/external/np/pp/eng/2015/061115.pdf>. In brief, taking the measures of infrastructure output—infrastructure access and quality—and mapping them against the public capital stock shows an investment efficiency frontier. Where a country is situated relative to the frontier provides a measure of its efficiency in converting infrastructure spending into infrastructure outcomes. The vertical distance between the country's position and the frontier represents the efficiency gap. Slovakia's estimated output efficiency gap of 23 percent is higher than in most EU countries, advanced economies and regional peers.

Figure 34. The PIMA Framework



Sources: IMF, 2018, [Public Investment Management Assessment: Review and Update](#).

19. For each of these 15 institutions, three dimensions are analyzed and scored, according to a scale that determines whether the criterion is met in full, in part, or not met. Each dimension is scored on two aspects: institutional design and effectiveness:

- *Institutional design* assesses whether appropriate laws, organizations, policies, rules and procedures are in place. The average score of the institutional design of three dimensions provides the score for the institution, which may be high, medium, or low.
- *Effectiveness* assesses the degree to which the intended purpose is being achieved in practice, or there is a clear impact. The average score of the effectiveness of three dimensions provides the effectiveness score for the institution, which may be high, medium, or low.

20. This PIMA is being undertaken against the backdrop of a modern PFM system that implements many recommended practices. The Acts on Budget Rules and the Fiscal Responsibility Act, for example, provide a comprehensive legal framework for PFM in the general government, and stipulate clear and transparent fiscal rules to ensure fiscal discipline and sustainability. Medium-term budgeting and accrual accounting for the public sector have been established. Cash management is conducted through an effective treasury single account (TSA) arrangement, credible cash forecasts and coordinated cash and debt management. Many practices (e.g., on project appraisal and procurement) are underpinned by EU legislation. All of these practices are underpinned by deployment of digitalization across the PFM spectrum.

21. Further reforms to improve PFM are already underway, which would be expected to also strengthen PIM. The MoF has initiated actions to strengthen the efficiency of government expenditures through a series of spending reviews which started in 2016.¹⁵

B. Overall Assessment

22. Areas where PIM could be strengthened can be characterized by three themes:¹⁶ planning and managing public investment as an integrated portfolio, using standard criteria for project selection, and strengthening the transparency and accountability frameworks related to PIM institutions. Improvements could include streamlining strategic planning and preparing a pipeline of major projects, using standard criteria for project selection, introducing a central PIM coordination unit to execute some of these above-mentioned functions, strengthening SOE financial oversight functions in the MoF, and increasing central oversight of the capital investment project portfolio during project implementation. The recommendations set out in this report provide guidance on how these reforms might be designed.

C. Investment Planning

1. Fiscal principles or rules (Design—High; Effectiveness—High)

23. Legislation on fiscal principles and rules provides a sound framework for fiscal planning and sustainability. These laws include the constitutional Fiscal Responsibility Act (FRA) of 2011 together with budgetary rules for general government and subnational governments, as well as the rules of the European Union which also apply to general government (Table 3).^{17, 18} The national rules shown in this table are defined in cash terms whereas EU rules are defined in accrual terms. Fiscal transparency principles and rules set out in the FRA are equally important.¹⁹ Slovakia's Council for Budgetary Responsibility (CBR) was established to validate the government's macro-fiscal forecasts, promote transparency, and provide oversight of fiscal policy. The Council has noted certain potential inconsistencies between the fiscal rules set in domestic legislation and the EU rules, since they are based on different objectives and targets. A provision in the FRA to measure Slovakia's net worth will require better estimates of the capital

¹⁵ The first round of expenditure review focused on healthcare, transport and informatization, covering about 8.6 percent of GDP. The 2017 spending reviews on education, environment, labor market policies and social policies reviewed expenditures covered 7.3 percent of GDP. In 2018, further reviews will be carried out of agriculture, the inclusion of marginalized groups, and employment and remuneration in the general government. The final reports will be prepared by March 2019.

¹⁶ The assessment is done mainly on the basis of average scores for EU funded and budget funded projects.

¹⁷ Constitutional Act No. 493/2011 on Fiscal Responsibility.

¹⁸ Budget Rules Act of 2004.

¹⁹ These include requirements for the government to publish three-year spending projections on a program classification (MTBF), detailed information on budget execution for the past two years, a consolidated balance sheet for general government, contingent liabilities, tax expenditures, and the fiscal performance of SOEs.

stock and depreciation of fixed assets for all entities belonging to the public sector, including state enterprises where comprehensive data are lacking (see Institution 5).

Table 3. Summary of the Main Rules Guiding Fiscal Policy in Slovakia

National Rules	EU Rules
<p><i>Constitutional Fiscal Responsibility Act, 2011</i></p> <ul style="list-style-type: none"> • Debt brake (60% of GDP until 2017, then reducing by 1 percentage point a year to 50%) • Expenditure ceilings (not specified) • Rules for municipalities and HTUs • Transparency rules • Covers general government 	<p><i>Stability and Growth Pact</i></p> <ul style="list-style-type: none"> • Deficit < 3% of GDP, debt < 60% of GDP • Excessive deficit procedure • Medium-term objective, MTO, consolidation by 0.5% of GDP annually • Debt reduction above 60% of GDP by 1/20th annually • Expenditure benchmark • Semi-automatic sanctions
<p><i>Budgetary Rules Act, 2004</i></p> <ul style="list-style-type: none"> • Local government debt < 60% of actual revenues in the previous year • Local government debt service < 25% of actual revenues in the previous year 	<p><i>2-Pack</i></p> <ul style="list-style-type: none"> • European Commission evaluation of draft budget • Enhanced surveillance for countries in difficulty
<p><i>State Budget Act (annual)</i></p> <ul style="list-style-type: none"> • Sets revenues, expenditures, maximum deficit • Expenditures may overrun by maximum 1.0% subject to no increase in the deficit • Adopted always for one year 	<p><i>Directive 2011/85/EU (part of 6-pack)—</i> Requirements for Medium-Term budgetary frameworks:</p> <ul style="list-style-type: none"> • Accounting, statistics, audit • Independent fiscal council – macro forecasts, sensitivity analysis • Numerical rules • Medium-term fiscal framework • Transparency

Source. Based on Council for Budget Responsibility. June 2013. *Report on Compliance with the Fiscal Responsibility and Budget Transparency Rules for the Year 2012.*

24. The objective of the FRA is to ensure that general government fiscal management provides a sustainable level of public debt in both the short term and the medium term.

Various numerically expressed indicators are used to identify fiscal policy deviations and a set of automatic sanctions and correction mechanisms to reduce excessive debt levels. Under the debt brake rule, the upper limit of general government debt is set at 60 percent of GDP and is linked to three numerical sanction brackets. Automatic sanctions are activated as soon as debt reaches a level of GDP 10 percentage points below the upper limit (i.e., 50 percent).²⁰ During the period from 2018 to 2027 these sanction brackets will be reduced by one percentage point a year until the upper limit reaches 50 percent of GDP in 2027. A proposal to exclude all public investment from the debt brake rule was endorsed by the Council of Ministers in 2017 but has not been implemented and is strongly opposed by the CBR.

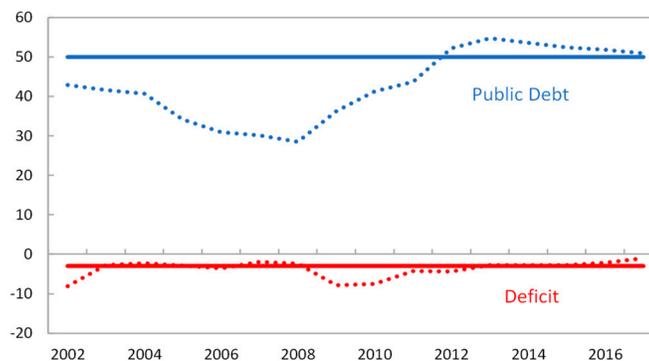
²⁰ The lowest sanction bracket consists requires the finance minister to submit a justification letter which includes proposed debt-reduction measures, while the two upper sanction brackets require a balanced budget and a parliamentary vote of confidence in the government respectively.

25. An escape clause in the FRA allows sanctions to be modified in defined circumstances such as post-election periods, sudden and extreme recessions, natural disasters, or major banking failures. Provisions for municipalities and higher territorial units (HTUs) make these entities financially independent of the government and subjects them to broadly similar debt limits and sanctions. For example, local governments are forbidden to take loans if their debt exceeds 60 percent of actual revenues in the previous year, or annual debt service is greater than 25 percent of these revenues.

26. The FRA contains a provision for the government to impose ceilings on public expenditure but does not specify the methodology by which such an expenditure rule would be implemented. Imposition of an expenditure rule would require new legislation, which is currently being considered by the government. The FRA states that the expenditure ceiling should be tied to the long-term debt sustainability indicator, which estimates the amount of fiscal adjustment that is needed over the medium term to achieve long-term debt sustainability.²¹ The idea of an expenditure rule as an operational tool for managing public finances, to complement the debt brake rule, has been endorsed by the CBR.

27. The fiscal rules outlined above have been consistently applied in the management of the deficit and public debt. In 2012, debt rose to 52.1 percent of GDP thus triggering the debt brake procedure to bring the debt level down to 50 percent of GDP. The European Commission has continued to press the authorities, under the EU fiscal rules, to take fiscal consolidation measures to bring the deficit towards structural balance (the medium-term objective, MTO). In 2017, for example, the authorities took additional expenditure-reducing measures (Figure 35).

Figure 35. Adherence to Fiscal Rules, 2002–18 (percent)



Source. Ministry of Finance.

²¹ The current estimate of the long-term sustainability indicator is 1.1 percent of GDP.

2. National and sectoral plans (Strength - Medium; Effectiveness - Low)

28. A national strategic framework for public investment in Slovakia is largely missing.

Slovakia does not have an overarching national plan setting the goals and strategies to guide investment allocations. Due to the lack of a national plan, there is no structured discussion on the prioritization of investment projects within or between sectors. There are many sectoral strategies, with varying quality due to a lack of common methodology to produce them.²² The process of selecting specific infrastructure programs and projects is not always based on demonstrating their contribution to meeting the objectives pursued in the strategies or on defined economic and social criteria (see Institution 10).

29. Most Slovak public investment strategies do not systematically include a financial dimension, measurable targets for outputs or an adequate monitoring framework.

In cases where sector strategies have included measurable targets for outputs, progress has not always been monitored regularly. For example, the recent Slovak *Strategic Transport Development Plan* and the *Environmental Strategy* do not include any financial framework, or a cost benefit analysis (CBA) of selected priority measures.²³ These two strategies identify high-level strategic objectives and measures to be undertaken till 2030 but lack a monitoring matrix which would enable monitoring their implementation. There is currently no comprehensive list of public investment projects financed from domestic or other sources (see Institution 7).

30. The strategic planning process is robust for programs and projects financed under ESIF, which represent around two-thirds of capital spending in Slovakia, and follows a seven-year programming cycle.

The main strategic document guiding the implementation of these funds²⁴ during the current 2014-2020 programming cycle is the Partnership Agreement negotiated between the European Commission and the Slovak authorities.²⁵ The actions for the priority thematic areas identified in the Partnership Agreement are implemented through seven OPs. The overall amount allocated from ESIF for the period 2014–20 is EUR 15.3 billion, with an additional national contribution of EUR 4.7 billion. The ESI funds represent around two-thirds of total investment spending (see Figure 15). The respective indicative allocations by ESIF and by year are specified in the Partnership Agreement. The individual OPs then identify the financial envelope attributed to each of their investment priority areas (priority axes) and, where relevant, the major measures to be funded. The OPs also include a detailed performance monitoring

²² According to the Deputy Prime Minister's Office, central government ministries have currently 232 ongoing strategies, 38 unused strategies and 68 strategies under preparation.

²³ *Strategic Transport Development Plan of the Slovak Republic up to 2030 – Phase II*, December 2016. *Zelenšie Slovensko, Stratégia environmentálnej politiky Slovenskej republiky do roku 2030*, December 2018.

²⁴ The European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Maritime and Fisheries Fund, the European Agricultural Fund for Rural Development.

²⁵ *Partnership Agreement of the Slovak Republic for the Years 2014 – 2020*, adopted by the European Commission on 20 June 2014.

framework, with defined specific objectives for each priority axis, expected outcomes, and indicators with baselines, targets and monitoring frequency.

31. The Slovak authorities are aware of the weaknesses in their national strategic planning and have started undertaking steps to remedy the situation. In 2016, the Office of the Deputy Prime Minister for Investments and IT was created to ensure a uniform national policy for investments, utilization of ESIF and implementation of IT projects. Since 2017, the government has published several strategic documents prepared by this Office: a Roadmap for a National Infrastructure Plan covering the period 2018–30; a common methodology for preparing public strategies and for performing CBA; as well as a pilot version of the National Investment Plan (NIP) for 2018–30.²⁶ The NIP identifies priority sectors for capital investment, strategic objectives to be achieved, measures to realize the objectives, overall estimates of needed funds, and examples of individual projects with some cost information.

3. Coordination between entities (Strength - Medium; Effectiveness—Medium)

32. Subnational governments (SNGs) have a large fiscal autonomy and do not coordinate the preparation of their investment plans with the central government. Public investment of the SNGs (8 HTUs and around 2,890 municipalities) represents about 23 percent of the Slovak public investment (see Figures 10 and 11). SNG investments are in general financed through three sources: the SNGs' own resources (around 50 percent), EU funds (35 percent) and subsidies from the state budget (15 percent).²⁷ The Slovak Constitution guarantees the SNGs large autonomy for managing their assets and resources. SNGs prepare, adopt and execute their investment plans without a formal coordination with the central government.

33. A summary overview of SNG's large public works with planned source of funding is available. The Ministry of Transport and Construction has a legal obligation to present to the government a "*Development Program of Public Works Priorities*" for a three-year period.²⁸ This document lists large public works projects (i.e. those with planned costs of over EUR 1.3 million), prepared and submitted by the state budget institutions and SNGs. The Development Program provides an overview of the technical preparation of the public works (dates of zoning decision, building permit, project documentation), of their planned start date, end date, planned costs, and foreseen source of funding. It is however not a plan for the realization of the public works, nor it entails any right for the public funding. The current development program for 2019–21 includes in total 84 projects with a total value of EUR 5.15 billion, out of which seven projects of SNGs.²⁹

²⁶ *Národný investičný plán SR na roky 2018 – 2030 pilotná verzia*, UV 412/2018.

²⁷ Based on approximate data provided by the Ministry of Finance. Aggregated figures by funding source are, however, not consolidated and reported by the Ministry.

²⁸ Act no. 254/1998 Coll. on Public works, as amended. See <https://www.mindop.sk/ministerstvo-1/vystavba-5/verejne-prace/dokumenty-a-materialy/rozvojovy-program-priorit-verejnych-prac>

²⁹ Out of the 84, in total 62 projects are planned to be co-financed by ESI funds through OPs IROP, OP Environment and OPII. The amount of the EU co-financing is not specified in the document.

34. Coordination between central authorities and SNGs is stronger in the context of EU-funded programs and projects. In Slovakia, the EU funds (ESIF OPs) are largely managed by line ministries. The SNGs have been involved in the preparation of the OPs, in particular concerning the objectives of the OPs (types of funded projects). The SNGs are also large beneficiaries of the OPs. The “Integrated Regional OP” (IROP) is dedicated almost entirely to capital investment projects of SNGs, with an allocated EU funding of EUR 1.75 billion for the period 2014–20. In the context of the IROP, the 8 higher territorial units and 7 major cities act also as intermediary implementing bodies, carrying out certain responsibilities delegated to them by the managing authority (the Ministry of Agriculture). These responsibilities include the organization of calls as well as evaluation of applications. Individual funding applications are submitted by SNGs, based on their needs and priorities, without a central coordination.

35. A transparent system for financing SNGs exists, but capital transfers for specific projects are not fully predictable. The main income of SNGs’ budgets is a proportion of personal income tax (PIT) collected in respect of their territory: 70 percent of the PIT is allocated to the relevant municipality and 30 percent to the higher territorial unit.³⁰ Ministry of Finance publishes three-year tax forecasts, which are updated every three months.³¹ In addition, the state budget institutions can also, within context of programs defined by law, make transfers to SNGs for specific capital projects. These specific transfers, which represent only a minor part of SNGs capital spending, are not fully predictable, as depend on an evaluation of financing proposals submitted by the SNGs.

36. Contingent liabilities arising from major public investment projects are presented in government budget documents as an annex, regardless of who is responsible for the projects. By law, the central government does not guarantee liabilities incurred by SNGs.³² Every year, the central government approves a general government budget covering a period of three years.³³ It contains the state budget and a summary of budgets of general government institutions. Annexes to the budget include general government contingent liabilities (including contingent liabilities of SNGs and SOEs) and “implicit liabilities” (“Implicitné záväzky”— Annex 5 of the GG budget).³⁴ The projected “availability-based” payments for PPPs (discounted expected

³⁰ Act no. 564/2004 Coll. on Budget allocation of the income tax to SNGs, as amended.

³¹ See <https://www.finance.gov.sk/sk/financie/institut-financnej-politiky/ekonomicke-prognozy/danove-prognozy/danove-prognozy.html>

³² Constitutional Act no. 493/2011 Coll. on Budget responsibility stipulates in the Article 6 that the State does not financially ensure nor is responsible for the solvency of SNGs.

³³ Available under <https://www.finance.gov.sk/sk/financie/verejne-financie/rozpocet-verejnej-spravy/> Implicit obligations are under Constitutional Law no. 493/2011 Coll. on Budgetary Responsibility defined as “the difference between the expected future expenditures of public administration entities and the expected future revenues of public administration entities resulting from the financial consequences caused by the future exercise of the rights and obligations laid down by the legislation of the Slovak Republic, unless these are part of the government debt.” These are the net aging commitments in the social, health and education sectors, and other types of commitments, such as PPP commitments and the decommissioning costs.

³⁴ Required by Constitutional Act no. 493/2011 Coll. on Budget responsibility, Article 9.4.

payments for the remaining duration of the concessions) are reported as “implicit liabilities” and are expressed as a percentage of GDP. In 2018, the implicit liabilities connected to PPPs were estimated at 3.3 percent of GDP.

4. Project Appraisal (Strength—Medium; Effectiveness— Medium)

37. Projects financed by EU funding are subject to comprehensive technical, economic and financial analysis determined by EU rules and procedures, and there is central support for project appraisal. For the 2007–13 programming period the EC published a guideline for cost-benefit analysis (CBA) which provides a common framework for project appraisal. This was subsequently updated for the programming period 2014–20. The EC requires the use of CBA for all major infrastructure projects above EUR 50 million, regardless of the beneficiary. In Slovakia, all projects under the OPs follow the EU rules and conduct the required CBA. Around 80 percent of all major projects is funded by the EU, of which more than two-thirds are implemented by the Ministry of Transport (MoT). Standardized CBA is applied for all major projects conducted by the MoT. The state expertise involvement in the appraisal project is also mandatory.³⁵ Since 2017, the results of the appraisals are published on the website of the MoT.

38. Projects financed by budget resources have also been subject to CBA since 2017. CBAs are mandated for major projects above EUR 40 million and for IT projects above EUR 10 million. Central support for state budget-funded major projects is rendered by the MoF’s Value-for-Money Division, which validates the calculations set out in the CBA before any project is eligible to enter the procurement stage. The Value-for-Money Division was created to assist Ministries which do not have the ability to do the CBA and to control the quality of CBA’s for projects. Even though the MoF’s opinion on the CBA of these major projects is not binding, it has a strong influence on the decisions taken by government. Some municipalities (e.g., Bratislava) also conduct feasibility studies after completion of the final design of major projects, and in some cases use the CBA methodology applied by MoT.

39. Further work should be done by budget institutions and the MoF to improve the methodology and application of CBA, including the quantification of costs and benefits. For example, feasibility studies prepared by the MoT do not use consistent and reliable traffic data and traffic forecasts, which could be consolidated in a central database. The MoT and MoF have commenced a project to harmonize the assumptions and methodologies used in conducting feasibility studies and value-for-money analysis of investment projects in the roads and railways subsectors. More resources need to be provided for technical analysis (e.g., geotechnical investigations by the Slovak Railway Company) that should be factored into feasibility studies.

40. Many budget institutions that regularly undertake infrastructure projects have a good capacity for managing the appraisal of major projects. Risk assessments are included in

³⁵ Act 254 Of 1998 mandates the involvement of the state expertise in the appraisal process.

the project appraisals carried out by entities such as the MoT, the Slovak Railway Company, the National Highway Company (NHC) and some municipalities, but these assessments are generally qualitative and lack any analysis of the cost implications and strategies to mitigate risk.

5. Alternative infrastructure provision (Design—Medium; Effectiveness—Medium)

41. Slovakia’s regulatory framework is based on EU rules and encourages competition in economic infrastructure markets. Policy and legislation in these sectors closely follow the principles, practices and guidelines laid down by the European Commission in various directives, regulations and guidelines. There are three regulatory bodies covering, respectively, electronic communications and postal services; energy, water and sewerage; and transportation. All three bodies have been established since the early 2000s and are operationally and financially independent of the government. Competition is being actively encouraged. In electronic communications: for example, there are some 1,200 companies and four mobile operators. In postal services, the 100 percent state-owned Slovak Posts provides a universal service and 27 private companies, with unlimited market access, also operate in specific segments of the market. A new Electronic Communications Code was introduced by the Commission in 2018 and will require massive investment in new business processes and fiber optics systems, thus creating challenges in further liberalizing the market. Slovakia’s overall performance in connectivity remains below the EU average.³⁶

42. The energy and transport markets are also being liberalized in accordance with EU rules. The structure of the electricity sector was divided into separate generation, transmission and distribution companies in the early 2000s. A new EU directive and regulation on the sector was provisionally approved in December 2018. The legislation is designed to further strengthen competition and give consumers greater access to tools such as price comparisons and smart meters. EU transport policy aims to ensure the free movement of people and goods through the EU by means of integrated networks using all modes of transport (road, rail, water and air).

43. The regulatory framework for energy still has deficiencies.³⁷ Electricity and gas prices for households, small businesses and customers under the “supplier of last resort” regime are regulated, including the commodity component, although it does not constitute a natural monopoly that needs regulating. All household consumers and SMEs are considered as vulnerable consumers and therefore are supplied electricity and gas at regulated prices, which hampers market development. Alternatively, better-targeted measures for protecting vulnerable

³⁶ Fixed broadband coverage and take-up did not progress significantly, while mobile broadband, 4G and “next generation access” broadband network coverage increased by 4 and 11 percentage points respectively compared to 2016. See European Commission. July 2018. *Country Report for Slovakia, 2018*.

³⁷ Also cited in European Commission. July 2018. *Country Report for Slovakia, 2018*.

customers and less well-off households could be achieved through social policy means rather than energy policy measures.

44. While there is no dedicated PPP law, the government has published a PPP strategy, and a methodology³⁸ for preparing, selecting and managing projects. All PPPs approved so far have been user-funded projects (concessions). Following a financially unsuccessful and unpopular first PPP project (the R1 motorway, which has been operating since 2010), the government has adopted a cautious approach to proposing new PPPs, favoring instead EU-financed projects. One new project is in the construction phase (the D4/R7 motorway), one has received financial approval (the Žilina intermodal transport terminal), and one is in the pipeline (the Rimavská Sobota prison). Capital expenditure on the two motorway projects is estimated at about EUR 2.2 billion (2.6 percent of GDP); the other two projects are much smaller. No ex post evaluations of PPP projects have been carried out.³⁹

45. The MoF plays a limited role in the preparation and approval of PPP projects. PPPs above EUR 5 million formally require Government approval prior to contract award and must also include an MoF opinion on the budget implications, but the strength of this requirement has not yet been tested and does not amount to a full evaluation by the MoF of the project's value-for-money. Information on the *implicit liabilities* ("Implicitné záväzky" Annex 5 of the GG budget) of approved PPP projects is published as an annex in the budget. Monitoring of PPP projects post-implementation could be improved. Currently, the MoF receives no reports from the procuring authority on the performance of projects after they have been implemented, and there is no regular monitoring by the Budget Department or the MoF's PPP Unit of their financing or implicit fiscal risks.

46. State-owned enterprises (SOEs) are major investors in infrastructure but are subject to little central oversight of their operational or financial performance.⁴⁰ Ninety-two SOEs are recorded in central government and several hundred in local governments. Capital expenditure by SOEs represents more than half of total public investment (Figure 9), and their fixed assets account for around 30 percent of GDP (Table 4). Some of the largest SOEs companies (highways, rail tracks) have been classified as entities of general government since 2014, others are part of the wider public sector but are wholly or partly owned by the government (electricity generation, ports). All SOEs are required to produce annual financial statements and are subject to external audit, but only 13 of 92 central government SOEs follow IFRS reporting standards. A

³⁸ This methodology covers the scope and content of PPP projects, selection criteria, management of risks, feasibility studies and public-sector comparators, and the management of project preparation and implementation.

³⁹ The State Audit Office informed the mission that, surprisingly, no value-for-money assessment has been made of the R1 PPP project "because of insufficient data" even though the highway has been operating for more than ten years.

⁴⁰ The data presented below are based on responses to an *OECD Questionnaire on the Disclosure and Transparency of Individual SOEs*, 2019.

provision in the FRA requires the government to publish information on the fiscal risks associated with SOEs, but this has not been carried out.

Table 4. Slovakia: Fixed Assets of the Largest SOEs (Euro million)

Classification	Company Name	2015	2016	2017
General Government	National Highway Company	7,573	8,136	8,522
Public Sector	Slovakia Electricity Generation	7,174	7,575	7,906
General Government	Slovak Railways	3,292	3,281	3,355
Public Sector	Slovak Water Management	1,367	1,368	1,369
Public Sector	Dam Construction	1,181	1,158	1,150
General Government	Slovak Railway Company	968	925	897
Public Sector	Slovak Electricity Transmission	797	820	819
Public Sector	Public Ports	591	589	589
Total (Percent of GDP)		22,942 (29)	23,853 (30)	24,607 (29)

Source. Ministry of Finance.

47. While the SOE sector in Slovakia has not created serious financial problems in recent years, potential fiscal risks are significant, and many risks, including those related to investment, are not disclosed, contrary to a provision in the FRA. Oversight by the MoF is very light even where—as in the case of the electricity grid—the MoF is the parent ministry and exercises ownership rights.⁴¹ Unlike many other countries— examples include Chile, France, New Zealand, South Africa, Sweden, Finland, and Brazil^{42, 43}—financial oversight function is weak in the MoF. There is a newly established unit in the MoF to gather data, but financial oversight of the companies needs to be expanded and improved. The enterprises are not required to report on their profits, liquidity, return on equity, dividends, quasi-fiscal activities, or other key financial indicators; their budgets or strategic plans are not submitted to the MoF for approval; and no consolidated report is produced on the financial performance of the SOE sector. No operational review has been carried out on the SOE investment framework. There are gaps in managing

⁴¹ An example is the electricity transmission company (SEPS). The MoF is represented on the board of SEPS, but it is the regulatory body for electricity which sets SEPS a target rate of return on total assets of 6 percent. The mission was informed by SEPS that the MoF play no active role in overseeing the company or monitoring its financial performance and does not offer substantive comments in its main planning document, the 10-year Network Development Plan.

⁴² In most of these countries, the SOE Unit is located in the finance ministry, but in Finland it is located in the Prime Minister's Office and in Brazil in the Ministry of Planning. The number of employees in these units typically ranges from 10-40. Their functions vary from country to country but typically include monitoring the financial position of SOEs, reviewing their budgets and financial plans, regulating major transactions, advising on SOE funding, assessing applications for guarantees and borrowing limits and monitoring the government's exposure to fiscal risks, monitoring implementation of SOEs' capital investments and borrowing programs, and reviewing board appointments and remuneration.

⁴³ The SOE Unit in the South African National Treasury has about 40 staff and is responsible for monitoring the financial position of all SOEs, reviewing their budgets and financial plans, regulating major transactions, advising on SOE funding, assessing applications for guarantees and borrowing limits and monitoring exposure the government's exposure to guarantees, monitoring implementation of SOEs' capital investments and borrowing programs, and reviewing board appointments and remuneration.

project appraisal in some SOEs (Institution 4). Investments of and capital transfers to the SOEs that belong to the general government are reported in the budget, but no consolidated data on SOEs' financial performance are published.

Recommendations

Issue: The many sectoral and regional investment plans in Slovakia have varying coverage and structure, time periods, and information on projects (including costs), and are poorly coordinated. The DPMO has already undertaken steps to improve the strategic planning framework and by developing a common methodology and a pilot national investment plan (NIP).

Recommendation 1: MoF and DPMO to finalize the strategic investment planning framework and translate it into a project pipeline. The DPMO should ensure that the NIP does not become an unrealistic "wish list" of projects and work with the MoF to transform the plan and its goals and objectives into a national infrastructure pipeline (See Recommendation 5).

Issue: SOEs are responsible for nearly half of public investment, but the MoF exercises very little oversight of their investments, operations and financial performance, which heightens fiscal risks.

Recommendation 2: The MoF should expand and strengthen the newly established SOE unit's financial oversight functions. In relation to investment, the functions of this unit could include reviewing the annual budgets, investment plans and financial plans of major SOEs; undertaking an operational review of SOEs' investment framework; and analyzing capacity constraints of the companies in managing project management and execution, and in carrying out investment appraisal. The unit could also have wider oversight responsibilities as noted under Institution 5.

D. Investment Allocation

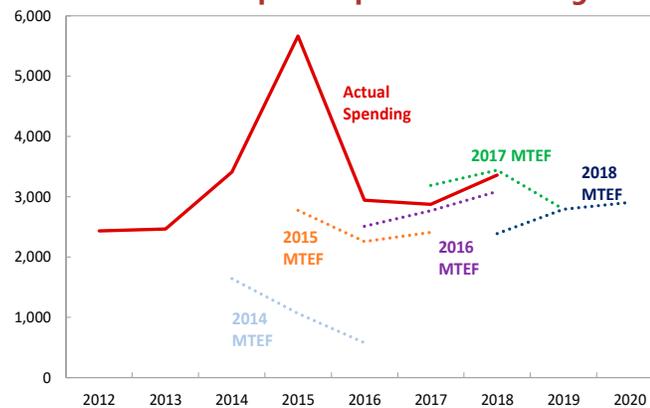
6. Multi-year budgeting (Strength—Medium; Effectiveness— Medium)

48. Projections of total capital spending for the general government are published by budgetary entity and program over a three-year period. These projections distinguish between spending on capital projects and recurrent spending. The numbers for the first year, which are appropriated in the Annual Budget Act are based on generally realistic assumptions, but there are many amendments and virements during the year which create substantial differences between the approved budget and the outturns (see Indicator 8). The projections of EU-financed investment in this first year are broad-based estimates which may change substantially during the year as information on specific projects firms up, and the availability of resources for co-financing is confirmed (see Indicator 9). Estimates of spending in years 2 and 3 of the MTBF are even more unreliable (Figure 36).

49. In principle, the MTBF contains ceilings on the spending, capital and recurrent, of all general budgetary entities, but these ceilings have no binding force, either legally or

politically. The CBR has noted that these ceilings should be taken “mostly indicatively.”⁴⁴ As a result, the ceilings are not binding and have been changed substantially in recent years (Figure 36), both in the first year (as noted above) and in subsequent years, both for recurrent and capital spending (see also Institution 8). The FRA provides for the government to establish a rule that will cap public expenditure, but this rule has not yet been defined or implemented by law (see Institution 1).

Figure 36. Medium-Term Capital Expenditure: Ceilings and Outturns



Source: MoF. Capital expenditure includes capital transfers.

50. The ITMS database produces detailed information on EU-financed projects, summaries of which are published. An investment register does exist for state-funded projects as part of the budget reporting system, but project level information is not publicly available (see Institution 7).

7. Budget comprehensiveness and unity (Strength—Medium; Effectiveness—Medium)

51. In Slovakia, the organization of government is highly fragmented, which makes a unified approach to budgeting challenging.⁴⁵ Significant capital spending is undertaken by SOEs that belong to the general government sector and other extra-budgetary entities (EBEs), though this spending is not authorized by the parliament or disclosed in the budget documentation. Extra-budgetary entities comprise both state enterprises that are part of general government and other entities. In the approved budget for 2019, capital spending by EBEs accounted for 48 percent of total spending and 36 percent of capital spending. The social security and health insurance funds, however, carry out very little capital spending (Table 5).

⁴⁴ Council for Budget Responsibility. June 2013. *Report on Compliance with the Fiscal Responsibility Transparency Rules for the Year 2012*.

⁴⁵ According to the MoF, the total number of general government entities is 7,666, of which 862 belong to the central government, 850 to regions (HTUs), 5,471 to municipalities, and 483 to other entities.

Table 5. Slovakia: Expenditure by Extra-Budgetary Entities, Budget 2019
(Euro million)

Expenditure category	Expenditure (% of total)	Capital investment and transfers (% of total)
Social security and health insurance funds	13,310 (35.8%)	19 (0.8%)
Other EBEs	4,628 (12.4%)	902 (35.9%)
Total EBEs	17,969 (48.3%)	921 (36.6%)
Total expenditure	37,228 (100.0%)	2,516 (100.0%)

Source: Ministry of Finance.

52. Very limited project-level information is presented in the annual budget documents. The annual budget law authorizes expenditure by main policy area and program. With few exceptions, capital projects, even major ones are not separately authorized. The information on program budgets submitted by the spending entities contain extensive information on activities planned for the next year, but little data are published on budgeted total project costs and the corresponding expenditures to date, or of actual implementation rates against the plans.

53. Capital and recurrent budgets are prepared and presented together in the budget documents, using a program classification. The Budgetary Rules Act sets out rules for the operational management of the budget.⁴⁶ Budgets are fully integrated at the level of the budget entities and their subordinate agencies. The policy areas in the budget incorporate all relevant recurrent and capital expenditures which are integrated at the program level using a single chart of accounts for budgeting and reporting.

8. Budgeting for Investment (Strength – Medium; Effectiveness – Low)

54. Spending on capital projects is authorized by the parliament on an annual basis, and little information is included in the budget documents on total project costs. Capital spending is authorized through the Annual Budget Law. Estimates of the spending on EU-financed projects are approximate and may be changed during the year as projects are approved or revisions to their costs are made. The budget documents contain little information on either the budgeted total cost of individual capital projects or their expected phasing by year (see also Institution 7).

55. Budget execution procedures are quite loose by international standards and give the MoF considerable freedom to make in-year budget reallocations. Rules for transferring budgetary allocations during the execution of the budget (virement) are defined in the Budget Rules Act, Articles 15–18. These rules give considerable discretion to the Budget Department of

⁴⁶ These rules include deadlines for the submission of budget proposals, the classification of expenditures and revenues, provisions on the evaluation of capital investment projects, and requirements for all budgetary entities to prepare annual financial statements.

the MoF in making transfers and are driven by the legal limit on the cash deficit (see Institution 1). There are no legal limits on the amount of transfers to be made or to prevent funds being transferred from capital to recurrent spending. The difference between budgeted allocations and outturns for capital spending in the first year can be as great as 100 percent (Table 6). The five-year mean deviation was 3 percent for recurrent spending, 40 percent for capital spending.

Table 6. Slovakia: Deviations Between the Approved Budget and Actual Spending, 2013–18
(Euro million)

		Budget	Actual	Deviation (Percent)
2013	Current	24,339	25,146	3
	Capital	1,867	2,585	38
2014	Current	25,030	26,227	5
	Capital	1,645	2,573	56
2015	Current	26,311	28,803	9
	Capital	2,776	5,668	104
2016	Current	28,477	29,390	3
	Capital	2,510	2,943	17
2017	Current	30,215	29,895	(1)
	Capital	3,409	2,872	(16)
2018	Current	31,647	31,441	(1)
	Capital	2,392	3,360	40

Source: MoF. Current expenditure excludes interest payments; capital expenditure includes capital transfers.

56. Virements may take place within budgetary chapters, or between programs or ministries. No ex ante approval of virements is required from the parliament, though information on budget reallocations is published ex post on the MoF’s external website. For EU-financed projects, funds may only be used to finance capital spending. Supplementary budgets are not permitted by law. A provision in the FRA permits the government to increase the overall budget envelope by up to 1 percentage point, provided that the deficit ceiling is not breached (see Institution 1).

57. No formal mechanisms have been put in place that give specific priority in the budget to ongoing projects. In practice, however, extensive carryover provisions provide some measure of protection for such projects. These provisions (Article 8 of the Budget Rules Act) apply to both EU-financed and state-financed capital spending as well as certain categories of recurrent expenditure (but not wages) and may be applied for two consecutive years (the “n+2” rule). Carryovers may be used as a means of delaying spending if the fiscal deficit is under pressure. The extent of carryovers has been very substantial, up to 1 percent of GDP in some years. Carryovers are approved by the MoF and do not require the prior authorization of parliament, though information is published ex post on the MoF’s website. Several expenditure reserves, amounting to up to 1 percent of GDP, are included in the budget (e.g., for the President’s Office, environmental protection, or new policy proposals) and may be used to protect program spending, but not specifically capital investment. No other budgetary rules or procedures are specifically designed to protect capital investment.

9. Maintenance funding (Strength—Medium; Effectiveness— Medium)

58. There is no standard methodology in place across the government for estimating routine maintenance needs although some sectors (e.g., transport) have developed methodological guidelines and monitor the physical condition of the infrastructure. In the case of roads, physical road condition inspections as well as electronic testing methods are conducted at regular intervals to determine the maintenance requirements. Similarly, bridge inspections are conducted regularly, sometimes once a year, because of the high risks involved.

59. Although there is no standard methodology that apply across the board, each ministry/corporation, has a methodology for routine and capital maintenance designed for the specific sector. These specific sector methodologies include the National Highway Company (NHC) as well as the power generation company, railway corporation, electricity generation and distribution. Appendix 3 includes an example summarizing maintenance requirements for different type infrastructure.

60. Routine and capital maintenance needs are estimated regularly during the state budget preparation process, but the estimates are not always reliable. Table 7 shows the budget appropriations for routine and capital maintenance as a share of capital stock during 2011–17. Compare to depreciation rates for public capital assets between 5 to 10 percent (depending on their income level), these allocations for maintenance seem low. Routine and capital maintenance budgets are identified in the budget and reported in the national and sectoral plans, but the resources allocated are normally less than required. However, budgeted maintenance funds appear under-utilized. For example, in 2016 and 2017, the NHC spent on average around 5 percent of its capital budget on routine maintenance, but only about 80 percent of the allocated funds were spent (Table 8). The condition of infrastructure assets is poor in some sectors. Box 1 gives examples of bridges and rail tracks.

Table 7. Slovakia: Routine and Capital Maintenance (percent of GDP)

	2011	2012	2013	2014	2015	2016	2017
Routine Maintenance	0.14	0.15	0.16	0.13	0.05	0.09	0.1
Capital maintenance	0.01	0.01	0.01	0	0.66	0.39	0.34
Total Maintenance	0.15	0.16	0.17	0.13	0.71	0.48	0.44
Capital Stock	48	48	48	48	47	47	47
Maintenance/Capital Stock	0.3	0.3	0.4	0.3	1.5	1.0	0.9

Table 8. Slovakia: Routine and Capital Maintenance of NHC (percentage)

	2016	2017
Routine maintenance in NHC budget/NHC's capital spending	3.5	5.9
Actual spending versus budget allocation for routine maintenance	78	88

Box 1. Maintenance of Infrastructure in Slovakia

Bridges are categorized as follows: Category 1: Flawless; Category 2: Very good; Category 3: Good; Category 4: Satisfactory; Category 5: Bad; Category 6: Very bad; Category 7: Emergency

- There are 8,066 bridges in the network of which about 1,000 falls within categories 5 to 7. Therefore, the condition of around 12 percent of all bridges in the network is bad, very bad, or in a state of emergency.^{1/}
- Slovenska Sprava Ciest manages 3176 km of class I roads of which 9 percent in 2015 were in a state of disrepair.
- The Railway Company's maintenance funding is identified in the budget, however 400 Million Euro per year is required for maintenance of class II tracks and only 130 Million Euro per year is allocated. The Class II tracks are all in a poor state.

1/ 12 percent of the bridges of the road network in bad, very bad or a state of emergency, Bridges are normally neglected all over the world, in 2006 in the USA only 6,3 percent of bridges was structurally defective, an improvement from the 9.5 percent in 2007. 2017 Infrastructure Report Card ASCE.

10. Project selection (Strength—Medium; Effectiveness—Low)

61. Project selection is currently conducted on a decentralized basis. Each ministry, region, city and municipality are responsible for scrutinizing and selecting its own projects. The Public Works Act requires the creation of a large public works program that is updated annually and is essentially a projects pipeline.⁴⁷ In practice, the program is a formality and not used for actual investment planning. Ministries, regions, cities and municipalities develop projects to meet a wide range of sector strategies, some of which are approved by Government. All entities have their own selection criteria, and these criteria are published.

62. Except for review by a central ministry (e.g., the MoT), major projects funded by government funds, are not always reviewed by an independent agency or experts prior to inclusion in the budget. However, major EU funded projects (which are the majority) are reviewed by independent experts. Projects within the MoT are selected based on the readiness for implementation and availability of funding, if the projects are state funded. MoT has developed Strategic Plans for Development of Transport Infrastructure. Project selection and project prioritization in the MoT are based on the following documents: (i) Strategic Plan for Development of Transport Infrastructure until 2020 (basis for programming the OP in 2014); (ii) Strategic Plan for Transport Development until 2030 (Second phase, on par with measures based on Joint Assistance to Support Projects in European Regions (JASPERS) input); and (iii) Work with Value-for-Money Division on methodology for road projects prioritization. Projects funded by EU are prioritized in accordance with the EU priorities as well as readiness for implementation. EU funded projects, selection for funding is undertaken by the Project Monitoring Committees of OPs.

63. There is no standard selection criteria and integrated national pipeline of projects for the state budget. The MoF requests information from budget entities about new major

⁴⁷ Act 254 of 1998.

projects for the budget strategy discussions but does not systematically obtain information about projects for which financing decisions are not required in the budget preparation process.

64. There is central review by Ministry of Finance (VfM). The Value-for-Money Division at the MoF is in the process of prioritizing the projects for the MoT, and can be tasked with preparing in a coordinated manner a pipeline of major projects or monitoring of the implementation of the large public works. This division would ensure that all projects included on the list have been appraised according to requirements stated in law, and meet national policy priorities, e.g., for improving economic growth and increasing cohesion. It could also provide advisory services to budget institutions on removing bottlenecks to the implementation of projects. Box 2 summarizes how the planning and management of national infrastructure is organized in the UK. Appendix 2 includes examples of the possible roles and responsibilities of a central ministry in Slovakia, based on experience in other countries.

Box 2. Planning and Management of National Infrastructure in the United Kingdom

The UK has established two central agencies responsible for the planning and delivery of national infrastructure.

1. The National Infrastructure Commission (<https://www.nic.org.uk>), established in 2017, is an executive agency of HM Treasury (the UK's finance ministry) with a staff of about 40. The main activities and outputs of the Commission include:

- Preparing a *National Infrastructure Assessment* every parliament (i.e., once every four years) of long-term infrastructure needs which is submitted to the government and parliament.
- In-depth studies of pressing infrastructure challenges (e.g., recent reports on freight, modern technologies, transport in London, 5G)
- Monitoring progress in the delivery of major infrastructure projects, with recommendations to the government on actions required to remove bottlenecks.

2. The Infrastructure and Projects Authority (IPA), established in 2018, reports jointly to the UK's Cabinet Office (Office of the Government) and HM Treasury, and has a staff of about 150.

A core task of the IPA is to prepare and publish a *National Infrastructure and Construction Pipeline*. The *Pipeline* includes about 700 major projects at all stages of the cycle in seven different sectors (transport, energy, utilities, digital infrastructure, flood and coastal erosion, science and research, and social infrastructure) with a value of £700 billion over 10 years. The government will confirm its infrastructure priorities and capital spending plans in the *2019 Spending Review* which will be conducted by HM Treasury.

The IPA tracks progress in delivering the projects included in the *Pipeline*. In addition, the IPA:

- Provides expertise and advisory services to government departments and agencies on building capacity to deliver capital projects, especially for the most critical and complex projects.
- Sets standards and benchmarks to measure the performance in implementing projects.
- Provides assurance on the mitigation of project risks.
- Provides advice on the availability of private finance.

Source. UK Government documents, mission.

Recommendations

Issue: Comprehensive information on public investment projects financed from domestic or other sources, or of changes made to the approved budget during the year (carryovers and virements), both for capital investment and recurrent spending, is not currently reported to the parliament and the public in a systematic way.

Recommendation 3: To improve transparency, the MoF should publish in the budget documents comprehensive information on:

- All major capital projects, above a defined threshold. This information should include the total construction costs of the projects, the breakdown of this cost over the duration of the construction period if more than one year, and the source of financing (EU funds, other external sources, the state budget, own resources, etc.).
- In-year reallocations of spending (virements) and carryovers from one budget year to the next year in respect of both capital spending and recurrent spending, and an analysis of the reasons for these changes.

Issue: There is not enough attention given to maintenance in the budget process, and no clear strategy how to improve maintenance spending and budgeting.

Recommendation 4: Establish a national strategy and norms for routine and capital maintenance budgeting, that will enhance the quality of strategic existing infrastructure and will include:

- Medium term increments for routine and capital maintenance.
- The establishment of static weigh stations in strategic locations to eliminate overloading.

Issue: There is no consolidated project pipeline across sectors, and no comprehensive criteria for selection of budget-funded projects for implementation. While EU-funded projects are assessed and selected in accordance with EU rules, projects funded by the national budget are not subject to a stringent set of selection criteria.

- There is no central Public Investment Management (PIM) unit tasked with preparing in a coordinated manner a pipeline of major projects or monitoring the implementation of the large public works.

Recommendation 5:

a. Establish a unified pipeline of appraised major projects in order to compare projects within and across sectors in a transparent and competitive manner, that:

- Focuses on major projects with a value above a specified threshold and include projects financed from different funding source (the state budget, EU funds, own resources, or PPPs).

- Incorporates a ranking procedure to select projects for inclusion in the pipeline. Appendix 1 provides an illustration of how such an approach has been adopted in other countries.
 - Publishes the criteria for project selection for transparency purposes.
 - Is linked with financial envelopes to be established in the MTBF, whatever the source of funding.
- b. Consider introducing a central PIM unit function either in the MoF or another central agency of government (Appendix 2).

E. Investment Implementation

11. Procurement (Strength—High; Effectiveness— Medium)

65. Most large public procurements in Slovakia follow open and transparent procedures. The Slovak Public Procurement Law (PPL)⁴⁸ distinguishes between low-value procurement (in general below EUR 15,000), medium-value procurements and high-value procurements. The thresholds for high-value procurements follow the applicable EU legislation⁴⁹ and depend on the object of the procurement and on the type of the contracting authority. All relevant public procurement documents are published on the website of the Public Procurement Office (PPO). In 2017, most high-value procurements in Slovakia were carried out through a competitive process (91.6 percent by value, which represents a significant increase from around 81 percent in 2016 and 2015), with open tender being the most frequently used procedure. Table 9 provides a detailed overview of the public procurement procedures in 2017.

Table 9. Public Procurement Procedures (2017)

Type of procurement	Value		Procedures			
	Million EUR	Percentage	Number	Percentage	Cancelled	Total
Open tender	2 206,800	64,6%	728	83,2%	434	1 162
Restricted tender	850,802	24,9%	50	5,7%	11	61
Negotiated with a prior call for participation	69,023	2,0%	13	1,5%	1	14
Negotiated without prior notice	286,816	8,4%	83	9,5%	29	112
Competitive dialogue	0,073	0,0%	1	0,1%	1	2
Inovative partnership	0,000	0,0%	0	0,0%	0	0
Sum	3 413,514	100,0%	875	100,0%	476	1 351
Procurement below threshold value	591,284	-	1 812	-	1 227	3 039
Total	4 004,798	-	2 687	-	1 703	4 390
Specific contracts under Framework contracts	738,694	-	2 455	-	-	2 455
Design competition	0,316	-	16	-	1	17
Concessions	0,000	-	0	-	6	6

⁴⁸ Act no. 343/2015 Coll. on Public Procurement, as amended.

⁴⁹ An overview of the rules and thresholds is available under https://ec.europa.eu/growth/single-market/public-procurement/rules-implementation/thresholds_en

66. Despite some progress, weak administrative capacity and anticompetitive practices continue to impact negatively the tender procedures. The effectiveness of public procurement in Slovakia has for long been subject to criticism from the public, businesses and European institutions.⁵⁰ The Slovak authorities have taken several important steps to improve the situation. Slovakia's public procurement legislation has been modernized, and fully electronic procurement procedures were introduced in 2018.⁵¹ Several important indicators improved in 2017 (the number of tenders with single bidder, the proportion of open tenders, the speed of decision-making).⁵² Nevertheless problems remain⁵³ and include weak administrative capacity,⁵⁴ too narrow specifications (tailor-made for particular companies), unclear selection or evaluation criteria, and corruption in general.⁵⁵ The Slovak Supreme Audit Office covers public procurement in the context of some of its audits, but has not performed any thematic audits focusing specifically on this area. In 2018 PPO analyzed a sample of 100 public procurement procedures and found that the majority of procurement procedures organized by SNGs (mostly municipalities) included breaches of law, and / or led to only one or two applications for tenders. Table 10 provides a more detailed analysis.⁵⁶

Table 10. Slovakia: Analysis of a Sample of Public Procurement Procedures

Contracting authority	Procedures (number)	Tender applications					Breaches of law	
		1	2	3+	Percentage with < 3 applicants	Average no. of applicants	Number of procedures	Percentage of procedures
Central government	9	2	2	5	44%	2,63	1	11%
SNG	23	6	7	10	57%	2,90	14	61%
SOEs	17	3	2	12	29%	4,42	7	41%
Sub-total general government	49	11	11	27	45%	2,96	22	45%
Grant beneficiaries	51	4	15	32	37%	3,10	7	14%
Total	100	15	26	59	41%	3,23	29	29%

67. The PPO maintains a comprehensive procurement database and produces regular reports on public procurement, but the analysis of problematic areas could be

⁵⁰ See European Commission, Flash Eurobarometer 457: Businesses' attitudes towards corruption in the EU, and European Commission Staff Working Document, Country Report Slovakia 2018, SWD (2018) 223 final.

⁵¹ A new public procurement law was adopted in 2015. The last amendment effective from 2019 makes certain overly rigid rules more flexible.

⁵² Single Market Scoreboard for Public Procurement, Reporting period 2017, European Commission, http://ec.europa.eu/internal_market/scoreboard/performance_per_policy_area/public_procurement/index_en.htm

⁵³ A high proportion of cancelled procurement procedures (overall 38.8 percent in 2017, see Table 9) is one of the indicators of these weaknesses.

⁵⁴ See also *Developing Administrative Capacity for Public Procurement in The Slovak Republic: A Training Action Plan For 2016-2019*, OECD, 2017

⁵⁵ According to the European Commission Staff Working Document, *Country Report Slovakia 2018*, SWD (2018) 223 final, "efforts to tackle corruption in the public sphere have been limited and are hampered by institutional limitations and an apparent lack of political will."

⁵⁶ <https://www.uvo.gov.sk/extdoc/2198/Prva%20analyza>

strengthened. The PPO is an independent body responsible for policy making, supervision of the public procurement system and management of the procurement e-tools. The PPO's national electronic procurement system includes all relevant procurement documents (for example tender notices, calls, tender documents, clarifications, evaluations, received tenders, contracts, etc.), and in 2018 the whole procurement procedure became electronic. The PPO closely monitors the procurement procedures.⁵⁷ The list of the PPO's reviews and adopted decisions are available on the PPO website. The Office also presents to the government and publishes on its website annual statistics on public procurement. These statistics include a detailed analysis of public procurement procedures by type (for high-value procurements), financial limits, the subject of procurement, and so on. The statistics do not, however, include analysis of openness of medium-value procurements, depth of competition, or results of PPO's control activities.

68. Procurement complaints are reviewed in a fair and timely manner, though detailed statistics are not available. Complaints regarding a procurement procedure can be lodged by a tender applicant, a participant or another interested party. To reduce the incidence of frivolous complaints, complainants pay a fee of between EUR 2,000 and EUR 50,000, which is reimbursed if the complaint is successful. The PPO has a deadline of 30 days to review the complaint. The first-level decision by the Office can be appealed to the PPO Council, which comprises the PPO president, two vice-presidents and six independent members nominated by the government. PPO decisions are legally binding and can be subject to judiciary review. The PPO publishes on its website decisions relating to individual complaints. Summary statistics and analysis of the decisions are, however, not available.

12. Availability of funding (Design— High; Effectiveness— High)

69. The State Treasury guarantees timely cash availability through reliable cash flow forecasts. The Treasury prepares two kinds of cash plan: (i) cash flow forecasts for general government, called financial plans; (ii) more detailed cash flow plans for state budget institutions. The financial plans enable the government to estimate their overall financing requirement and are submitted to the Debt and Liquidity Management Agency (ARDAL). The cash flow plans provide the Treasury with detailed information on the future liquidity requirements of the state budget institutions. Both plans are prepared for a quarter on a daily basis and updated monthly on a rolling basis. To ensure cash availability, the Debt and Liquidity Management Agency (ARDAL) holds a cash buffer.

70. There is no cash constraint on capital spending. The Treasury makes payments when requested. When the budget is approved, the full annual budget allocation is made

⁵⁷ For any high-value procurement co-financed by the EU, the contracting authority can request from the PPO an ex-ante assessment of the procurement documents (prior to launching the tender). Before contract signature, PPO reviews all high-value public procurement procedures co-financed by the EU and other procedures on its own initiative or at the request of the contracting authority, of the government office, of the managing authority of EU funds, or following a complaint.

available to budget institutions for use immediately but the Treasury monitors and discusses spending requests with the budget institutions to prevent front loading.

71. Slovakia operates a modern treasury single account (TSA), which includes almost all general government institutions' bank accounts. The TSA covers the budgetary revenue and expenditure bank accounts of state budget institutions, social insurance and health insurance funds and companies, public universities, and many municipalities. The EU accounts are also included in the TSA.

13. Portfolio Management and Oversight (Institutional Design – High; Effectiveness - Medium)

72. EU funded projects, major projects are monitored during project implementation. All EU project are tracked through an IT system, which is an extensive central database monitoring expenditure, physical progress and time and cost over runs.

73. State-budget funded projects are monitored by the ministry concerned but there is no centralized monitoring system or database as in the case of EU-financed projects. All project monitoring data are entered into the ministry's own separate data base. MoT receive daily reports form project level and compile weekly, monthly and quarterly reports to the Minister of Transport. Project Managers from the MoT also attend all progress meetings on site on a monthly basis to evaluate the financial and physical progress and to identify possible risks.

74. Funds can be re-allocated between projects during implementation. In the case of EU-financed projects, reallocation is possible when the project falls under the same OP but rare as it needs the approval of managing authority, monitoring committee and the EC. In the case of state budget funded projects, reallocations are made with the approval of the MoF.

75. Ex-post reviews are conducted regularly for EU-funded projects, but only for some major nationally-funded projects. Reviews of EU-funded projects are done by independent parties in accordance with the EU rules. Such reviews are an important management tool for assessing if the project outputs and outcomes were successfully and efficiently achieved. The results of the evaluations can be used to adjust project design, appraisal and implementation procedures in general. There is no common approach to ex post evaluations of nationally financed projects and such evaluations are done rarely.

14. Management of Project Implementation (Institutional Design – High; Effectiveness – Medium)

76. There are project monitoring arrangements and senior officials are systematically assigned for major investment projects, both of physical progress as well as financial costs. Responsibility for monitoring the physical and financial progress of projects rests with the respective ministries, regions, cities and municipalities. Implementation plans are conducted prior to budget approval, EU projects as well as project funded by own resources. Cost overruns vary

between 4-10 percent and time overruns on average 12 months for major projects, time overruns are mostly weather related with consequential delays. External audits are conducted for EU funded projects, but not so for nationally funded projects.

77. Standardized rules are in place for project cost adjustment. These rules and limits follow the EU's procurement legislation. A similar limit (15 percent of the project value) applies for nationally-funded projects. Project costs for infrastructure projects may be adjusted by recommendation of the contract engineer and with the approval of the PPO and the MoF. If a project adjustment greater than the limit specified in the law is required, then the rationale, costs and expected outputs of the project are re-visited to determine the way forward. Currently one major project at the MoT is under investigation, which can be a lengthy process.

78. External audits for state budget-financed projects are not conducted on a regular basis. The SAO audits projects selectively. The Financial Control Department in the MoF serves as the Audit Authority for EU-financed projects and conducts a verification of public procurement and financial transactions incurred by these projects. For each review conducted, the department issues a specific report, and an annual report is also prepared.

15. Monitoring of Public Assets (Institutional Design –Medium; Effectiveness – Medium)

79. The physical assets owned by the Slovak Republic are recorded in a central electronic register, which however does not include information on the cost or physical condition of the assets. Slovakia introduced the electronic central asset register by law in 2014⁵⁸ and it was launched in 2016. It registers immovable property of the state used in the non-business areas. The covered public sector institutions have a legal obligation to update the register within 30 days of any relevant change. The register contains data on residential and non-residential buildings and premises, and non-agricultural land owned by the Slovak Republic. It does not include certain categories of infrastructure assets such as roads, rail and utility networks, and lands on which these assets are built. The register also does not include any information on the value (cost) of the assets, or their physical condition. Therefore, it is of little value for the planning of public investment or estimating maintenance needs.

80. The value of nonfinancial assets is reported in the financial statements at historical cost, decreased by accumulated depreciation, and is not subject to revaluation. Since 2008, all public sector organizations have applied accrual-based accounting, following the International Public Sector Accounting Standards (IPSAS).⁵⁹ Individual nonfinancial assets are in principle recorded at acquisition cost, decreased by accumulated depreciation. The depreciation of these

⁵⁸ The Central Property Records is an information system created by Act No. 278/1993 Coll., as amended by Act No. 324/2014 Coll. See <https://www.majetokstatu.sk/en>

⁵⁹ Act no. 431/2002 Coll. on Accounting as amended, and Measure MF/16786 /2007-31 of the Ministry of Finance laying down the details of accounting practices for public sector organizations.

assets (apart from land) is calculated on the basis of the assets' estimated useful life. In the case of capital maintenance, the carrying value of the assets is increased by the cost of the works and the depreciation schedule is adjusted. The assets' useful life and depreciation methods are, however, not reviewed regularly and the depreciation policy does not always reflect the actual useful life of state property. State property is not systematically reviewed for impairment and no valuation adjustments are made to reflect changes in the market value of the assets. These weaknesses should be addressed to strengthen the basis for calculating the value of nonfinancial assets reported in the public sector financial statements.

Recommendations

Issue: Despite some progress, weak administrative capacity and anticompetitive practices continue to impact negatively the public procurement procedures in Slovakia. The SAO has not performed any thematic audits focusing specifically on this area and the reports from the PPO do not cover all areas to support this process.

Recommendation 6: The SAO should consider performing thematic public procurement audits for identified weaknesses that are followed up with corrective measures. The PPO can support this process by strengthening reporting to include:

- Openness (types of procedure) followed in the case of medium-value procurements.
- Depth of competition (e.g., the average number of bidders, and the number of tenders with only 1 or 2 bidders).
- Results of the PPO's control activities (the proportion of procedures with identified breaches of law).
- Results of the complaints review process (e.g., the proportion of upheld complaints).

Issue: There is insufficient attention given to portfolio management and oversight

Recommendation 7: Develop an integrated project database, based on the project pipeline that:

- Can generate a consolidated report on portfolio oversight for all major projects
- Flags potential risks to major projects to enable corrective action

IV. CROSSCUTTING ISSUES

81. Several IT systems exist for specific purposes in the PIM cycle and all appear to be supporting specific functions of budgeting, reporting and monitoring. As outlined in Institution 7, the organization of government is highly fragmented, and the development of IT systems reflects these divisions. In addition to the standard IFMS package used for budget execution, there are three main groups of IT systems across the public sector that play varying roles in the project management cycle (Table 11).

82. IT system changes may be required for Slovakia if the integrated project pipeline approach is adopted. In its current form, IT systems appear to be serving the objectives of the multiple parts of the government. Going forward, if a project pipeline is developed, the central unit responsible for managing the pipeline would require access to all projects that have been considered eligible for inclusion in the pipeline (see Recommendations 5 and 7). This would ensure that full information to undertake a ranking of projects is available at key decision points in the budget process, and sufficient information is available on the physical progress of projects to mitigate risks in implementation by taking relevant corrective actions. Various IT system country examples are available for Slovakia to draw upon, which include Malaysia and Columbia.⁶⁰

Table 11. IT Systems Used for PIM

IT system	Purpose	Capital spending component
Budget preparation and reporting system	Records revenues and expenditures by budget classification with mapping to ESA 2010	Includes an investment register that records broad level project information for budgeted projects (project description, cost and annual budgets)
Central consolidation system	Consolidates the financial reports of all public sector entities (8000+) to produce the public sector balance sheet	Fixed assets (stock) information is included, at aggregate and entity level
ITMS (EU)	System that manages all EU projects from inception through to implementation	Project monitoring module can track spending, procurement, physical performance against priorities in each operational program

83. Staff capacity appears to be high, but more time could be dedicated to analytical functions to support PIM. Given that budget, reporting and accounting has to cover over 8,000 public sector entities, it is understandable that the bulk of technocratic time is spent on ensuring European System of Accounts (ESA) requirements are closely adhered to. Going forward, as project oversight is strengthened, staff skills may have to be adapted to play a greater risk management and challenge function role for public investments decisions. This will be particularly important if a PIM Unit is established (Recommendation 5). It is important that technical skills development in these areas is undertaken for domestic civil servants in addition to staff under EU funded projects.

84. The legal framework is comprehensive and there are no apparent gaps that hamper efficient PIM. Ministries and other budget institutions have legal departments as part of their structure and a comprehensive list of all laws are centrally stored on a public website. When new

⁶⁰ The mission did not explore the viability of the three main systems to incorporate the pipeline approach as part of their current configuration.

legal requirements are required to support PIM processes, relevant decrees can be drawn up for approval, as was the case with the publication of cost-benefit analysis appraisals. One possible hindrance in the legislative environment is its instability and consequently ensuring that entities comply adequately ensuring with legal requirements.⁶¹

⁶¹ According to the European Commission Staff Working Document, Country Report Slovakia 2018, SWD (2018) 223 final, "Instability in the legislative environment also harms the business environment. For example, between 2007 and 2016 the Trading Act was amended 54 times and the law on income tax 53 times, while the labor code was amended on average between 2 and 3 times per year. In 2015 the Social Insurance Act was amended 9 times and the Trade Licensing Act 12 times, making it particularly difficult for businesses to comply."

Appendix I. Example of a Scorecard for Project Selection

Principles and criteria for prioritizing projects: Illustrative								
		Scores to be determined by authority						
Principles		Criteria for Prioritizing	Responsible unit	Scoring of Projects				
Principle 1: Strategic relevance assessment	1.1: Strategic fit of the project to the National Strategy	1.1.1: Does the project fit to any of the <u>priorities</u> ?	MoF	TBD				
		1.1.2: Does the project fit to any of the <u>strategic objectives</u> in the National Strategic plan	MoF	TBD				
	1.2: Strategic fit of the project to the sector strategy	1.2.1: Does the project fit to any of the <u>sector strategies</u> ?	MoF	TBD				
	1.3: Strategic fit of the project to annual policy priorities decision of the Government	1.3.1: Does the project fit to the <u>annual policy priorities decision of the Government</u> ?	MoF	TBD				
Principle 2: Economic Appraisal and Fiscal Affordability	2.1: Current situation and rationale for investment	2.1.1: Is there description of the <u>current situation</u> (including problems)?	MoF	TBD				
		2.1.2: Is the <u>rationale for investment</u> provided? Are the project outputs defined?	MoF	TBD				
	2.2: Investment options/Cost Benefit Analysis (CBA required for medium and full appraisal)	2.2.1: Were <u>investment options</u> prepared? OR Was <u>CBA</u> prepared? Do the results make sense? (required for medium and full appraisal)	MoF	TBD				
		2.3: Environmental/social/other impact (required for medium and full appraisal)	2.3.1: Is the <u>environmental impact</u> described? Is assessment by the Ministry of Environment required? Was obtained?	MoF	TBD			
			2.3.2: How will project uplift the community?	MoF	TBD			
			2.3.3: Is any <u>other impact</u> described?	MoF	TBD			
	2.4: Impact on recurrent costs , i.e. operational and maintenance costs	2.4.1: Are <u>recurrent costs</u> (operational and maintenance) recognized and identified?	MoF	TBD				
Principle 3: Maturity / Implementation Assessment	3.1: Risks that may impact project implementation	3.1.1: Are the project <u>risks</u> identified?	MoF	TBD				
		3.1.2: Are the <u>actions to minimize the impact of the risks</u> on the project described?	MoF	TBD				
	3.2: Project management and organization arrangements	3.2.1: Is project <u>manager</u> defined?	MoF	TBD				
		3.2.2: Are project <u>organization</u> arrangements explained?	MoF	TBD				
	3.3: Project plan/pre-feasibility study/feasibility study/other economic/financial analyses	3.3.1: Is project <u>implementation plan</u> developed?	MoF	TBD				
		3.3.2: Is <u>pre-feasibility study</u> developed?	MoF	TBD				
		3.3.3: Is <u>feasibility study</u> developed?	MoF	TBD				
		3.3.4: Are any <u>other economic/financial analysis</u> prepared?	MoF	TBD				
3.5: Project implementation phase and financial plan	3.5.1: Are <u>start and end dates</u> of project implementation phase set?	MoF	TBD					
	3.5.2: Are <u>investment costs</u> defined? Are the <u>total project costs</u> defined? Are the <u>sources of funds</u> defined?	MoF	TBD					
A	B	C	D	E	F	G	H	O
(Budget)	(EU)			(PPP)	(SOE)	(Bilateral loans)		(Other-Specify)

Appendix II. Functions and Structure of a PIM Unit

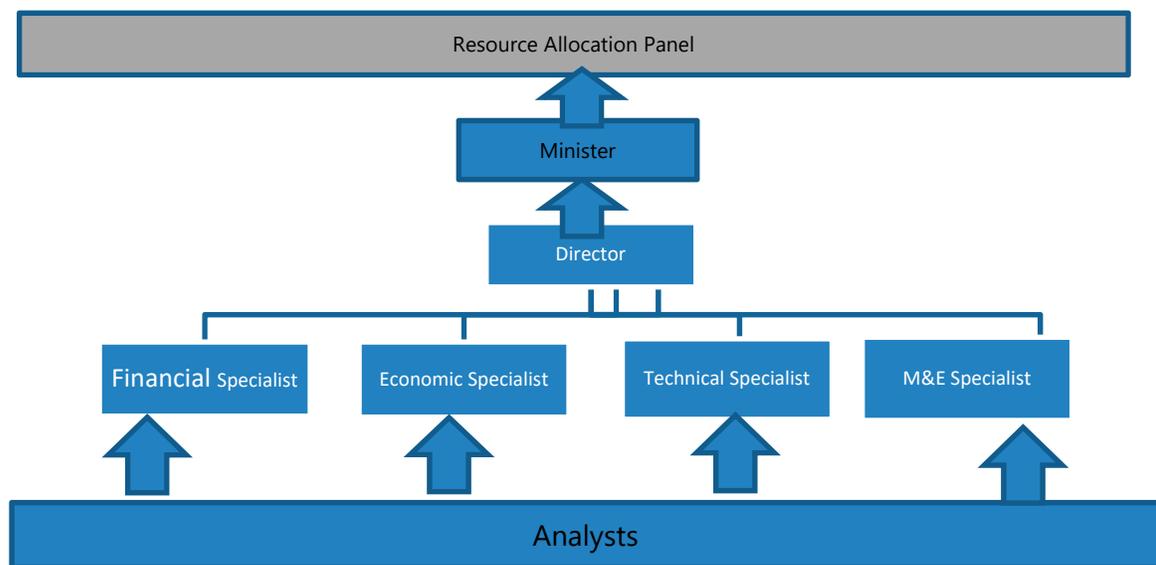
This annex provides some examples of the functional structure of a PIM unit based on cross country examples. Broadly, two main functions are undertaken by such a unit:

1. To prepare an integrated infrastructure pipeline of major projects
2. To track progress in delivering the projects included in the pipeline

PIM units typically feed analytical findings upwards through to the Minister for resource allocations to be considered at a higher top technical/political level indicated by the resource allocation panel (grey box) in the diagram below.

The head of the unit would be assisted by four deputies in charge of financial, and technical analysis to support the preparation of the pipeline of projects and a monitoring and evaluation sub unit tasked with tracking progress of project implementation. At least three analysts would be required to support each sub unit.

PIM units play a key coordination role both within the Ministry of Finance (generally they are in MoF), across planning and line ministries and also play a liaison role with the project implementer such as an SOE. The table below provides a summary of broad functions and coordination roles that are undertaken across PIM units and would have to be adopted to fit the administrative and institutional set up in Slovakia.



Sub unit	Functions	Coordination roles
Financial	Assessment of the affordability and financial viability of projects	Budget, Debt and PPP Departments
Economic	Economic and Social assessment	Macro unit
Technical	Appraisal of technical issues (designs, land, environment, social)	Line ministries
Monitoring and Evaluation	Monitoring of project delivery and evaluation	Budget Department, Line ministries
Analysts	Research, analysis, modelling	All

Appendix III. Maintenance of Public Assets

Maintenance of public assets should be given a high priority and considered alongside proposals for new investments. Strategic infrastructure such as transport, energy, or digital communications, if it fails, can have a significant impact on service delivery and the economy. It is therefore critical to maintain the assets in good condition. Capital maintenance may provide in general better cost/benefit than new construction. Routine road maintenance enhances the quality of roads and moderates the need for new investment. A rigorous overload strategy for roads, inclusive of permanent weigh bridge facilities at strategic positions, can reduce further road deterioration as well as maintenance costs. It is advantageous to investigate ways to increase maintenance spending and its implications for investment in new infrastructure. Table A3 below provides indicative estimates of maintenance requirements for major infrastructure types. These figures are applicable for South Africa, and the authorities might want to develop norms that reflect the different geography, geology, climate and topographical characteristics of Slovakia.

Table A3. Slovakia: Maintenance Requirements for Different Types of Infrastructure

Infrastructure type	Maintenance budget ^(a)	Key assumptions	Replacement or major rehabilitation ^(b)
Roads and storm water	5-10 percent	Mostly emergency repairs, storm damage and periodic maintenance. (Resurfacing every 7 – 10 years)	20 – 30 years
Public buildings	4 – 6 percent	Mostly for emergency repairs, storm damage, and periodic maintenance. (Repainting and cosmetic upgrades every 5 – 10 year)	30 – 50 years
Hospitals	5 – 8 percent	Mostly for emergency repairs, storm damage, and periodic maintenance. (Repainting every 3 to 5 year and upgrades every 5 to 10 year)	30 – 50 years
Schools	4 – 6 percent	Mostly for emergency repairs, storm damage, and periodic maintenance. (Repainting every 5 to 7 year)	30 – 50 years
Electricity reticulation	10 – 15 percent	Mostly for emergency repairs, storm damage, safety and security, routine maintenance and periodic maintenance	20 – 30 years
Electricity generation	5 – 8 percent	Mostly for electrical and mechanical equipment and dependent on age and technology of works	20 – 30 years

Source: Infrastructure Maintenance Budget Guidelines (CIDB: South Africa). (a) Average annual maintenance budget as percentage of replacement cost; (b) over and above the annual maintenance budget requiring a specific capital budget.

Hospitals as an example: One need to allocate at least 5 percent of the replacement cost of the hospital in the budget for maintenance, for any specific year, if the facility is still in a fairly good condition and 8 percent if the facility is in an under average stage. To calculate the exact number for maintenance, require a condition assessment of the facility before budgeting and even then, the calculation might not be 100 percent accurate as one cannot foresee emergency damage as well as storm damage.