SPECIAL STUDY

EBRD Public Sector Operations: Mobilising Private Sector Participation in Infrastructure

European Bank
for Reconstruction and Development

EvD ID: SS21-171

February 2022

EBRD EVALUATION DEPARTMENT

The Evaluation department (EvD) at the EBRD reports directly to the Board of Directors, and is independent from the Bank's Management. This independence ensures that EvD can perform two critical functions, reinforcing institutional accountability for the achievement of results; and, providing objective analysis and relevant findings to inform operational choices and to improve performance over time. EvD evaluates the performance of the Bank's completed projects and programmes relative to objectives. Whilst EvD considers Management's views in preparing its evaluations, it makes the final decisions about the content of its reports.

This report has been prepared by EvD independently and is circulated under the authority of the Chief Evaluator. The views expressed herein do not necessarily reflect those of EBRD Management or its Board of Directors. Responsible members of the relevant Operations team were invited to comment on this report prior to internal publication. Any comments received will have been considered and incorporated at the discretion of EvD.

EvD's Special Studies review and evaluate Bank activities at a thematic or sectorial level. They seek to provide an objective assessment of performance, often over time and across multiple operations, and to extract insights from experience that can contribute to improved operational outcomes and institutional performance.

Report prepared by Bob Finlayson, Associate Director, Senior Adviser, EBRD Evaluation department. David Bloomgarden and Alex Wellsteed acted as external peer reviewers. The views presented are those of EVD.

One Exchange Square
London EC2A 2JN
United Kingdom
Website: www.ebrd.com

Contents

Abbreviations

ABI	Annual Bank Investment
ADB	Asian Development Bank
AEB	Agreement Establishing the Bank
AMI	Annual Mobilised Investment
ATC	Assessment of Transition Challenges
ATQ	Assessment of Transition Qualities
BRI	Belt and Road Initiative
CAS	Central Asia
CEB	Central Europe and the Baltics
CEE	Central and Eastern Europe
CMD	Capital Markets Development
COO	Countries of Operation
CPA	Composite Performance Assessment
CPI	Climate Policy Initiative
CRR	Capital Resources Review
CSDR	Country Strategy Delivery Reviews
CSRF	Country Strategy Results Framework
CSRM	Country Strategy and Results Management
CYP&GRC	Cyprus and Greece
DAC	Development Assistance Committee
DCF	Donor Co-financing
DFI	Development Finance Institutions
E2C2	Energy Efficiency and Climate Change
EAP	East Asian and the Pacific
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
EEC	Eastern Europe and Caucasus
EECA-SEMED	Eastern Europe, Central Asia and the Southern and Eastern Mediterranean
EIBG	European Investment Bank Group
EIRR	Economic Internal Rate of Return
EIU	Economist Intelligence Unit
EMEA	Europe, the Middle East and Africa
EPEC	European PPP Expertise Centre
EPG	Economic Policy and Governance
ESAP	Environmental and Social Action Plans
ESD	Environment and Sustainability Department
ESP	Environment and Social Policy
ETC	Early Transition Countries
ETI	Expected Transition Impact
EU	European Union
EVD	Evaluation Department
FCY	Foreign Currency
FDI	Foreign Direct Investment
FIT	Feed-In Tariffs

FPCP	Financing Private Concessions Policy
FW	Framework
FX	Foreign Exchange Rate
GECA	Green Economy and Climate Action
GET	Green Economy Transition
GCAP	Green City Action Plans
GCI	Green Cities Initiative
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GHG	Greenhouse Gas Emissions
GIF	Global Infrastructure Facility
IA	Integrated Approach
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communication Technology
ICGI	Investment Climate and Governance Initiative
IDBG	Inter-American Development Bank Group
IFC	International Finance Corporation
IISS	International Infrastructure Support System
IMF	International Monetary Fund
IPG	Infrastructure Finance, PPPs & Guarantees
IPO	Initial Public Offering
IPPF	Infrastructure Project Preparation Facility
KPI	Key Performance Indicators
LAC	Latin America and the Caribbean
LC2	Local Currency Capital Markets
LCY	Local Currency
LTT	Legal Transition Team
MCPP	Managed Co-lending Portfolio Programme
MDB	Multilateral Development Bank
MEI	Municipal and Environmental Infrastructure
MENA	Middle East and North Africa
MIGA	Multilateral Investment Guarantee Agency
NDC	Nationally Determined Contribution
OAD	Operation Administration Department
OECD	Organization for Economic Cooperation and Development
OGC	Office of the General Counsel
O&M	Operations and Maintenance
PBC	Performance Based Contracts
PCR	Project Completion Reports
PDM	Private Direct Mobilisation
PF2	Private Finance 2
PFI	Private Finance Initiative
PIM	Private Indirect Mobilisation
PIMA	Public Investment Management Assessments
PMU	Project Management Unit
PODD	Procurement Operations and Delivery Department
PPI	Private Participation in Infrastructure
PPIAF	Public-Private Infrastructure Advisory Facility

PPP	Public Private Partnerships
PPR	Procurement Policies and Rules
PSC	Public Sector Comparator
PSO	Public Sector Operations
PSP	Private Sector Participation
PTI	Portfolio Transition Impact
QII	Quality Infrastructure Principles
RAROC	Risk-Adjusted Return on Capital
RE	Renewable Energy
RORC	Return on Required Capital
RUS	Russia
SAR	South Asia Region
SCF	Strategic Capital Framework
SDG	Sustainable Development Goals
SEE	Southeast Europe
SEMED	Southern and Eastern Mediterranean
SI	Sustainable Infrastructure
SI3P	Sustainable Infrastructure Policy and Project Preparation
SIG	Sustainable Infrastructure Group
SIP	Strategy Implementation Plan
SNG	Sub National Government
SOE	State Owned Enterprise
SSA	Sub Saharan Africa
SSF	Special Shareholders' Fund
TC	Technical Cooperation
TCRS	Technical Cooperation Reporting System
TCX	The Currency Exchange Fund
TI	Transition Impact
TIMS	Transition Impact Monitoring System
TKY	Turkey
TOC	Theory of Change
TOMS	Transition Objective Measurement System
TMEA	Turkey, Middle East & Africa
TPI	Traditional Public Investment
TQ	Transition Qualities
UK	United Kingdom
URP	Unfunded Risk Participation
USP	Unsolicited Proposals
VFM	Value for Money
VP3	Vice President 3
WBG	World Bank Group

Defined terms

Non-Sovereign	EBRD classifies an operation without sovereign government involvement or recourse as Non-Sovereign.
Private Sector	EBRD defines the private sector as that part of the economy that is both run for private profit and is not controlled by the state. By contrast, enterprises that are part of the state are part of the public sector. The designation is used for determining the Portfolio Ratio as required in the Agreement Establishing the Bank (ref: BDS101/92).
Public Sector	An entity that meets the conditions of EBRD's definition for State Sector and/or can benefit from EBRD's definition of Sovereign financing
Sovereign	EBRD classifies an operation as Sovereign if it involves financing of entities owned (Sovereign Direct) or guaranteed (Sovereign Guarantee) by sovereign governments. With this, governments guarantee that an obligation will be satisfied if the primary obligor defaults.
State Sector	EBRD's definition of the state sector includes national and local governments, their agencies, and enterprises owned or controlled by any of them. A loan or guarantee to, or equity investment in, a state-owned enterprise, which is implementing a programme to achieve private ownership and control shall not be considered as made to the state sector. Loans to a financial intermediary for on-lending to the private sector shall not be considered as made to the state sector

Executive summary

This evaluation provides a strategic review of EBRD's Public Sector Operations (PSO), which is almost exclusively financing infrastructure. EBRD's Sustainable Infrastructure Group (SIG) finances energy, transport, and municipal infrastructure in countries of operation (COOs) using a combination of debt, equity and technical cooperation (TC) grants. The evaluation assesses EBRD's PSO contribution to structural and institutional change in its COOs that facilitated transition Impact (TI). The evaluation period is 2010-2020.

Transition of economic activity from the public to the private sector is a primary purpose of EBRD, defined in the Agreement Establishing the Bank. Over time, views on the best way to develop private markets have changed and new countries have joined EBRD that have different needs.

In 2016, the definition of transition shifted from being a process to an outcome. In part, this shift reflected increasing demand from EBRD's stakeholders to support new types of operations that meet sustainable development goals (SDGs). These operations often require public sector interventions. These developments have highlighted the need for EBRD to develop innovative approaches to support public sector efforts to facilitate private sector participation (PSP) and mobilise finance to address new challenges.

There is clear evidence of a large infrastructure gap in COOs and provision of infrastructure is a core operation for EBRD. In line with requests from the G20 and undertakings made with other Multilateral Development Banks (MDBs), EBRD is actively pursuing opportunities to scale up mobilisation of private finance for infrastructure in line with Hamburg Principles. This activity requires close collaboration with governments to facilitate institutional and structural reforms using instruments such as public private partnerships (PPPs) to enable private investment to occur.

EBRD has supported scaling up private finance for infrastructure over the last two decades through structural reform and strengthening private sector institutions. Previous evaluations indicate declining levels of success due to limited appetite from governments for structural reform and sector wide corporatisation and privatisation reforms. There has been slow progress on PPPs to meet this gap due to lack of coordination of public and private sector operations, misaligned incentives, lack of bankable projects, and foreign exchange (FX) risks. The G20 and other MDB's are now increasingly focussing on enhancing both mobilisation and quality of investment at the country level.

EBRD's corporate strategies have evolved over time, due to the shift in transition priorities, and increasing instability of conditions in COOs. Recent corporate strategies prioritise climate change mitigation, inclusiveness and mobilisation.

Key Messages from the Evaluation:

1. **There is high potential to strengthen EBRD's offering by developing a business model that focusses on creating value for money (VFM) and infrastructure governance for COOs, as emphasized by the G20's Quality Infrastructure Principles (QII).**
2. **PSO risks of crowding out are real, but with good opportunities for mobilisation and meeting non-market goals in areas such as climate change and inclusiveness.**
3. **Focus of institutional reform needs to include more public sector capacity development in addition to laws and regulations.**
4. **However, EBRD's planning and results frameworks in infrastructure sectors need solid improvements to avoid risks of misallocation of resources, by collecting data on results rather than inputs and by creating opportunities for learning.**

Evaluation Context

The evaluation is based on a Theory of Change (TOC), which identifies demand for public sector finance and assesses EBRD's supply response. Objectives and results frameworks are drawn from EBRD strategies and financing documents. The evaluation looks at inputs (markets, products, policies, staff and finance). Results are assessed looking at benefits (relevance of objectives, and effectiveness of outputs, outcomes and impacts), and costs to EBRD (efficiency), relative to targets in results frameworks. Due to constraints arising from the Covid Crisis, it was not possible to make field trips to COOs to interview stakeholders. The study draws on desk research and remote interviews

Evaluation findings: Moderate Performance so Far but Real Opportunities

The evaluation concludes PSO's material contribution to structural and institutional reform and the promotion of PSP in infrastructure in COOs has not been substantial over the evaluation period, and a new approach is required to meet the changing demand.

The evaluation focussed on answering four questions.

1) **Relevance and Additionality: Are Public Sector Operations objectives clearly identified, are they relevant and are they likely to be additional?**

The COOs' need for infrastructure confirms relevance of PSO, however being more specific on priorities and objectives would help ensure they address the right priorities. Actions are contingent on approval of the government, EBRD's Board, and availability of donor funding and are overall relevant to the need and demand of the COOs. However, country strategies do not provide a TOC or informative results frameworks clarifying EBRD's strategic approach to address priority needs and demand from COOs and the expected results. Sector and thematic strategies focus on how EBRD can potentially provide assistance, rather than what it seeks to achieve.

Financial additionality is low, and there is a real risk of crowding out the private sector. Sovereign loans do not directly mobilise additional private finance due to borrower country restrictions on MDBs extending their sovereign guarantees to non-MDB parties. Similar to other MDBs, sovereign pricing is set at a standard rate of 1% over cost of funding. The sovereign lending rate is below market rates and it is sometimes crowding out private sector investment in potentially contestable markets. Non-sovereign public sector facilities such as Green City Action Plans (GCAPs) and PPPs rely on project designs that limit potential to facilitate PSP. Programmes do not always contain measures that improve bankability of projects by strengthening fiscal appropriation measures and use instruments such as project preparation and guarantee funds.

Non-financial additionality of sovereign and non-sovereign PSOs finance is high in areas such as engaging in policy dialogue and developing institutional capacity, but is not always realised to its full potential. Potential is under-mined by a lack of a clear strategic focus, and lack of information and metrics on the expected sources of value creation. Expected TI (ETI) scores do not differentiate between project costs and benefits, making it difficult to identify opportunities for value creation, and provide a basis for prioritisation and evaluation of effectiveness and efficiency.

2) **Effectiveness: What has been the outputs, outcomes and impacts of PSOs?**

(i) Outputs – While the legal framework is pretty much completed, the need is now on upstream and downstream institutional capacity development in governments, and delivery of physical outputs

The evaluation looked at institutional capacity development and financial outputs.

Legal Transition Team (LTT) has played a central role in designing legal and institutional frameworks for infrastructure. Based on LTT's 2017/2018 PPP Laws Assessment, and confirmed by external studies such as the Economic Intelligence Unit (EIU) report on Eastern Europe, Central Asia and the Southern and Eastern Mediterranean, most laws and institutions have been in place since 2017, indicating this work is complete, and institutional capacity development is now the primary focus of reform.

Sustainable Infrastructure Policy and Project Preparation (SI3P) has not prioritised institutional reform and it mainly directs resources towards project preparation using international consultants. There are no apparent synergies between sovereign loan operations and SI3P projects. As a result, SI3P frequently collaborates with Global Infrastructure Fund and IFC to develop PPPs, and relies on upstream institutional capacity reforms undertaken by World Bank Group (WBG). While collaboration is positive, in many cases WBG reforms will not fully reflect the priorities of EBRD, leading to critical gaps in capabilities.

SI3P formed a policy unit in 2019, but operations limited by the Covid 19 pandemic and internal restructuring. The policy unit responsible for developing institutional capacity upstream and downstream of project preparation was only operating for 6 months before Covid curtailed its activities. Under a restructuring in late 2021, 4 out of 7 staff in the policy unit working on Renewable Energy (RE) transferred to a new Policy Unit under Vice President 3 (VP3), responsible for green investments.

Several banking departments are preparing PPP projects, although activities are not very visible. SIG's energy departments have achieved significant success developing Feed in Tariffs (FITs) and auctions to facilitate PSP in RE projects. Transport departments have successfully developed ports and roads using PPPs, but capacity building appears limited. Municipal Environmental Infrastructure (MEI) is active developing institutional capacity at the municipal level using Green City Action Plans (GCAPs), but potential for PSP is limited.

SIG Annual Bank Investment (ABI) lending is broadly in line with Early Transition Country initiative priorities. ABI is allocated evenly across COOs outside Central and Eastern Europe, and between energy, transport and municipal services. While SIG ABI approvals increased in line with overall EBRD approvals, disbursements are low. Data at August 2021 shows undrawn sovereign loans at 79% for MEI, 54% for transport and 50% for energy.

Evidence raises concerns about the quantity, quality and cost of infrastructure delivered with sovereign financing. Cost over-runs and delays, and inadequate maintenance, can often reduce effective capacity of government-financed infrastructure by more than 50%. Analysis of EBRD's procurement data indicates changes in scope and date of delivery of sovereign loans occurs frequently.

Further concerns arise due to the consistent use of Foreign Currency (FCY) to finance public sector infrastructure, which is likely to increase costs. The cost of servicing FCY debt in Local Currency (LCY) terms appreciates over time due to depreciations in the FX rate, often outweighing the benefits of low interest rates FCY debt. Economic shocks magnify costs; the effect can last for many years; and they happen frequently in transition countries.

(ii) Outcomes: Limited evidence of a shift towards private/non-sovereign and private finance mobilisation

Sovereign loans have conditions precedent and covenants, which can be used to effect structural reform, but this potential is not being realised. These legal provisions are difficult to enforce as any breach effects all sovereign loans in a country. As a result, relatively few sovereign loans require TI covenants and they are rarely waived or modified.

There is little evidence of increased PSP arising from PSOs. Infrastructure sector strategies indicated projects would shift from state/sovereign to private/non-sovereign status in line with structural reform and a transition to market economies. This shift only happened in RE generation through PPPs supported by FITs. State Annual Mobilised Investment (AMI) is another indicator of PSP and most of it was in the form of donor grants for MEI energy efficiency projects, rather than private mobilised finance.

Loan approvals indicate Sovereign lending was more successful than private lending at catalysing Green Economy Transition (GET) financing, but results are reversed when looking at actual project impacts. GET financing is based on ex ante forecasts Greenhouse gas (GHG) savings at the end of construction and figures are not validated with ex post data. The lack of delivery of these outputs, and consequent realisation of GHG savings on a whole of life basis, indicates ex post results for sovereign lending are likely to be low.

(iii) Impacts: limited evidence of improvement in institutional capacity and structural reform leading to increased PSP.

Analysis of PSO project TQs shows a marked shift away from targeted competitiveness impacts to green and governance, indicating PSP is no longer a priority for PSOs. Country Strategy Delivery Reports provide little information on results due to lack of TOCs and focus on inputs and project milestones.

Portfolio TI (PTI) and ETI scores show high levels of success, but these figures are not supported by data presented in transition reports and external studies. A comparison of Assessment of Transition Challenges (ATC) scores prepared by Office of the Chief Economist in 2009 and 2016, the last year of publication, indicates almost no change in institutional and structural reform. EIU categories for COO institutional capacity for PPPs mainly fall under the classification of emerging, one-step up from the lowest score of nascent on a scale of 1-5.

3) Efficiency: How efficient are the PSOs, looking at resource costs and profitability?

PSO staff numbers appear adequate, and differentials between sovereign and non-sovereign pricing have diminished due to high levels of liquidity in COOs. Cancellations and prepayment rates of State-Sovereign and Private Non Sovereign projects are low. The main sources of inefficiency are the high levels of donor funds used by SIG for preparing projects and lack of indirect mobilisation of sovereign loans using instruments such as unfunded risk participations.

While PSO appears moderately efficient from an EBRD perspective, there is a question about competitiveness and additionality. The scale of EBRD PSO is a small fraction of the programmes offered by large public sector MDBs. These MDBs can offer tenors of up to 35 years, very low interest rates, and access to large amounts of grant funds, relative to EBRD. A further challenge, is the decline in financial additionality due to high levels of liquidity in COOs. A shift to prioritise PSP in infrastructure using instruments such as PPPs would help improve the attractiveness and distinctiveness of EBRD's offer and its competitive position.

4) Opportunities: Does experience suggest ways the performance of the PSOs can be improved?

Evidence shows that large benefits can potentially be realised if EBRD shifts from a model that prioritises the delivery of low cost finance to a model that creates value for money (VFM) for its clients, in line with practices of other MDBs.

These practices highlight the importance of measuring both costs of supply (ie efficiency) and demand benefits (ie effectiveness), and preparing VFM assessments that compare costs of private versus public

sector provision to identify least cost source of procurement. Without putting these metrics in place, the risks of resource misallocation and inefficient projects is real.

Issues and Lessons

- Corporatisation and privatisation have been the primary approaches used by EBRD to increase PSP, but demand for this type of reform has declined over time.
- Evidence shows that PPPs can enhance PSP by mobilising private finance for large strategic infrastructure assets when government agencies have adequate institutional capacity.
- Misalignment of incentives and limited scope for learning feedback within EBRD and government clients undermines capacity to achieve expected results.
- Weak results frameworks creates risks of misallocation of resources and inefficient projects.

Recommendations:

Strategic:

1. **Review priorities and scope of EBRD's Public Sector Operations to include a greater focus on institutional capacity building and provision of advice and knowledge for enhanced additionality and results:**
   a. Consider placing more priority on TC grants for non-transactional institutional capacity building..
   b. Consider broadening the scope of traditional sovereign loans, subject to demand, to also include funding facilities such as project preparation and guarantee funds and provision of advice.
2. **Maximize synergies between policy and institutional capacity building at the country level for greater results by adopting a holistic development approach to design infrastructure programmes.**
   a. Country Diagnostics and Country Strategies, as relevant, should include key information on the adequacy of infrastructure facilities and institutions, capacity of local banks to provide LCY and identify clear opportunities to provide preparation and guarantee funds.
   b. Country Strategy Results Frameworks for infrastructure, as relevant, should be supported by measurable time bound indicators aimed to demonstrate expected VFM.

Operational:

3. **PSO results management should be underpinned by a well-articulated theory of change, using metrics that can be influenced and measured by the Bank to assess its long-term contribution towards narrowing the transition gaps, and provide a basis for identifying sources of VFM**.
   a. Mid-LT outcome indicators for PSOs should 1) reflect conditions within the country such as progress achieving Nationally Determined Contributions, and 2) corporatisation/privatisation/PPPs goals
   b. Board approval documents for infrastructure should be transparently supported by evidence of expected value creation for clients that integrate long term outcomes and project based sources of VFM.
4. **Prepare an approach paper that outlines a business model for infrastructure projects that focuses on creating VFM for EBRD Countries of Operations. Specific areas of focus would include:**
   a. Operational approach of G20's Quality Infrastructure Principles.
   b. Development / Refinement of a VFM methodology, aimed to identify costs-benefits when appraising and structuring EBRD's infrastructure financings at the project level, in line with international best practices.

c. Preparation of an updated Business Case for SI3P, taking into account the recent reorganization of VP3; this should include an articulation of the most effective and efficient organization structure to mobilise private finance through the delivery of advice on institutional capacity upstream at project identification, preparation, transaction, and downstream project management.

1. Introduction and Evaluation Approach

1.1 Background

Independent Evaluation Department (EVD) proposed an evaluation of sovereign operations in its work-plan in 2019. Following a review of the data, the study scope definition became Public Sector Operations (PSO) and this change reported in EVD's Annual Evaluation Report 2020. The change was due to the nature of EBRD's classification system, which distinguishes between state versus private, and sovereign versus non-sovereign. There are various combinations of these categories, and it is more informative to evaluate PSO from the perspective of both classification systems, rather than a single dimension. Most PSO is occurring in energy, transport and municipal infrastructure. The study provides a strategic review of EBRD's PSO, focussing on structural and institutional developments contributing to EBRD's transition impact (TI) mandate of facilitating private sector participation (PSP) in infrastructure over the period 2010-2020.

Box 1. Public Sector- *vis-à-vis* Sovereign Operations

- **Sovereign Operations include exclusively direct engagement occurring through grants** for institutional capacity building and market reforms and sovereign guaranteed lending to develop facilities.
- **Public Sector Operations include both direct (sovereign-) and indirect support** occurring via financing state owned and/or controlled enterprises and banks, and sub-sovereigns (including municipalities) without sovereign guarantees.

EBRD's public sector supports this mission through direct and indirect engagements; both types of financing, direct and indirect, are public for the purpose of procurement but only sovereign lending benefits from standard concessional sovereign pricing.

Transition of economic activity from the public to the private sector is a primary purpose of EBRD, defined in the agreement establishing the bank. EBRD initially targeted support to its countries of operation (COO) to scale back public sector activities and directly provide non-sovereign financing to private sector firms. The focus of these reforms was on introducing structural reforms to facilitate PSP, and strengthening corporate governance. Over time, views on the best way to develop private markets have changed and new countries have joined EBRD that have different needs. In 2016, the definition of transition shifted from being a process to an outcome. A new set of Transition Qualities (TQs) was introduced that showed how EBRD would support a more diverse set of transition goals. The TQs are based on the premise state involvement is critical for effective functioning of markets, indicating a greater level of engagement with the state to strengthen its institutions might be desirable to achieve TI objectives.

In part, this shift reflected the increasing demand from EBRD's stakeholders to support new types of operations that meet sustainable development goals (SDGs). These operations provide public goods in areas such as climate change and inclusiveness in existing and new COOs. Population growth, rapid urbanisation and a growing middle class is creating large and often unmet demand for clean infrastructure. Governments in COOs are developing rather than scaling back public sector capacity to meet complex emerging transition and development goals. They are having difficulty meeting these demands due to lack of fiscal and institutional capacity. The covid pandemic and new technologies such as digitalisation have

reinforced these trends and highlighted the need for EBRD to develop innovative approaches to support public sector efforts to mobilise finance to help address these new challenges.

The annual estimated global investment requirement for infrastructure is about $6.9 trillion up to 2030. The provision of infrastructure is a core operation for EBRD and there is clear evidence of a large infrastructure gap in COOs. In line with undertakings made with other Multilateral Development Banks (MDBs), EBRD is actively pursuing opportunities to scale up mobilisation of private finance for infrastructure. This activity requires close collaboration with governments to facilitate institutional and structural reforms using instruments such as public private partnerships (PPPs) to enable private investment to occur.

1.2 Objectives of the Study and Evaluation Questions

In line with EBRD's objective for the new TI framework of developing a well-functioning and sustainable market economy the overarching question for the evaluation is:

"To what extend have EBRD PSOs contributed to fostering well-functioning sustainable market economies?"

The evaluation uses the OECD Development Assistance Committee (DAC) methodology and the following sub-questions guided the evaluation:

1) **Relevance and Additionality**: Are PSOs objectives clearly identified, are they relevant and are they likely to be additional?
2) **Effectiveness**: What has been the results (outputs, outcomes and impacts) of the PSOs?
3) **Efficiency:** How efficient are the PSOs, looking at resource costs and profitability?
4) **Opportunities**: Does experience suggest ways the performance of the PSOs can be improved?

1.3 Evaluation Approach, Methodology and Limitations

The study presents a review of the Bank's PSOs over the period 2010-2020, with emphasis on EBRD's financings in infrastructure sectors (energy, transport and municipal), which account for almost 100% PSOs.

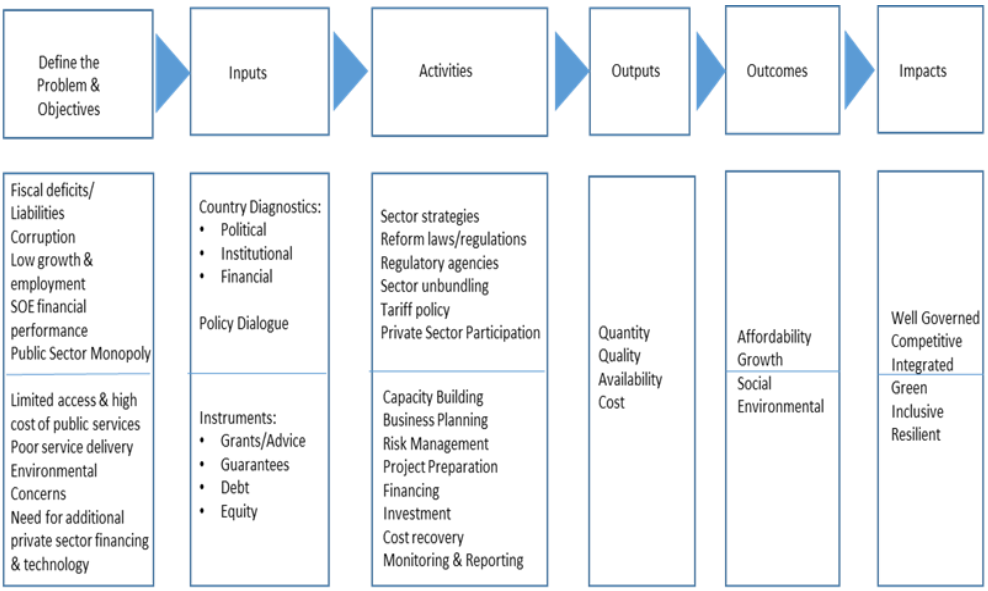
In Section 2, the evaluation reviews international experience procuring infrastructure. Trends financing infrastructure using Traditional Public Investment (TPI) and PPPs across regions and sectors, and main drivers of performance provides context. The review distinguishes between the development of institutional capabilities, structural reform, and volumes of private financing mobilised. A summary of MDB approaches to engaging with governments, findings of relevant evaluations and studies are detailed.

In Section 3, the evaluation provides findings on EBRD's PSOs and their contribution to transition objectives. EBRD's primary transition objectives and its strategic framework to pursue these goals provides an overarching framework to define expected results. The evaluation then reviews types of finance provided, organisation of PSOs, and trends in volumes of loans and technical cooperation (TC) grants. The evaluation looks at how the PSO financings mapped onto EBRD's TI targets, and the extent PSOs facilitated institutional development, and structural reform, to increase PSP in infrastructure financing.

In Section 4, the study draws lessons from the evaluation and presents opportunities to scale up PSP in infrastructure.

The evaluation reflects a Theory of Change (TOC), which identifies demand for public sector finance and assesses EBRD's supply response (Fig 1.)

Figure 1: Theory of Change for the Evaluation



Source: EVD

Objectives and results frameworks are drawn from EBRD strategies and financing documents. The evaluation looks at inputs (markets, products, policies, staff and finance). Results are assessed looking at benefits (relevance of objectives, and effectiveness of outputs, outcomes and impacts), and costs to EBRD (efficiency), relative to targets in results frameworks (see **Annex 1**).

Due to constraints arising from the Covid Crisis, it was not possible to make field trips to COOs to interview stakeholders. The study draws on desk research and remote interviews. EBRD's information systems on financing, TC, Policy Advice, and linkages in databases of programmes and projects to strategic initiatives is limited, and there is little ex post data available at the project level. As a result, the external databases of agencies such as the World Bank Group (WBG) on Private Participation in Infrastructure (PPI) and Economist Intelligence Unit (EIU) on PPP initiatives, and country case studies have played an important role in determining key drivers of EBRD's PSP initiatives in infrastructure sectors and the level of success.

2. Context and Rationale: Experience Financing Infrastructure

Key Facts:

- In the late 1980s western governments started implementing structural and institutional reforms to redefine the role of the state and transfer non-core functions to the private sector
- PSP was seen as preferred means of supply due to clear incentives to align production with goals using contracts, flexible means of operation and ability to access resources in markets,
- EBRD was established to help facilitate this transition in COOs
- Rate of transition was rapid in CEE, but slower in other regions, due to factors such as lack of a clear economic rationale for reform and institutional, financial and funding capacity constraints
- Despite potential gains, levels of private finance for infrastructure remain low (6% of total investment in ECA in 2017), and DFIs are the main source of infrastructure finance
- Due to fiscal constraints, and inability of private sector to provide financing, demand for infrastructure investment has far exceeded availability in COOs
- PPPs are used to mitigate these constraints by accessing private sector funding, monetising externalities, and creating efficiencies in delivery through competition, innovation, accessing private finance, timely maintenance, and provision of accurate data on performance
- MDBs have supported the scaling up the level of private finance for infrastructure by strengthening government institutions and developing local banks and capital markets
- Evaluations indicate low success due to factors such as lack of coordination between public and private sector operations, lack of incentives, difficulties sourcing bankable projects, and FX risks

This section provides the context for considering the way EBRD has adapted its PSOs since establishment in 1991 to support COO's transition to a market economy. Annexes 2, 3, 4, 5, 6 and **7** provide further details on external studies of these developments.

2.1 Why is the Public Sector Important in Developing Infrastructure?

In the late 1980s, economists at IMF and World Bank Group (WBG) formulated the Washington Consensus on how governments should implement economic reform programs. Under this approach, the role of the state was to co-ordinate and control the delivery of public services, and transfer production to the private sector to improve effectiveness and efficiency. Where there was value, non-core production functions were unbundled to enable competition, corporatised and then privatised.

Structural and institutional reforms are an important precursor to PSP. Structural reform consists of removing regulatory barriers to PSP, and separating non-contestable operations such as infrastructure networks that have high entry and exit costs for private firms, from contestable operations that used networks. Complementary institutional reforms corporatized state owned enterprises (SOEs), moved prices to full cost recovery, and permitted open access to network assets. As market reforms matured, and public sector understanding of market dynamics improved, non-core PSO functions were subject to regular reviews to identify opportunities to outsource or divest operations under competitive conditions.

Privatization generated large efficiency gains, and IMF found by the late 1990s productivity growth in privatised firms in Eastern Europe was five times the rate for State Owned Enterprises (SOEs)[1]. Despite these gains, economic growth has been slow to materialise, there have been frequent economic shocks such as the Global Financial Crisis (GFC) that have delayed reforms, and governments continue to hold majority ownership in many utilities, large firms, and banks.

Lack of progress was due to programs in many COOs that did not fully reflect market development initiatives in advanced economies, in the form of institutional reforms in core government agencies. PSO institutional capacity was developed to create and regulate markets, pursue structural reforms, and fund public goods. New institutional modalities based on contracts that aligned incentives between the public and private sectors were introduced, particularly in infrastructure sectors due to high risks for private investors associated with sunk costs and inability to monetise externalities. These instruments provided a mechanism that made infrastructure sectors contestable for private sector investors, without initiating significant structural reform. Governments found it necessary to develop in-house institutional capacity to prepare and manage contracts such as PPPs.

2.2 Demand and Trends in Infrastructure Financing in Developing Economies and COOs

2.2.1 Demand for infrastructure is growing and the financing gap is increasing

This section provides an overview of international trends in infrastructure financing (see **Annex 2** for further details). The data shows demand for infrastructure is growing, and investment is not keeping pace.[2] The annual global investment requirement is about $6.9 trillion up to 2030.[3] Demand is driven by the need for economic growth, urbanisation, SDGs and Paris Climate Agreement. High levels of public expenditure to mitigate the impacts of Covid 19 have further reduced fiscal capacity.

Despite economic reforms, public sector continues to dominate infrastructure investment. In 2017 public sector accounted for 83% of infrastructure investment.[4] SOEs accounted for 66% of total public investment, with ministries accounting for the balance. Latin America and the Caribbean has achieved the greatest level of success attracting PSP at 40% of investment (**Figure 2**). Europe and Central Asia (ECA) had 6% PSP, just ahead of Sub Saharan Africa (SSA) at 5%. PSP accounts for 10-20% of investment in transport, energy and water (**Figure 3**). Most public sector (87%) infrastructure investment is concentrated at the national level. Municipal governments account for about 8% of infrastructure investment.

Figure 2: Infrastructure Investment by Region, by Sponsor, 2017 (% Total)

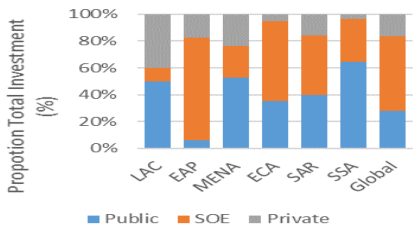
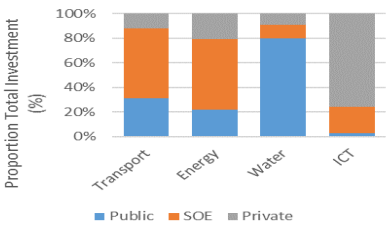


Figure 3: Infrastructure Investment by Sector, by Sponsor, 2017 (% Total)



Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

PPPs have increased available sources of finance over the last 20 years, but volumes remain small as a proportion of total infrastructure investment. Data from WBG's PPI database shows a downward

trend in private investment in developing countries from 2010 to 2020. Investment in PPPs tend to be concentrated in a small number of countries and sectors, and about 80% occurred at the national level.

2.2.2 *Infrastructure Investment by Region*

Asia, including East Asia and the Pacific (EAP) and South Asia Region (SAR), attracted more infrastructure investment than all other regions combined. A small number of countries in each region tend to dominate private infrastructure investment. EAP has become increasingly dominant in PPPs, mainly due to China, which accounted for 69% of regional PPP investment. LAC had the highest share (40%) of private investment, driven by countries such as Brazil.

In ECA, the main driver of private investment was the PPP program in Turkey. Other ECA countries with PPP programs include Armenia, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kosovo, Serbia, Ukraine and Uzbekistan. The Middle East and North Africa (MENA) region is a minor source of PPPs, although activity is occurring in Egypt, Jordan, Morocco, and Tunisia.

2.2.3 *Infrastructure Investment by Sector*

About 50% of total investment in 2017 was in energy (80% public), 45% in transport (88% public), 4% in water (80% public) and 1% in information and communication technology (ICT) (34% public). SOEs dominate transport and energy, public sector (ministries and municipalities) in water.

In the energy sector, SOEs dominate investment in EAP, whereas private sector is the main source of investment in LAC. At the sub-sector level, SOEs are dominant in generation, transmission and distribution, with private investment mainly occurring in generation and distribution. Energy accounted for about 40% of private investment in 2019, with 80% in electricity, and 20% in natural gas. About 60% of private energy investment was in renewable energy (RE), particularly solar PV. These projects relied on government funded Feed in Tariffs (FITs) to cover the cost of public good climate benefits.

Most transport finance comes from the public sector, with private sector making a minor contribution across all regions. Private sector only makes a material contribution (about 50%) in ports, due to their dollarized revenues, and ability to rely on user revenues. Despite the low overall level of investment, transport has increased its share over time, accounting for about 50% of PPP investment in 2019. Roads accounted for 59% of private investment, followed by railways, ports and airports. Most of the private road investments in 2019 were in China and it was sponsoring many of the PPP transport projects in other regions under the Belt and Road Initiative (BRI).

Municipal water, sewerage, and solid waste are minor areas of private investment.

2.2.4 *Sources of Financing for Infrastructure*

Public sector is the most important source of funding for infrastructure. Public sector projects used a debt to equity financing ratio of 41:59, indicating a heavy reliance on public sector funding. PPPs relied on more debt than public sector projects, having debt to equity ratio of 70:30, in most cases all of it sourced privately. Most debt finance for public and private sector projects came from international markets. SOE infrastructure-project investment commitments in China accounted for 95% of locally sourced debt.

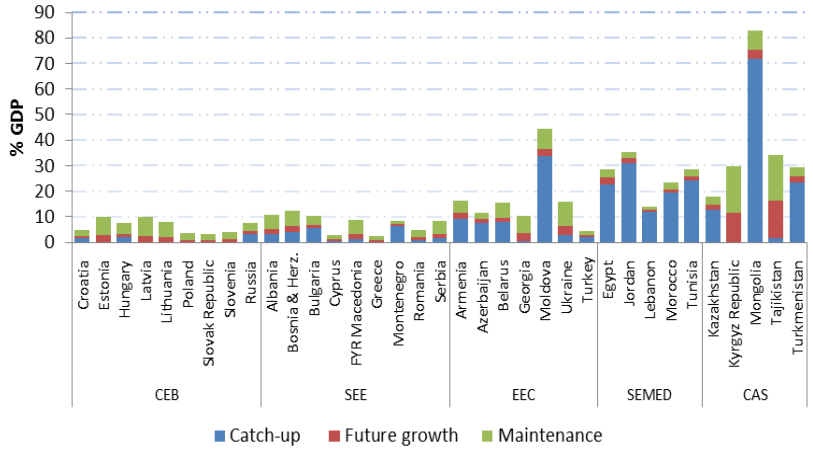
Development Finance Institutions (DFIs) were the most important source of debt finance (30% of investment commitments), with 94% being allocated to public sector projects. MDBs were the dominant DFIs financing public sector projects (42% of public sector debt), followed by bilaterals (30%). Bilaterals were more prominent financing PPPs (24% of PPP debt), compared to MDBs (12%).

2.2.5 Demand for Infrastructure Finance in COOs

EBRD's Transition Report 2020-21 prepared a review of state involvement in COOs. The report noted that SOEs in COOs are concentrated in electricity, transport, and water, and account for more than 90% of infrastructure provision. Governments view state ownership as an important mechanism to stabilise employment during economic shocks and in disadvantaged regions. SOEs in COOs continue to account for about 50% of state employment. There are continued and large inefficiencies in the delivery of state services, and significant under investment in infrastructure. SOEs often set prices below market rates, crowding out private investors. Despite these concerns, there appears to be limited appetite in COOs to pursue sector wide reforms that might negatively impact on state employment, and delivery of public goods.

EBRD's Transition report for 2017-18 estimated the investment need for infrastructure within COOs. Investment was required mainly in roads (50%), followed by energy (32%), railroads (10%), mobile (5%), and water and sanitation (2%). Investment needs vary across countries in terms of the requirements for expansion, versus maintenance. In Central Europe and Baltics (CEB), South Eastern Europe (SEE) and Eastern Europe and Caucasus (EEC) regions, infrastructure demand is mainly for maintenance, whereas in the South Eastern Mediterranean (SEMED) and Central Asian (CAS) regions most demand is to expand the infrastructure stock (**Figure 4**).

Figure 4: COO Infrastructure Investment by Country, Region & Purpose (% GDP)



Source: Transition Report 2017-18, EBRD

The SDGs and the 2015 Paris Agreement obligations will add to these investment needs. The Paris Agreement requires its signatories to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit that increase to 1.5°C. The International Energy Agency issued a roadmap for a global energy sector in 2021 that meets net zero emissions by 2050. The roadmap indicates the global economy will increasingly run on electricity, with electrification led by road

transport, and require extensive networks of charging stations for electric vehicles (EV). Electricity supply will come mainly from renewables and require the current electricity transmission system to triple in size.

Governments are facing fiscal constraints due to rising public sector debt, compounded by the COVID 19 crisis and stimulus packages. Bureaucratic constraints make it difficult for national governments to finance sub-national governments (SNGs), where a large proportion of demand for infrastructure is occurring due to rapid urbanisation, and they are primary sources of climate emissions. SNGs face complex and lengthy budget appropriation procedures. Funding allocations are often insufficient, and earmarked to areas unrelated to investment needs. Local governments have few own sources of funding and they are subject to highly restrictive borrowing constraints. Most SNGs do not have a credit rating, and financiers view them as high risk due to their lack of control over sources of funding.

Despite the shortfall in investment, PPI data shows PSP in infrastructure in COOs is low by world standards and declining over time (See Annex 2, section 2.5). As a large proportion of these demands come from public goods, where most benefits cannot be fully monetised, PPPs based on availability payments, or viability gap payments will be required to attract private finance to meet these demands.

Box 2: Best Practices for Facilitating Private Sector Financing of Infrastructure

There has been a growing international acknowledgement of the importance of reducing the infrastructure gap, and the need to address constraints on the increased use of private finance (see Annex 3). The G20 has stressed the need to scale up infrastructure investment and mobilize more private capital. A set of Quality Infrastructure Principles (QII) emphasise a focus on infrastructure governance including Value for Money (VFM), life cycle costs, climate resiliency, and fiscal affordability within the medium-term fiscal framework of the country. MDBs such as the WBG and Asian Development Bank (ADB) have formally recognised these Principles.

Institutional capacity within governments is critical to reduce the infrastructure gap. Public Investment Management Assessments (PIMAs) carried out by IMF found on average countries lose 30% of potential benefits of public investment in infrastructure due to process inefficiencies. Countries are better at designing public investment management institutions than managing them effectively. There are a range of alternative PPP modalities that can be developed by governments, and preferred structures have evolved over time (see **Appendix 4**). WBG has prepared several studies on "Procuring Infrastructure PPPs". These studies assess the legal and regulatory frameworks and good practices that govern PPP procurement across 135 economies that show the importance of developing both upstream and downstream institutional capacity (see **Annex 5**). Similarly, the EIU prepared a series of regional studies of countries' capacity to develop PPPs, which reinforce the WBG study findings (see **Annex 6**)

2.3 MDB Operations to Promote PSP and Lessons

2.3.1 MDB Infrastructure Operations

Financing of infrastructure is a core business of MDBs, through direct financing of public infrastructure, and non-sovereign financings for corporatisation, privatisation and PPPs. The MDBs all offer a similar range of products including sovereign guaranteed loans for direct financing of infrastructure, and in some cases finance for maintenance, project preparation and guarantee funds. PSOs

usually retain responsibility for policy dialogue, and provision of advice on upstream regulatory and institutional reforms designed to facilitate PSP using non-reimbursable grants.

MDBs offer non-sovereign guaranteed debt and equity instruments for private sector financings through separate private sector operations. Most MDBs offer political risk and partial credit guarantees, and more recently MIGA has started offering non-honouring guarantees to credit enhance public sector offtake arrangements for PPPs. IFC provides independent advisory services for PPP project transactions on a partially commercial basis. In 2019, IFC created a new Upstream Department, which develops institutional capacity to prepare projects and create project pipelines.

2.3.2 Lessons from Evaluations

There are many evaluations of critical determinants of public sector reform and engagement with the private sector through corporatisation, privatisation and PPPs (see **Annex 7**).

- **MDB Evaluations**

External evaluations from MDBs such as the WBG and IMF highlight the growing importance of SOEs in the global economy, coupled with systematic under-performance relative to private sector firms. Reviews of determinants of programmes facilitating PSP highlight:

- The importance of country diagnostics;
- Enabling conditions for private investment; and focus on incremental rather than radical reform;
- Difficulties introducing reforms on a sector wide basis, with engagement occurring in sector components such as ports and renewable power generation, primarily at the national level;
- Lack of capacity of public sector institutions and regulatory bodies in infrastructure sectors to enforce regulations, particularly for pricing and competition;
- A shift away from PSP to new goals such as inclusiveness and climate change;
- The importance of assessing institutional capacity upfront and providing well focused support;
- Weaknesses in programme planning, monitoring and evaluation functions; and
- Limited availability of data, particularly on public sector investment in infrastructure.

PPPs have been an important feature of operations for MDBs pursuing PSP in sectors such as transport and energy. ADB prepared an evaluation of PPPs for the period 2009-2019.

- ADB's upstream work on PPPs had not been able to achieve transformative change in the public sector due to high costs and risks of projects.
- Minimal advocacy of linked sectoral and SOE reforms had undermined ADB contributions.
- ADB's organisation arrangements focussed on project procurement, reducing incentives to develop upstream capacity needed to support preparation of PPP projects.
- There was no shortage of finance, but there were insufficient risk mitigation products available to address needs of private sector developers.

- There was a lack of coordination, and Key Performance Indicators (KPIs) were focussed on number of projects approved, reducing incentives to deliver upstream policy and advocacy support. Monitoring systems did not follow projects after financial completion.

IDBG prepared an evaluation in 2017 of PPPs in infrastructure. The study noted:

- PPPs are not easy fixes for governments and require institutional developments (including project preparation capacity) that take time to consolidate before delivering their potential.
- Potential demand for PPPs needs to be assessed through country diagnostics, define priorities for intervention, establish a PPP focal point in the organisation, and assess the current PPP capacities.
- Staff incentives for staff required reform and should reward mobilization from private investors, and collaboration (e.g., for public sector staff to identify PPP opportunities).
- Analyse infrastructure projects in the pipeline and advise countries on the most suitable delivery model for the projects; and explore the use and development of new financial and advisory products.
- Strengthen the results framework for PPP operations so operations routinely review VFM; design a specific PPP knowledge strategy to incorporate lessons of experience.

- **EBRD Evaluations**

EVD and staff evaluations echo many of the findings of the MDB evaluations, particularly the importance of aligning institutional incentives with results, and a VFM focus. Key lessons include:

- Staff not rewarded for pursuing policy related work, or implementing complex projects.
- The need to provide support to government agencies to build up experience to design PPP projects that balance benefits and costs to both public and private sector.
- Lack of engagement of staff in provision of policy advice on PPPs.
- Potential for conflicts of interest between policy advice and provision of financing.
- High levels of financial distress in PPPs financed with foreign currency, and lack of engagement in institutional capacity within governments upstream and downstream from project preparation.
- Declining levels of financial additionality due to high levels of liquidity in COO financial markets.
- EBRD TI metrics did not align with VFM principles, particularly in areas such as refinancing of projects.

3. EBRD Support to Public Sector Operations: Key Findings

The PSO evaluation is presented under the following headings: (i) EBRD's Approach to Infrastructure Finance; (iii) Governance, resources and processes; (iv) Are Public Sector Operations objectives relevant and likely to be additional?; (v What has been the results of PSOs?, and (vi) How efficient are PSOs?.

3.1 EBRD's Approach to Infrastructure Finance

Key Findings:

- EBRD has a mandate to promote private investment and it can engage with public sector directly through sovereign financing or indirectly by financing SOEs and PPPs
- EBRD's corporate strategies have evolved over time, focussing on structural and corporate institutional reforms until 2016, and then redefining transition impact goals as six qualities
- In 2016, corporate strategy documents were redefined, with the SCF providing guidance on strategic direction and SIPs detailing operational plans
- In 2020 the SCF prioritised capacity building in public and private sectors
- Since 2016, country strategies are based on diagnostic assessments, and identify areas where EBRD may provide financing using a bottom up project development model
- Sector strategies provide details on how EBRD will provide support in infrastructure sectors, and thematic strategies such Early Transition Countries and Green Economy Transition define how cross cutting goals will be met
- EBRD's Board often delegates responsibility to management for approving financings under Framework Agreements
- The Board monitors performance using transition indicators contained in country reports

3.1.1 Overview

EBRD's mission is to create sustainable market economies. EBRD has a mandate to work in both the private and public sectors. This capability enables EBRD to combine policy engagement, capacity building, and investment, to help unlock private sector financing opportunities. Efficient state institutions are integral to private sector development and market expansion. The provision of public goods such as the correct pricing of environmental externalities is important for the private sector to operate. EBRD supports these activities through private initiatives such as privatisation and development of PPPs.

EBRD's PSO supports this mission through direct and indirect engagements. Direct engagement occurs through grants for institutional capacity building and market reforms and sovereign guaranteed lending to develop facilities. Indirect support occurs via financing state owned and/or controlled enterprises and banks, and sub-sovereigns (including municipalities) without sovereign guarantees. Both types of financing are public for the purpose of procurement. Only sovereign lending benefits from standard concessional sovereign pricing.

3.1.2 Corporate Strategy Framework

Article 1 of the Agreement Establishing the Bank (AEB) states "the purpose of the EBRD shall be to foster the transition towards open market-oriented economies and to promote private and entrepreneurial initiative". In 1997, TI was defined as: (i) the creation, expansion and deepening of markets; (ii) the establishment and strengthening of institutions, laws and policies that support the market (including private ownership); and (iii) adoption of behaviour patterns and skills that have a market

perspective. TI at the country level from 1997-2014 was measured using weighted indicators of structural and institutional reforms across sectors, aggregated in Assessment of Transition Challenges (ATCs).

In 2016 the concept of TI was revised to "support for the development of sustainable market economies". TI is elaborated using six transition qualities (TQs): (i) Inclusive; (ii) Green; (iii) Resilient; (iv) Competitive; (v) Integrated; and (vi) Well Governed. In effect, the TQs relabelled structural reform and institutional capacity building as Competitive, Integrated and Well Governed, and they show how transition is achieved through efficiency improvements. The TQs augmented these indicators with new social and environmental indicators (Inclusive, Green, Resilient), which define what EBRD will achieve through improvements in effectiveness.

Assessment of Transition Qualities (ATQs) are calculated at the country level. ATQs measure the gap between advanced transition countries and the individual COOs along each of the six quality dimensions. The ATQs enable priorities and targets to be established that are operationalised in country strategies (ie what will be achieved), and explained in sector strategies (ie how the targets will be achieved). The ATQs prioritise EBRD resources, both investment and policy, on the most important levers in COOs that can generate systemic improvements in the quality of markets.

The EBRD's medium-term strategic orientation is set out in five yearly documents. Prior to 2016, Capital Resources Reviews (CRRs) defined the corporate strategy. The CRRs for 2006-2010 and 2011-2015 prioritised restructuring banks following the GFC, and scaling up energy investment to increase security and meet climate change goals. EBRD ceased lending operations in Russia in 2014 and started operations in SEMED region in 2015. In 2016, Strategic and Capital Frameworks (SCF) replaced CRRs to provide more flexibility due to the rapidly changing environment EBRD in which was operating.

The first SCF supported COOs to 'Re-energise Transition'. In 2020 the Board approved the second SCF for 2021-2025, and the objective is to preserve and accelerate transition in COOs. There are three cross cutting themes of transition to a green low carbon economy, promoting equality of opportunity, and accelerating the digital transition. EBRD will continue to strengthen operations with respect to mobilisation, donor resources and policy engagement. The SCF noted the possibility of EBRD expanding its geographic scope to include countries in SSA and Iraq. There had been an increased role of the state in COO economies following Covid-19. EBRD would focus on good governance and sound institutions, its private sector capabilities, and selective engagement with the public sector, particularly at the sub-sovereign level.

The Strategy Implementation Plans (SIPs) operationalise the SCFs through a rolling three-year budget and corporate scorecard targets. The scorecard includes composite performance assessments (CPA) of changes in TQs. CPAs are supported by operational indicators such as Annual Business Investment (ABI), Annual Mobilised Investment (AMI), Disbursements, Return on Required Capital (RORC), and institutional indicators (eg number of operations, cost to debt ratio), and resource allocation (budget parameters). The corporate scorecard targets are cascaded to departmental, and staff performance targets, and provide a basis for staff remuneration through bonus payments accounting for 15-20% of staff pay. In the case of bankers, bonuses are tightly linked to volumes of loan approvals.

The first SIP for 2016-2018 reflected the SCF and indicated EBRD would re-energise transition. The SIP for 2017-19 noted TI alignment with the SDGs, the COP21 agenda and Financing for Development (ie increase mobilisation of private finance). EBRD would continue to strengthen engagements in the Early Transition Countries (ETC) and the Western Balkans, and develop its operations to full potential in the

SEMED Region. The SIP for 2018-2020 noted continued high levels of economic and political uncertainty at the local and broader geo-political levels. The SIP focus for 2020-22 was on continuity. The SIP for 2021-23 noted the profound uncertainty arising from Covid 19, and the operating capacity of EBRD through prolonged remote working. Deteriorating credit margins in the market, and continued equity volatility contributed to a challenging outlook.

3.1.3 Country Strategies

Country strategies have drawn on country diagnostic studies since 2016. These diagnostics identify the main obstacles to entrepreneurship and private sector development and help shape the EBRD's strategic priorities and project selection.

Country strategies bring together EBRD's long-term strategic objectives, the applicable strategic initiatives, the country transition challenges and opportunities. The strategy identifies EBRD's activities in the country, including policy dialogue, TCs and investments. Country strategy objectives reflect an assessment of needs based on ATQ gaps relative to advanced countries, opportunities for investment, and capacity of EBRD in its areas of expertise, business model and complementarity to other DFIs.

EBRD country strategies provide guidance on how EBRD will measure results. In 2014, EBRD introduced Country Strategy Results Framework (CSRFs), and Country Strategy Delivery Reviews (CSDR) to provide the Board with annual information on progress against target activities. The CSDRs report on changes in transition gaps for COOs, and country level indicators in the country strategies.

3.1.4 Sector Strategies

Sustainable Infrastructure Group (SIG) is one of three core business lines in EBRD. SIG is responsible for preparing strategies for energy, transport and municipal infrastructure. The main features of these strategies are summarised in **Annex 8.**

Up to 2018, infrastructure sector strategies emphasised structural reform. The energy strategy pursued reform through unbundling of distribution and generation, corporatisation, moves to cost recovery, and in some cases privatisation. In the transport sector, rail is unbundled by separating tracks from rolling stock, corporatizing rolling stock in freight, moving prices to full cost recovery, and allowing third party access to tracks. In the port sector, land-lord models are pursued where infrastructure is leased to the private sector. In roads, autonomous agencies are established, supported by maintenance funds. Municipal infrastructure focused on decentralisation, corporatisation, cost recovery, and in some cases PSP in areas such as urban transport. Post 2018, SIG strategies focused on efficient and sustainable energy, transport and municipal infrastructure, with a priority on helping countries transition to a green, low-carbon trajectory.

The sector strategies also presented a model of transition for operations. Initially lending in COOs in the early stages of transition tends to be to the sovereign or through sovereign guarantees to increase capacity and facilitate structural reform using loan covenants and policy dialogue. Over time EBRD financing was expected to become progressively more commercial. As regulatory capacity improves and financial markets deepen, EBRD provides support for corporatisation, privatisation and PPPs.

SIG projects use TC grants for project preparation and promotion of transition through sector unbundling and institutional capacity building. Loans are used to develop physical infrastructure and covenants help sustain structural reforms. Important current SIG initiatives include: (i) support for PPPs

through Sustainable Infrastructure Policy and Project Preparation (SI3P) advisory services, policy engagement, financing investment and secondary sales; (ii) advancing electrification and digitalisation of infrastructure; and (iii) sub-sovereign lending for the Green Cities programme.

3.1.5 Thematic Strategies

The primary thematic priorities for infrastructure have been the Investment Climate and Governance Initiative (ICGI), ETC initiatives, Green Economy Transition (GET), Strategy for the Promotion of Gender Equality, and mobilisation. The ICGI (2014) promotes policy reform in areas that directly affect the private sector, particularly through EBRD's Legal Transition Programme to strengthen the legal framework for markets.

The ETC initiative began in 2004 and it prioritises support for ten countries of operations with some of the widest transition gaps in EEC and CAS. These countries include Armenia, Azerbaijan, Belarus, Georgia, Kyrgyz Republic, Moldova, Mongolia, Tajikistan, Turkmenistan and Uzbekistan.

The Board approved GET in 2015, and a new GET 2.1 Approach for 2021 - 2025 reflects a scaling up of green financing. The goal is to raise the share of green finance to at least 50% of ABI and reduce net CO^2 by 25 to 40 million tonnes by the end of the SCF period. In 2021, shareholders agreed on the full alignment of EBRD activities with the Paris Agreement by the end of 2022. EBRD will work with national authorities to develop national climate action plans to achieve Nationally Determined Contributions (NDCs), and supporting policies, regulations and standards with the engagement of the private sector.

The Strategy for the Promotion of Gender Equality 2016-2020 was approved in late 2015. It has three specific objectives: i) improving access to finance and business support for women-led businesses, ii) increasing access to employment opportunities and skills for women, and iii) improving access to services.

In 2021, management presented a Mobilisation Approach for the Board. Its primary purpose is to develop new instruments and incentives to pursue both EBRD own financing, and third party private investment enabled by EBRD. The proposed Approach does not include an agreed definition of mobilisation. For the purpose of this evaluation mobilisation is defined as follows:

> **Total Investment** = Own finance + Mobilisation
>
> **Own finance** = ABI – Indirect Mobilisation
>
> **Mobilisation** = Direct Mobilisation + Indirect Mobilisation
>
> **Direct Mobilisation** = Private Finance caused by EBRD, which is not intermediated via EBRD's own balance sheet with its associated privileges such as preferred creditor status (eg advisory services, guarantees, syndications etc)
>
> **Indirect Mobilisation** = Mobilisation intermediated via EBRD's balance sheet (eg B Loans, Unfunded Risk Participations etc)

Indirect mobilisation is broadly equivalent with AMI, as presently structured. The distinction between direct mobilisation, and indirect mobilisation is important as the potential to leverage private finance is much greater if it is direct. Direct mobilisation is not constrained by the size of EBRD's balance sheet, which is small compared to COO infrastructure investment needs. In this context, it is important to note the definitions of direct mobilisation and indirect mobilisation do not follow the definitions agreed by MDBs for Private Direct

Mobilisation (PDM) and Private Indirect Mobilisation (PIM), which differ based on whether an MDB earns a fee demonstrating causality.[13] The main problem with PDM is the lack of distinction between mobilisation, which is a measure of effectiveness, and indirect mobilisation is a measure of efficiency. PIM is not considered in the definition of mobilisation used in this evaluation.

3.1.6 Projects and Framework Agreements

Most infrastructure projects use a combination of TC, debt, and in some cases equity. Project documentation is mainly organised around loans, and there maybe references to TCs, particularly if they are used for transactional purposes. Many RE and municipal projects are part of Framework Agreements (FA), sometimes referred to as Integrated Approaches. Under these agreements, the Board delegate's authority to management to approve project financing that fall within indicators agreed in Board documents. FAs streamline the process of assessing groups of projects that contribute to a common set of transition objectives through a set of standardised criteria. The Board has set the threshold delegated authority for approval for sub projects under FAs at EUR25 million.

3.1.7 Result Indicators for Monitoring and Evaluation

Investments need to comply with EBRD's Sound Banking and Additionality investment criteria. Sound banking is based on minimum financial criteria such as risk-adjusted return on capital (RAROC).The Additionality principle is defined in the Agreement Establishing the Bank (Article 13, vii), and all projects must demonstrate financial and non-financial additionality. To date, financial additionality has referred to benefits such as longer tenors and not crowding out the private sector, particularly by under-pricing private finance. With the introduction of the Mobilisation Approach, the focus may shift to include the extent private finance is crowded in.

Non-financial additionality does not have a clear definition. Until 2014, and similar to other MDBs, projects were required to calculate an economic internal rate of return (EIRR) to demonstrate non-financial additionality. This indicator measured expected TI based on detailed projections on expected sources, magnitude and timing of costs and benefits. After 2014, non-financial additionality for infrastructure has mainly been justified on the grounds of developing environmental and social action plans (ESAPs) at the project level, rather than looking at improvements in the broader policy and institutional environment.

Following introduction of TQs, each EBRD investment project is assessed ex-ante to identify its expected contribution to TI. Expected Transition impact (ETI) scores take into account ATQ gaps at the country level, country strategy priorities, and two priority TQs at project level. ETI scores draw on indicators in a Standardised Compendium, which set targets in the design phase.

ETIs are calculated using a questionnaire embedded in the Transition Objective Measurement System (TOMS). Projects are reviewed by the management Operating Committee, before submission to the Board for approval. All project financings approved by the Board include a Results Framework with indicators to measure progress.

Project progress is monitored against the targets in the results frameworks. Typically, reviews occur once per year, to assess the extent of achievement of TI and financial objectives and recorded in Transition

Impact Monitoring system (TIMS). A final rating is assigned at completion, which is used to calculate Portfolio TI (PTI) scores. Covenants in loan documents help preserve TI post completion. During project implementation, EBRD monitors and assesses progress against the indicators to see if projects deliver the inputs and activities defined in board approval documents. PTI scores are calculated at project completion/ exit and measure progress against ETI indicators.

3.2 Governance, Resources and Processes of EBRD's Public Sector

Key Findings:

- SIG accounts for almost 100% of EBRD's engagements with the public sector
- SIG finances energy, transport, and municipal infrastructure in its COOs
- EBRD operations are guided by policies for sovereign pricing, public sector procurement, financing private concessions, environmental and social impacts, and concessional financing
- Infrastructure departments were organised by sector until 2019, and then shifted to a geographical and sector structure under one department
- EBRD financing is classified as private v state, or sovereign v non-sovereign, and these classifications have implications for pricing and method of procurement
- State and sovereign financing have been capped in corporate scorecards, the measures are highly correlated, and they currently sit at about 20% of ABI
- Donor co-finance is an important source of grants for infrastructure institutional capacity building, project preparation and improving affordability using capex grants

3.2.2 Markets and Products

SIG finances energy, transport, and municipal infrastructure in its COOs. Infrastructure projects may be eligible for EBRD financing if they are likely to be profitable, supported by sound business plans, support corporate governance and commitment to tariff reform, and benefit the local economy. Financing products can be in the following forms:

Debt

Loan minimum of EUR5-15 million, and short to long-term maturities from 5 - 18 years. Project-specific grace periods of up to 4 years may be incorporated. Debt instruments include:

Own Financing:

- Sovereign, and sovereign guaranteed loans to SOEs, with financing up to 100%;
- Loans to the private sector, with financing up to 35%;
- Project finance loans (including PPPs) , with financing up to 35%;
- Foreign currency (FCY) and Local Currency (LCY), with fixed or floating interest rates;

Co-financing:

- Debt co-financing, working with commercial banks and DFIs;
- Syndication of non-sovereign loans under preferred creditor status; and
- Access to capital markets.

Equity

Equity maybe offered for privatisation and initial public offering (IPO) or PPP. Investing with majority sponsor to reduce equity burden and add value, up to a maximum of 25% total equity. Equity instruments include:

Own Financing:

- Common or preferred stock;
- Mezzanine equity and subordinated debt;

Co-financing:

- Infrastructure funds.

Technical Cooperation

EBRD brings in additional TC to economically viable projects. TC grants can be transactional or non-transactional. Transactional grants fund project preparation, capex grants to improve affordability, or first loss instruments to enhance the risk profile of financings. Non-transactional grants fund upstream institutional capacity building. TC grants come from EBRD's SSF, and external donors.

3.2.3 Bank Policies

Financing must comply with EBRD policies. The most important policies for PSOs consist of the Sovereign Pricing Policy, Procurement Policies and Rules (PPR), the Financing Private Concessions Policy (FPCP), Environmental and Social Policy (ESP) and use of Concessional Financing.

(i) Sovereign Pricing

Similar to other MDBs EBRD has a uniform price for sovereign loans of LIBOR plus 1%. Where projects have exceptional TI, risks are very low, or financing very large, or short tenor of less than 7 years, the margin can be reduced by up to 50 basis points (0.5%) below LIBOR. Sovereign loans accrue commitment and front-end fees.

(ii) Procurement Policies and Rules

PPR sets out rules for procurement of goods, works and services in EBRD financed operations involving the public sector. EBRD will help COOs transform their public administration systems so they are consistent with the needs of market economies. EBRD promotes the application of good international practices stipulated in the ESP and as further detailed in the legal documentation for projects.

(iii) Financing Private Concessions Policy

FPCP details EBRD's approach to the financing of concessions awarded by the public sector to the private sector. EBRD will ensure the procurement standards applied by the public sector entity awarding the concession follow a competitive tender process. When EBRD finances a private sector entity that has entered or will enter into a Concession Agreement, and the operation is classified as private sector. EBRD will not require the private sector entity to follow a prescribed procurement method. However, EBRD will satisfy itself the private sector entity employs sound and cost effective procurement methods. Contracts must be negotiated on an arm's length basis and be in line with market prices.

(iv) Environmental and Social Policy

The ESP is aligned with the IFC Performance Standards/ Equator Principles and EU environmental standards. Most infrastructure projects have environmental and social impacts arising from projects, managed through ESAPs that form part of loan documentation.

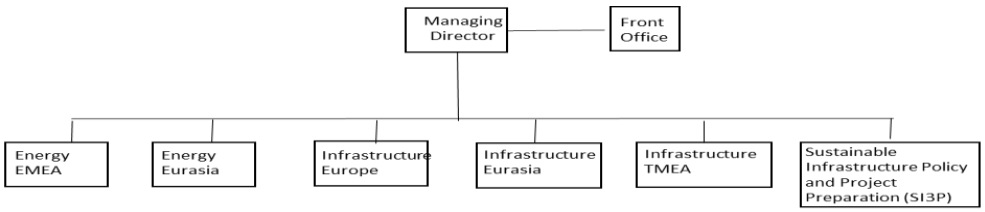
(v) Concessional Financing

EBRD does not have a formal policy on concessional finance, but it does comply with DFI Enhanced Principles approved by heads of MDBs in 2017. Blended concessional finance is an important mechanism to promote mobilisation of private finance. Infrastructure is the predominant sector for DFI concessional commitments, in many cases for climate change-related projects such as RE generation projects that rely on concessional FITs to make PPP projects commercially viable. Concessional finance should be additional, crowd in finance using minimum concessionality, be commercially sustainable, reinforce markets by correcting market failures, and promote high standards in corporate governance, environmental impact, social inclusion, transparency, integrity and disclosure.

3.2.4 Organization Structure

Infrastructure operations is one of three major banking operations in EBRD, in addition to Financial Institutions and Corporate banking. Banking is headed by Vice President Banking, beside Vice President Policy and Partnerships (VP3), both reporting to First Vice President & Head of Client Services Group. Until 2019, infrastructure banking was organised by sector with separate departments for energy, transport and MEI, with a focus on financing projects. SIG was created in 2019 under a Managing Director, with 5 banking teams organised along geographic and sectoral lines, and a SI3P grant support unit (**Figure 5**).

Figure 5: SIG Organization Structure



Source: SIG

Energy departments are organised regionally, consisting of Energy Europe, the Middle East and Africa (EMEA) and Energy Eurasia. These departments finance projects across the energy sector, including electricity generation, transmission and distribution, and transportation and distribution of gas.

Infra departments encompass the transport and municipal teams and they are organised regionally. Infra Europe covers countries in SEE, CEB, Ukraine, Cyprus and Greece. Infrastructure Turkey, Middle East & Africa (Infra TMEA) covers Turkey and the SEMED region. These departments provide finance for infrastructure in seaports, airports, roads, rail, urban transport, water, and waste management.

SI3P established in 2019 and it provides advice and support to SIG teams on the mobilisation and management of donor funds in support of investment and non-transactional policy dialogue projects. SI3P administers the IPPF, which maintains a pool of teams of pre-qualified consultants that can be rapidly mobilised to prepare and transact projects. SI3P has a policy team of 7 staff, a PPP project unit

of 5 staff that oversees IPPF projects, a Project Preparation and Implementation Unit that is overseeing the Green Cities Programme of 11 staff, and a Grant Implementation Unit of 10 staff.

SIG has a total staff complement of about 220 people at Headquarters and Resident Offices. SIG finances around 90 projects per year, investing approximately EUR 3.5 billion annually.

3.2.5 Project Processes

SIG works closely with other departments such as SI Debt Banking Portfolio, Equity Funds, Energy Efficiency and Climate Change (E2C2), Procurement Operations and Delivery Department (PODD), Donor Co-financing (DCF), Office of the General Council (OGC), Risk Management, Environment and Sustainability Department (ESP), Economic Policy and Governance (EPG) and Country Strategy and Results Management team (CSRM).

Bankers originate projects, prepare initial and final reviews approved by Management Committees and oversee implementation of financing up to final disbursement. They work closely with E2C2 to prepare green project designs, ESD to prepare ESAPs, Risk Management on structuring, and OGC to prepare the legal contracts. Economists in EPG assess the TI potential of projects and FAs and set the ETI scores using indicators from the Standard Compendium. The Board approves financing in accordance with TI, bankability and additionality criteria.

PODD oversees procurement in accordance with EBRD policies. SI Debt Banking Portfolio and Equity Funds are responsible for portfolio management. After loan approval, bankers prepare regular project monitoring reports, ESD monitors ESAPs, and Risk management prepares credit assessments. EPG reviews and updates ETIs in TIMS, and prepares PTIs at project completion, defined as 18 months after final disbursement. CSRM prepares annual CSDRs for the Board on project progress against ATQ, ETI and PTI scores. Bankers prepare Operational Performance Assessments (OPA) at project completion of loans and equity investments, and Project Completion Reports (PCR) for donors on the use of TC. EVD validates a sample of OPAs and prepares analyses of project clusters, and corporate, sector and thematic studies.

Apart from grants sourced from SSF, TC is not part of EBRD's capital, and PCR reporting occurs in accordance with donor requirements. Bankers are not required to upload terms of reference and regular reports on TC progress against objectives in EBRD's IT systems, resulting in an important gap in availability of information on upstream and downstream support activities.

3.2.6 Public Sector Financing

(i) Overview

When engaging with the public sector, EBRD classifies loans according to both the nature of the entity receiving the financing (Private versus State), and the terms of the financing and method of procurement (Non-Sovereign versus Sovereign).[14] These two classifications are not mutually exclusive, and it is possible to have financings classified as: (i) private non-sovereign; (ii) state non-sovereign and (iii) state sovereign (direct or guaranteed).

Projects are classified by type of entity as: (i) "State" if the national or local government of a COO owns or controls the entity receiving EBRD financing for its ongoing operations and it is not managed on a

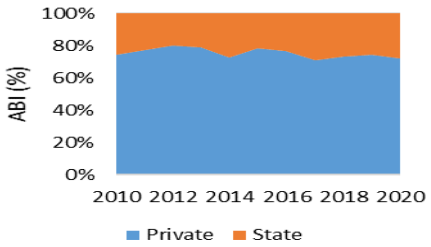
commercial basis; or (ii) "Private" if the operation is managed on a commercial basis. SOEs that receive finance for corporatisation, state banks that on lend finance to the private sector, and PPPs are "private", similar to other private sector firms.

EBRD also distinguishes PSOs when determining the applicability of procurement and pricing policies, and type of credit enhancement attached to the financing: (i) "Sovereign" loans are made directly to, or guaranteed by, a Recipient Member of the EBRD, and (ii) "Non-Sovereign" financing are made without a sovereign guarantee. Sovereign guarantees are irrevocable and underwritten by cross default clauses across all MDBs. In some cases, financing maybe classified as non-sovereign as it does not benefit from sovereign guarantees, even though the borrower is a national or sub-national public sector agency.

(ii) Annual Bank Investment

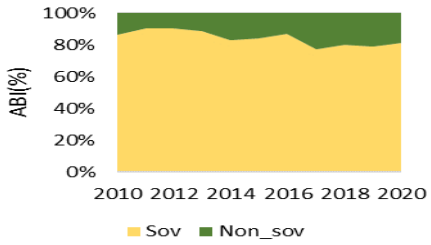
SIG staff's primary objective is to achieve ABI targets defined in the departmental scorecard, subject to projects meeting the minimum ETI score and complying with additionality, credit and ESD requirements. Volumes of State and Sovereign financing, as a proportion of total ABI financing, have been gradually rising over time in line with total EBRD financing approvals **(Figures 6 and 7).** State and sovereign financing are highly correlated and broadly similar, indicating that most state finance is sovereign guaranteed. State financing has been substantially less than the maximum of 40% defined in the AEB, consistently being about 20% of ABI over the evaluation period**.** In the SIP for 2020-2021, the corporate scorecard included a minimum non-sovereign share for ABI target of 80%. The SIP for 2021-2022 replaced this target with minimum private sector share of 75%.

Figure 6: Private v State (% ABI)



Source: EBRD Database

Figure 7: Sovereign v Non-Sovereign (% ABI)



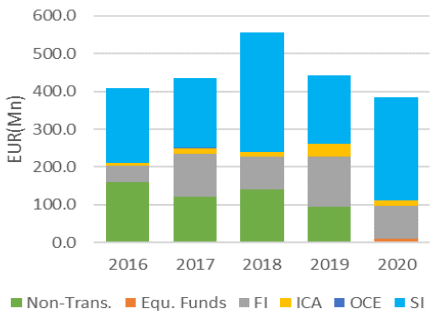
Source: EBRD Database

(iii) Donor Co-finance

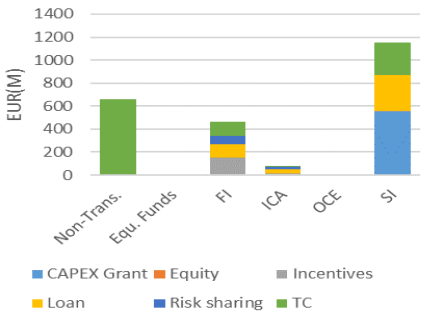
It is difficult to obtain reliable and informative data on grants. Data is only available from DCF from 2016 onwards. The DCF database is primarily set up to support donor reporting rather than strategy analysis. The database does not provide a breakdown of projects by activity, program, or output.

Figure 8: Grants by Department - Year

Figure 9: Grants by Department - Type



Source: DCF Database



Source: DCF Database

Grant data is split between transactional and non-transactional donor co-finance (Figures 8 and 9), with about 75% being allocated to transactions. DCF has only partially reconciled these figures by department. Nevertheless, the graphs seem plausible, and confirm statements in the sector strategies and the annual Donor Co-Finance reports. The figures shows the large proportion of donor co-finance used by SI department, and the majority of funds are supporting transactions rather than non-transactional policy and institutional capacity building.

3.3 Are Public Sector Operations objectives relevant and likely to be additional?

- **Relevance**

Relevance refers to the extent EBRD objectives reflect the needs and objectives of borrowers. The most important inputs for assessing relevance of PSOs are the country diagnostics and country strategies, followed by sector and thematic strategies, FAs and project documents. There is clear evidence of substantial unmet demand for infrastructure in COOs that confirms relevance of EBRD's infrastructure operations, but it is not clear how EBRD is meeting demand.

The country strategies from 2010-2018 provided an overview of EBRD's activities, the operational environment, and strategic orientations. These documents were about 60-70 pages in length and analysis was primarily qualitative. The focus of discussion was on political and macro-economic context, structural reform, access to finance, business and legal context, and social and environmental context. Strategic directions identified areas of operational priority for EBRD, such as balancing role of the state and private sector, broadening access to finance, enhancing regional integration, and promoting GET. These documents did not define institutional capabilities, investment and financing needs at the country level, prioritise EBRD initiatives, or provide TOCs, results frameworks or indicators to measure contributions to TI and measure progress.

EBRD produced a series of Country Diagnostic Papers in 2017/18. These documents are about 20 pages in length, and followed a similar format across countries. They analysed opportunities and constraints at the country level in the light of the six new TQs. The assessments looked at the structure of economies and economic performance using metrics such as growth in GDP, productivity levels, access to liquidity and foreign direct investment (FDI), and the role of the state. Critical constraints were identified, focussing on issues such as prevalence of SOEs, adequacy of regulations, procurement practices, progress on privatization programmes, capacity of the civil service, role of industrial policies, development of the banking sector, barriers to trade, quality of infrastructure, adequacy of frameworks for green growth and

inclusiveness of the skills base. Appendices showed how the constraints mapped onto TQs. Due to the brevity of the reports, analysis was limited, and most of the data presented consists of statistics at points in time, with no data on trends, or analysis of institutional and financial sector capabilities, and potential ways of improving performance. It is not clear how EBRD support could influence most of these metrics.

From 2018, country strategies adopted a slide format, which are about 30 pages long. The new format provides graphs of trends in EBRD financing and macro-economic indicators and cross sectional analysis of country performance relative to other countries under the new TQs and ATQs. Government priorities and EBRD reform areas agreed with the government are identified. EBRD priorities focus on activities such as privatisation and SOE commercialisation, reforms in financial and infrastructure sectors, strengthening of public administration, anti-corruption and rule of law. Social and environmental risks and an assessment of donor grant needs and their potential sources completes the strategy. The focus on TQs indicates that structural and institutional reform were no longer a priority, and were much less visible. There is no TOC, and results frameworks focus on Inputs, providing little insight on targeted results.

Taken together, the country assessments and strategies appear relevant to the strategic priorities of governments and EBRD, but are more like a strategic vision than a plan. The assessments provide a coherent picture of possible areas of support, but they are very broad, and there is no specificity on priorities. Possible actions are contingent on agreement of the government, EBRD's Board, and availability of donor funding. Country investment needs, and EBRD's expected outputs, outcomes and their contributions to TI are unclear**.** ATQs are based on a mix of efficiency goals (ie institutional and structural reform), and effectiveness goals (ie inclusiveness and mitigating climate change). Goals are very high level and indicators do not provide insight on the changes occurring and expected net benefits. There is no TOC, and little contextual information such as the government's infrastructure plans, availability of LCY finance, or details on fiscal or institutional capacity of the government to support reforms. Background on countries' access to finance, activities of other MDBs, and stage of development of capital markets ceased after 2016. There is no prioritisation of the constraints and opportunities, no discussion of expected EBRD outputs and outcomes, and no targets or baselines. The main basis of discussion are the TQs, but they have little meaning without TOCs and results frameworks with indicators on expected contributions to TI.

At the sector level, EBRD's infrastructure sector strategies showed a shift in focus over time from structural reform to sustainability goals in line with the GET initiative. Up to 2014, strategies provided guidance on the type of structural reforms each sub sector (energy, transport and municipal) would pursue in country strategies to develop sustainable markets. From 2014 onwards, the focus shifted to energy efficiency to improve competitiveness and mitigate climate change impacts. In the energy sector, promotion of RE generation was the priority, supported by the development of FITs, and auctions to allocate generation rights. Transport looked at how to improve energy efficiency of roads, rail, and ports, and pursue PPPs where feasible. MEI focussed on the development of green cities using Green City Action Plans (GCAPs), with limited reference to PSP.

These initiatives were in line with the GET initiatives, which now contain outcome measures such as tonnes of greenhouse gas (GHG) emissions avoided. This metric lacks context without GHG emission budgets at the country level. GHG savings are reported at the project level, and do not provide details on EBRD's expected contribution relative to the government and other DFIs. Overall, the sector and thematic strategies focus on how goals will be achieved, but provide limited insight to alignment with country goals, results frameworks or targets that provide information on expected outputs and contributions to TI.

The lack of information at the country and sector level has meant that framework and project approval documents play an important role in defining strategic relevance. This approach is in keeping with EBRD's bottom up project development model. RE and Municipal projects are often developed under FAs. Transport projects have made limited use of FAs due to the uneven distribution of projects over time across the region, making it difficult to define pipelines of projects. These arrangements have meant project board approvals are the main source of information on relevance. Information on projects under FAs are extremely brief and uninformative. Only a small proportion of road projects prepare EIRR estimates for projects with no details on underlying assumptions and they are not included in results frameworks. Some PPP projects refer to VFM studies, but they are not included in board documents and results not reported. Most of the discussion in board documents focusses on ETIs, and bankability metrics. There is no TOC, and results frameworks focus on inputs such as number of projects, or volume of ABI.

- **Additionality**

Additionality refers to the expected value addition derived from EBRD's participation in transactions and it is disaggregated into: (i) Financial Additionality (ie no crowding out and mobilisation); and (ii) Non-Financial Additionality (ie knowledge, innovation and capacity building).

Financial additionality for sovereign lending is low, crowding out seems likely, and there is no mobilisation. An essential feature of financial additionality is a requirement EBRD does not crowd out the private sector, and mobilises private sector finance. Almost all PSOs are denominated in FCY on the grounds infrastructure requires long-term finance. In the case of sovereign projects, FCY pricing is fixed at about 1% over LIBOR plus commitment and arrangement fees. Most MDBs follow this practice, with minor variations. The margin indicates a credit rating of "A" using Standard and Poors' classification, indicating a "strong capacity to meet its financial commitments". As most COOs have a credit risk rating of less than "A", and private sector firms do not benefit from a sovereign guarantee, it seems likely sovereign operations are crowding out the private sector in potentially contestable markets. For infrastructure, apart from RE, ports, and urban transport, most sub-sectors are not contestable without structural reform and/or use of PPPs. These types of reforms are only occurring to a limited extent, mainly in ports, RE and social sectors such as health. Sovereign loans do not indirectly mobilise additional private finance due to restrictions on MDBs extending sovereign guarantees to non-MDB parties.

Financial additionality for non-sovereign PSOs such as municipal lending and PPPs have potential for mobilisation, but programme and project designs limit impact. The most important documents at the municipal level are the GCAPs, which use conventional public sector planning principles where a detailed technical design is overlaid with analysis of traditional sources of finance from DFI loans and donor grants, and non-traditional sources such as private sector financing.[15] This approach does not try to change the institutional arrangements for financing municipalities along the lines pursued in regions such as LAC where national PPP units assist municipalities to prepare and manage large projects, often supported by project preparation and guarantee funds.

Similarly, EBRD's PPP projects work with existing institutional arrangements, rather than creating effective public sector agencies that have instruments to create bankable structures. All of the PPP projects reviewed in country case studies have a Probability of Default rating of "6" which is classified by EBRD as "Weak" and maps onto an external credit rating equivalent of "B". Standard and Poor's classifies"

B" ratings as "Highly Speculative", one notch below "Non-Investment Grade". While the risk profile is high, margins appear to be in line with market benchmarks.[5] PSP in PPP projects is primarily occurring through B Loans, which benefit from MDB's privileges and immunities such as preferred creditor status. This result indicates private sector would not invest in these PPPs, as structured, without MDB support, and mobilisation potential is limited. As a result, projects designs are not replicable and scalable without MDB participation.

Non-financial additionality of sovereign and non-sovereign PSOs finance is potentially high, but there is no information or metrics on the expected sources of value creation. The opportunity to engage with the public sector to encourage innovation and capacity building has high potential to add value. This type of interaction is particularly important in areas of market failure such as climate externalities. Apart from FAs, projects do not refer to policy dialogue and institutional capacity building activities, and similar to projects they are caveated by expectations on demand and subject to availability of TC. ETI scores screen projects for TI using an algorithm in TOMs, and they do not provide information on source, timing or scale of expected benefits and costs from financing that provide the basis for assessing effectiveness and efficiency. ETIs are drawn from a compendium of about 150 indicators, which provides a list of extremely general and uninformative statements such as "Client engages in [policy dialogue]: {type}". In practice, these indicators refer to activities, rather than outcomes, and do not provide measures of results.

3.4 What has been the results of PSOs?

Effectiveness looks at the extent outputs are produced, they generate positive outcomes that meet targets, and contribute to impacts sought from EBRD engagement.

(i) Outputs

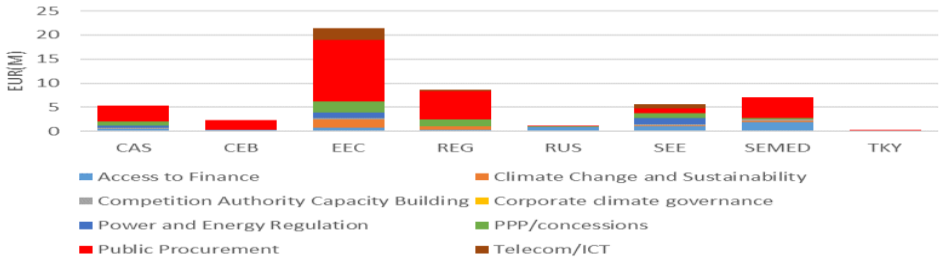
Infrastructure outputs are defined as: (i) institutional capacity; and (ii) infrastructure facilities. Output measures compare ex ante and ex post details on their quantity, quality, availability, and cost. EBRD does not prepare ex ante definitions, or collect ex post data, or report on physical outputs. The closest proxies are financial inputs, consisting of volumes of grants, and directly financed and indirectly mobilised loans and equity. In the infrastructure sectors, the primary instruments are non-transactional grants for institutional capacity building, and debt for structural reform (using covenants) and development of facilities.

- **Institutional Capacity**

Most institutional capacity building efforts in infrastructure sectors are directed towards public sector procurement, corporate governance reforms for SOEs, project preparation, RE in the energy sector, and sustainable municipal public sector projects. Apart from RE generation, progress on institutional reforms to facilitate PSP in infrastructure has been limited.

Institutional capacity building for core government agencies encompasses policy advice, legal and regulatory reform, project preparation and facilities management. Non-transactional grants and the associated policy and project preparation advice are the primary inputs to achieve structural and institutional reform. SSF is the most reliable source of data on non-transactional data, but it only provides a partial picture as it is typically blended with donor funding that is difficult to track. The most important users of SSF grants to develop institutional capacity in infrastructure sectors are Legal Transition Team (LTT) and SI3P.

Figure 10: LTT Funds, 2011-2020

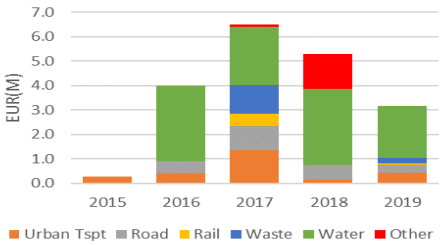


Source: LTT

LTT is an in-house team of lawyers in EBRD that provides upstream legal and regulatory advice to strengthen the investment climate and build markets. LTT's four key work areas are: (i) international legal standards and best practices; (ii) country legal assessments and diagnostics; (iii) support for legal reforms and building the institutional capacity; and (iv) outreach and knowledge sharing. Most LTT funding (**Figure 10**) went to digitalising public sector procurement capacity, with only a small share of its budget going to structural reform or PPPs. LTT stopped preparing top-down institutional diagnostics post 2017. Based on LTT's 2017/2018 PPP Laws Assessment, and confirmed by external studies such as the EIU report on EECA-SEMED, most of the laws and institutions for developing PPPs have been in place since 2017, indicating this body of work is complete, and institutional capacity development within line ministries and municipalities is now the primary focus of reform. This conclusion is further reinforced by the IMF's PIMA findings for COOs, which shows that many of the COOs are much better at institutional design than effective implementation of public investment including under PPP modalities.[6]

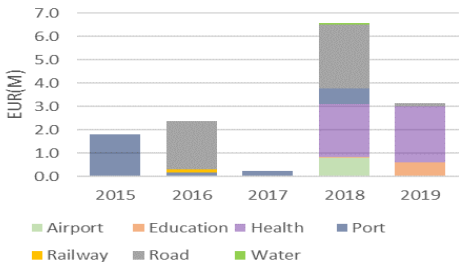
SI3P's primary function is the administration of the IPPF, established in 2014 with EUR40 million sourced from EBRD's SSF. The purpose of IPPF is to fund preparation of public sector transport and MEI projects, provide PPP advisory and project preparation services, and support EBRD's policy dialogue activities to develop transport, municipal and health infrastructure. IPPF has established teams of pre-qualified consultants that can be mobilised via three funding windows: (i) Sustainable Infrastructure Window (SIW) for the preparation of public sector projects (**Figure 11**); (ii) PPP Window (PPPW) for PPP preparation (**Figure 12**), and (iii) Policy Dialogue Window. Most SIW funds went to municipal water projects, and PPPW funds went to roads and health PPP projects. Limited funds were allocated to policy dialogue, which focussed on low impact workshops and seminars, and contributions of funding to joint MDB websites detailing best practices developing infrastructure. Institutional capacity building was not a priority.

Figure 11: SI3P Grants – Public (SIW)



Source: S13P Annual Reports

Figure 12: SI3P Grants – Private (PPPW)



Source: S13P Annual Reports

SI3P's focus is on providing technical capacity, mainly using external consultants, to enable EBRD to finance sector projects. Reliance on Project Management Units (PMUs) will tend to crowd out public sector experience developing PPPs, although progress will be achieved testing and reforming laws, regulations and contractual structures.

By 2020, IPPF had provided assistance to develop 14 PPP projects at different stages across 11 countries, with most of these projects moving forward, often under difficult market conditions. Several PPPs reached financial close including two ports in the Crimea, and the Sofia Airport PPP. The 6th of Oct. Dry Port PPP (Egypt) is expected to close in Q4, 2021. With a maturing pipeline now reaching full tendering and contract award stage, mobilisation levels are expected to grow steadily over 2022-2024.

A striking feature of the IPPF portfolio is the level of risk attached to the projects. Many of the projects are located in difficult regions such as roads in Belarus and Lebanon, ports in the Crimean region, and a dry port in Egypt that was dependent on a Greenfield public sector railway track procured using Traditional Public Investment (TPI). The other sector focus is hospitals, with complex full serviced hospitals developed in countries such as Kazakhstan, often without adequate institutional capacity, and limited experience in PPPs.

There appear to be few synergies with banking, and SI3P frequently collaborates with IFC to develop PPPs, and relies on upstream institutional capacity reforms undertaken by WBG. An important development is SI3P's recent involvement with IFC in the rehabilitation of roads in Ukraine using PPPs. This type of structure offers the government the potential to increase road capacity and connectivity at a much lower cost, and more rapid payback, than Greenfield developments of roads using TPIs.

SI3P has not yet reached its full potential. At one level, efforts appear fragmented, and not focussed on developing institutional capacity in governments to prepare and manage pipelines of PPP projects, or oversee operations during the operating period. In part, this result reflects the need for SI3P to gain experience and establish a market presence, before scaling up operations. An important development was the establishment of a Policy Unit in SI3P in 2019, assigned responsibility for developing the RE FIT schemes and auctions, providing support in upstream institutional capacity to develop infrastructure plans, and downstream capacity managing infrastructure facilities. This unit was only operating for 6 months before COVID materialised, curtailing its operations. Under a restructuring in late 2021, 4 out of 7 staff in the policy unit working on RE were transferred to a new Policy Unit under VP3, responsible for green investments.

There are opportunities for SI3P to partner with governments to scale up PPPs. In a recent development, the Government of Greece expressed an interest to SI3P in establishing a project preparation fund to enable the recruitment and management of a team of consultants that would support government agencies preparing PPP projects. This model has high potential, as it would provide governments with the means to identify and prepare projects, rather than SI3P. This new approach creates opportunities for SI3P's Policy Unit to engage in upstream and downstream capacity development, and enable SI3P's project team to focus on the final design and financing of projects where it can add greatest value. At present, SI3P's project team appears to be spending too much time on upstream feasibility studies, legal reforms, land acquisition, and stakeholder consultation. These activities can take many years to implement, particularly for high-risk projects, and should be led by the government.

Banking departments are active preparing PPP projects, although activities are not very visible as they use grants from donors rather than SSF. A review of the DCF database and sector strategy documents confirms the use of non-transactional grant resources for institutional capacity initiatives led by banking departments. It is difficult to ascertain the amount of grant funds allocated to specific activities.

SIG's energy departments have achieved significant success developing FITs and auctions to facilitate PSP in RE PPP projects. Structural and institutional reforms are largely complete in the energy sector in CEE, but there has been limited progress in other regions. It took several years to achieve success developing the RE program due to difficulties enforcing FIT arrangements, but these issues have declined due to improvements in institutional capacity and a substantial fall in the cost of RE, relative to fossil fuels. RE auctions are now being developed in 12 countries, and the Kom Ombo solar project (Egypt) reached financial close in 2021. A large RE programme is being implemented in Kazakhstan.

Transport departments have successfully developed ports and roads using concessions, but there has been limited use of availability payments and institutional capacity development appears limited. Following a number of largely unsuccessful attempts to develop roads with user fee based concessions such as the M1 in Hungary (prior to evaluation period), the BAKAD road in Kazakhstan was approved in 2019 using an availability based PPP. There has been progress introducing open access to rail tracks, corporatizing rolling stock operations, and establishing national road funds and Performance Based Contracts (PBCs) to improve maintenance. There is no information on the adequacy of funding and effectiveness of these road funds. Evidence from previous transition reports and evaluations indicates the quality of asset management practices for roads in COOs is low.

MEI is active developing institutional capacity at the municipal level using GCAPs. By October 2020, MEI had mobilised about EUR234 million from donors and some of these funds developed institutional capacity within municipalities in the areas of planning, procuring and administering public sector investments. These operations mainly focus on energy efficiency, with little evidence of structural reform, improving access to private finance, and promotion of PPPs in municipal projects.

Banking support departments also provide capacity development services but it is difficult to identify their contributions.

ESD provides support to implement ESAPs. Most assistance is project linked, and mainly delivered through PMUs. ESD is trialling a new form of assistance where it provides guidance and training to government officials after project disbursements to support monitoring of ESAPs and their implementation.

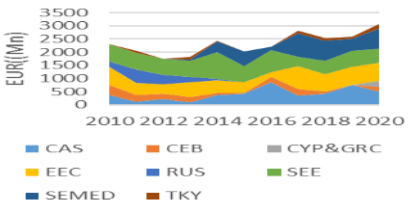
E2C2 transferred from banking to a new department Green Economy and Climate Action (GECA), under VP3 in 2021. GECA is responsible for coordinating the green economy work and climate action agenda of the Bank and contributing to further shaping the future of the GET approach. GECA will play a key role developing low carbon pathways for COOs to meet their NDC obligations. Infrastructure development, particularly in energy and transport sectors, will be central to these efforts.

Local Currency and Capital Markets (LC2) was established in 2010 following the GFC. LC2, recently renamed Capital Markets Development (CMD), transferred from banking to VP3 in 2021. CMD conducts market diagnostics, improves the regulatory framework, develops financial market infrastructure and the investor base, and broadens the range of instruments on offer. CMD works closely with EBRD's Treasury, which has successfully issued LCY bonds in about 30 different currencies, and swap agreements with various governments. CMD has started preparing country briefs that show markets such as Turkey have liquid financial markets, with benchmarks out to 10 years. In Serbia, banks are well capitalised and there are benchmarks for 5 and 10 year finance. In Ukraine and Kazakhstan, despite fragmented markets, EBRD has been able to enter into swap agreements with the national bank providing access to LCY.

- **Infrastructure Facilities**

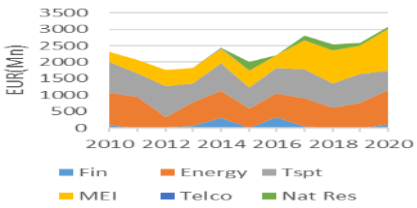
Most infrastructure facilities use sovereign debt denominated in FCY, supported by irrevocable government guarantees. State ABI approvals have been increasing since 2012 in line with bank lending. By region, state ABI is allocated evenly across EEC, SEE, SEMED and CAS (**Figure 13**), and broadly reflects ETC priorities**.** Energy, transport and MEI currently have an equal share of state financing, with recent growth occurring in MEI due to the GCAPs (**Figure 14**).

Figure 13: State ABI By Region



Source: EBRD Database

Figure 14: State ABI By Sector

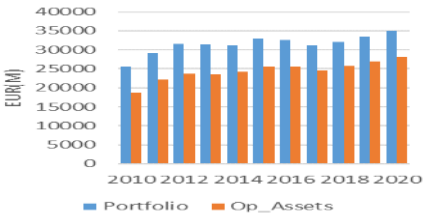


Source: EBRD Database

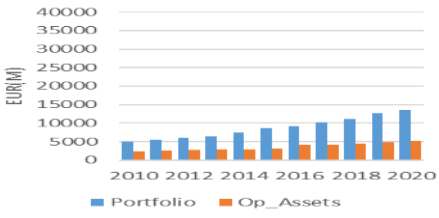
While PSO approvals have been growing in line with overall ABI approvals, disbursements of sovereign loans is low. The share of the portfolio (outstanding commitments) is increasing, mainly due to the low proportion of operating assets (Total disbursed amount less payments and write-offs of principal) (**Figures 15 and 16**). At August 2021, undrawn sovereign loans was 79% for MEI, 54% for transport and 50% for energy. An analysis of the data indicates only 80% of projects approved in 2010 had reached full disbursement, and this figure fell to 37% in 2016. Risks of delays with public sector projects is high due to the practice of financing preparation after loan approval.

Figure 15: Non Sovereign Portfolio & Operating Assets

Figure 16: Sovereign Portfolio & Operating Assets



Source: EBRD Database

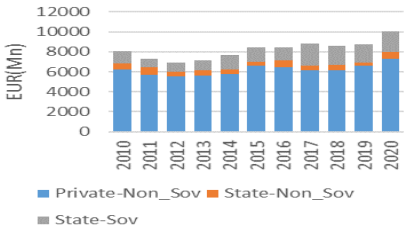


Source: EBRD Database

There are concerns about the quantity, quality and cost of the infrastructure delivered through sovereign financing. External evidence on public sector infrastructure projects indicate cost overruns for projects are likely to be substantial, and quality low.[7] An analysis of EBRD's sovereign procurement data indicates changes in scope and date of delivery of the terms of sovereign loans occur frequently. Most infrastructure is procured through input based works or goods contracts, rather than output based supply and installation (13% by number and 20% by value). The focus on procuring inputs, rather than outputs, makes risks of under-performance and excess costs high. Similarly, evidence from the World Bank(see **Annex 4**) indicates the expected life of infrastructure (effective capacity), is likely to be up to 50% less than infrastructure financed using PBCs or PPPs due to inadequate maintenance. Most government agencies have difficulty committing to maintenance, as they cannot obtain multi-year budget approvals.

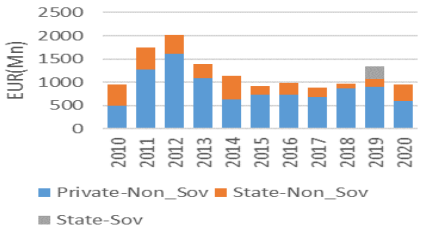
High costs of sovereign financed infrastructure on a whole of life basis are likely to be compounded by the extensive use of long term FCY (Figure 17). The only state-sovereign projects using LCY were two road projects financed in Kazakhstan in 2019 **(Figure 18)**.

Figure 17: Foreign Currency Finance



Source: EBRD Database

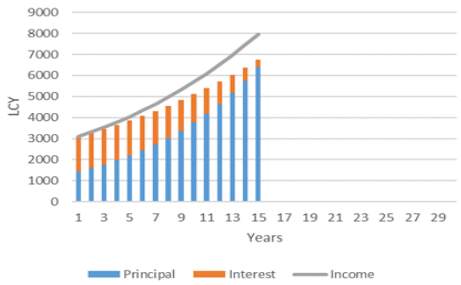
Figure 18: Local Currency Finance



Source: EBRD Database

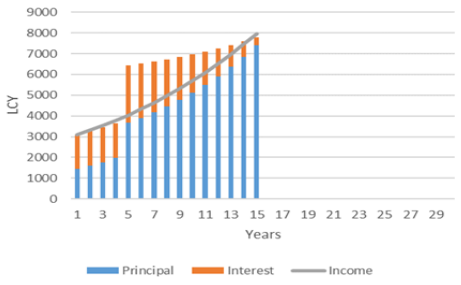
Developing countries often view sovereign long-term FCY loans as low cost due to low interest rates. In practice, depreciating exchange rates offset these gains over time (see **Annex 9** for a detailed analysis of FX risk and benefits of LCY finance). The low interest rates on FCY improve affordability of debt servicing in the early years of a project. Offsetting this result, higher rates of inflation in developing countries, relative to developed countries in the EU or US, cause FX rates to depreciate in LCY terms. The effect of low interest rates versus increasing cost of debt service in LCY terms over time is illustrated in **Figure 19**. The gray line is a benchmark that shows the cost to a hypothetical borrower of the initial payment, increasing at the local inflation rate, thereby providing a measure of relative cost over time.

Figure 19: Simulation of Cost of FCY Loans in LCY – No economic Shock



Source: EVD

Figure 20: Simulation of Cost of FCY Loans in LCY – With economic Shock



Source: EVD

Excess FCY costs can be amplified by economic crises, causing FX rates to depreciate faster than normal, further increasing costs for borrowers (**Figure 20**). Economic shocks can happen frequently as demonstrated in country case studies (see **Annexes 9 and 10**). Kazakhstan, Turkey and Ukraine have all experienced large and persistent economic shocks over the evaluation period.

Excess FX costs of debt servicing are often not apparent to governments. There is no comparison of costs of sovereign debt servicing to unquantified benefits derived from public sector infrastructure, and no counterfactual for individual projects to benchmark VFM. Excess FX costs are much more transparent in PPP contracts as project revenues are directly matched with project financing costs under the terms of the contract. FX crises led to the termination of Turkey's hospital PPP program, and a 4 year delay for the BAKAD project in Kazakhstan. Due to an economic crisis in 2016, the Kazakhstan government requested MDBs to provide finance in LCY, but it has only recently started to emerge (see Country Case Study in **Annex 10**), mainly due to swaps provided to EBRD by the National Bank of Kazakhstan. All of EBRD's PPP projects to date are financed in FCY with tenors of 15-18 years, exposing them to large FX risks.

(ii) Outcomes

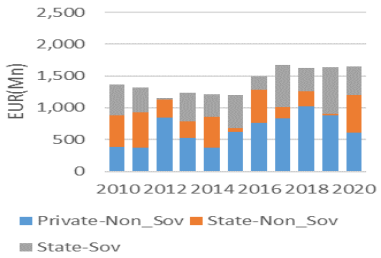
Outcome measures compare ex ante and ex post details on the extent outputs contribute to TI outcomes. Prior to 2014, the focus of outcomes was on structural reform and to a lesser extent institutional capacity building of corporatized and privatised entities. After 2014, this efficiency focus was retained (competitiveness and governance) and effectiveness social indicators such as inclusiveness and environmental indicators such as green introduced. Structural reform is measured using indicators such as levels of PSP, green indicators such as levels of GHG emissions, and inclusiveness indicators such as affordability, access to infrastructure, and connectivity.

Structural reform can occur through direct financing, and their conditions precedent and covenants. Implementation is difficult to enforce as any breach effects all sovereign loans in a country. Most reforms occur prior to loan approval or during loan effectiveness period. Relatively few sovereign loans require TI covenants and they are rarely waived or modified. This result indicates that conditions precedent and loan covenants are not important drivers of structural or institutional reform.

EBRD does not maintain records on levels of PSP at sector level, but similar to outputs, levels of finance by category provide some insights. Infrastructure sector strategies up to 2014 indicated PSO projects would shift from state/sovereign to private/non-sovereign status in line with structural reform. In

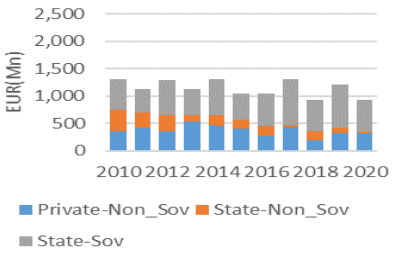
practice, this shift has only happened in RE through FITs and auctions (**Figure 21**). Transport has made progress in the area of ports with user pays PPPs, and more recently the BAKAD concession based on availability payments, but overall levels of private finance remain low **(Figure 22**).

Figure 21: SIG Energy ABI by Category



Source: EBRD Database

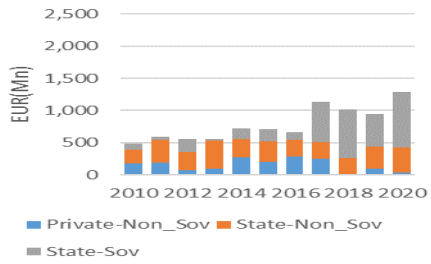
Figure 22: SIG Transport ABI by Category



Source: EBRD Database

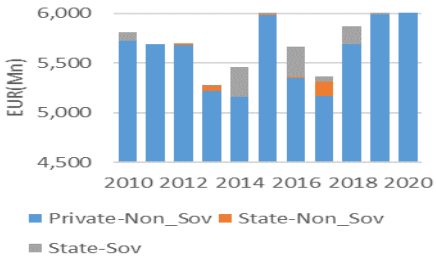
The MEI portfolio (Figure 23) is dominated by state sovereign lending. PPPs are mainly limited to user pays concessions for urban transport and solid waste on a small scale, and more recently, availability payments for hospitals. This result contrasts with non-infrastructure sectors, which are almost all categorised as private non-sovereign (**Figure 24**).

Figure 23: **MEI ABI by Category**



Source: EBRD Database

Figure 24: **Non Infrastructure ABI by Category**



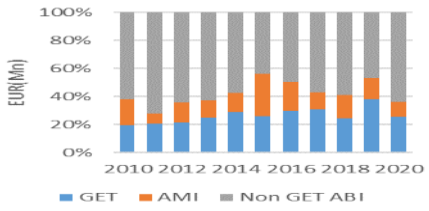
Source: EBRD Database

Mobilisation of private finance, GET, and inclusiveness are important strategic priorities for EBRD emphasised in the SCF approved in 2020. Mobilisation is measured using AMI. State AMI is significantly lower than private AMI **(Figures 25 and 26).** Most of the state AMI was in the form of donor grants for MEI energy efficiency projects, rather than private mobilised finance.

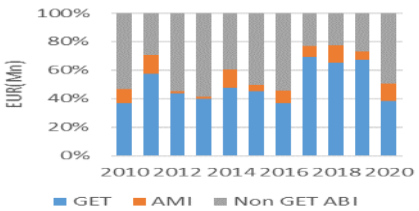
ABI approvals indicate sovereign financing is more successful than private ABI at catalysing GET financing (**Figures 25 and 26**)**, but in practice potential is not being realised**. These figures highlight the perceived trade-off between targets to mobilise private finance, versus achievement of green financing targets. GHG savings are based on ex ante forecasts at the time construction is completed, and not validated with ex post data during the operating period. As noted in the discussion on outputs, the availability of these outputs, and consequent realisation of GHG savings on a whole of life basis, is likely to be low.

Figure 25: ABI, AMI & Get – Private (%)

Figure 26: ABI, AMI & Get – State (%)



Source: EBRD Database



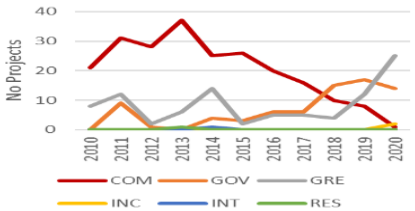
Source: EBRD Database

Data on inclusiveness is harder to find, as it is based end users' location and affordability of infrastructure facilities. Sovereign lending often achieves high scores for meeting social needs as the government can improve affordability to users as it funds the operation through taxes rather than user fees, but similar to GET approvals, this potential is not being realised. The analysis of the cost of infrastructure (**Figures 19 and 20**) indicates the extensive use of FCY can negatively impact affordability at the government level, as demonstrated by the cancellation of the Turkish hospitals, and long delays approving BAKAD. These FX risks apply equally to both PPP and TPI projects, although they are harder to identify and manage under public sector financing structures. Similarly, under-estimated costs, delays, and inadequate maintenance will work against availability, which is a necessary condition for inclusiveness.

(iii) Impacts

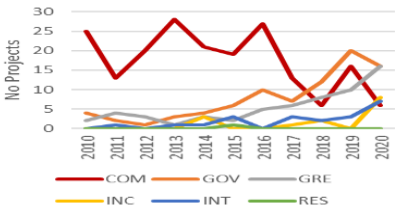
Impacts are concerned with ultimate effects of projects such as increased economic growth, improved standard of living, or mitigation and adaptation to climate change. Project level indicators for ETIs are based on two target TQs. For State Non Sovereign (**Figure 27**) and State Sovereign (**Figure 28**) there was a shift in TQ indicators away from competitiveness to green and governance. This result indicates PSP is no longer a priority, and green impacts such as mitigation are the primary goal for PSOs.

Figure 27: ABI State Non Sovereign TQs



Source: EBRD Database

Figure 28: ABI State Sovereign TQs

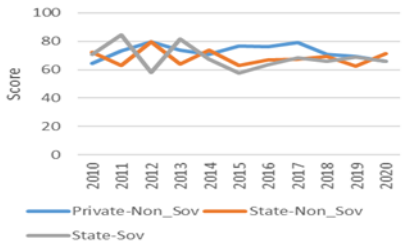


Source: EBRD Database

CSRFs define ex ante indicators based on ATC/ATQs at the beginning of the strategy period, but they are not informative. CSDRs are the main reports on ex post TI and progress against country targets. CSDRs report on indicator progress using measures such as "Improved performance, governance and/or efficiency metrics" and "No. of clients introducing improved standards". These indicators use qualitative assessments of change such as "Very Good Progress", or "No Milestones/ Progress yet". There are no TOCs, contextual indicators or baselines to show what, how much, and when progress occurred relative to targets, or expected contribution to transition. The progress on CSRF indicators is based on the bottom-up aggregation of project activity results and does not represent progress achieving country strategy objectives.

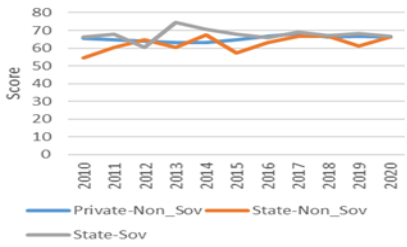
PTI scores (Figure 29) relative to ETI scores (Figure 30) are meant to provide a measure of project success, but in practice they are unresponsive to differences in project outcomes, or provide a measure of impact. The scores for all categories were almost identical and broadly flat over the evaluation period. The minimum threshold for ETIs is 60, and a PTI score of greater than 60 indicates success. The results indicate all of the projects achieved their TI objectives. Despite this success, data presented in transition reports and external studies indicates that levels of impact are low.

Figure 29: Average PTI at Board Approval- Non-Sovereign v Sovereign



Source: EBRD Database

Figure 30: Average ETI at Project Completion - Non-Sovereign v Sovereign



Source: EBRD Database

EBRD's Assessment of Transition Challenges in 2009 showed that as COOs moved south and east, institutional capacity and market structures deteriorated. In 2013, EBRD published a report, "Stuck in Transition", which noted that economic reform had stagnated since the mid-2000s and public opinion shifted against reform after the GFC. The final ATC scores prepared in 2016 show almost no change relative to 2010. On a scale of 1 (no reform) to 4 (industrialised economy) most countries in CEE and TKY rated 3-4. In SEE, EEC and SEMED scores ranged from 2-3, and in CAS 1-2.

External studies reinforce the conclusions that structural reform outside CEE has stalled and there is a lack of institutional capacity within governments in COOs to facilitate PSP in infrastructure. IMF's PIMA reports and WBG's "Procuring Infrastructure PPPs" studies show institutional capacity to develop PPPs in COOs is limited (**Annex 5**). The EIU Infra-scope Report, 2017[8] provides further confirmation of the limited institutional capacity of EBRD's COOs. EIU categories for COOs mainly fall under the classification of emerging, one step up from the lowest score of nascent on a scale of 1-5 (**Annex 6**).

It is too early to measure progress on climate mitigation and inclusion. SCF targets for GHG savings lack context without National Plans on how countries will meet their NDC obligations, and they are still under preparation in most COOs. The inclusion strategy is still in the early stages of operationalisation.

3.5 How efficient are PSOs?

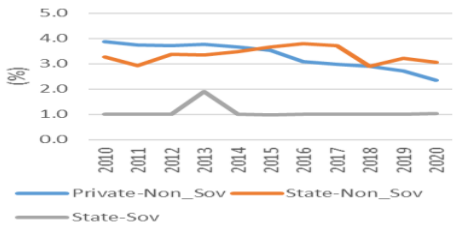
Efficiency is concerned with identifying PSO resource usage, and opportunity costs, relative to EBRD's other operations.

Staff numbers appear reasonable, and benefit from large transaction sizes, relative to other banking departments, which help reduce the high fixed costs of loan preparation. The average project size is

EUR35.6 million for a transport project, EUR26.7 million for an energy project, and EUR14.4 million for a municipal project, compared to other departments where the average project size is EUR12.5 million.

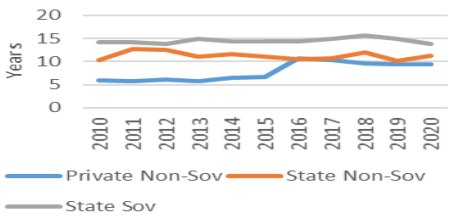
Sovereign pricing policy fixes the margin at 1%, placing a ceiling on profitability. Non-sovereign margins fell from about 4% in 2010 to 2.5% by 2020 (**Figure 31**), indicating the opportunity cost of financing sovereign projects has declined over time. The average tenor for State-Sovereign loans was 15 years, compared to State Non-sovereign and Private Non-sovereign, which were about 10 years (**Figure 32**).

Figure 31: Margin Differentials



Source: EBRD Database

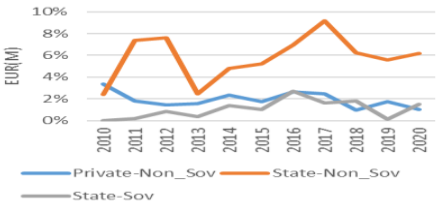
Figure 32: Tenor ABI by Category



Source: EBRD Database

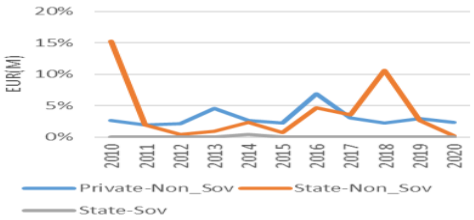
Cancellations and prepayment rates of State-Sovereign and Private Non Sovereign projects are low. In comparison, cancellation and prepayment rates for State Non Sovereign (SOEs and municipalities), are high and volatile (**Figures 33 and 34**), indicating financial risks of PSP sovereign operations are high.

Figure 33: Cancellations (% Portfolio)



Source: EBRD Database

Figure 34: Pre-Payments (% Portfolio)



Source: EBRD Database

SIG uses a high level of concessional donor funds for project preparation in infrastructure projects, relative to other banking departments, with most of it used for transactional purposes. This result appears to be due to the nature of donor funds, which are often earmarked for expenditure in fixed assets.

An important source of inefficiency is the lack of indirect mobilisation of sovereign loans using instruments such as unfunded risk participations. Sovereign loans are not amenable to indirect mobilisation as the loans benefit from sovereign guarantees, which are non-transferable to third parties. SI3P advisory services and financing of PPPs offer important means of indirectly mobilising private sector finance, but are not used at scale.

While the costs of PSO appears moderately efficient from an EBRD perspective, there is a question about competitiveness and realised additionality. EBRD can add value through its residential office network, quality of its advice, efficient procurement practices and AAA rating. Offsetting this result, the amounts invested by PSO in COOs are small compared to public sector MDBs such as ADB, EIB, and IBRD. These MDBs have multi-billion dollar infrastructure programmes in COOs, can offer tenors of up to

35 years, very low interest rates, and access to large amounts of grant funds, relative to EBRD (see **Annex 10**). A further challenge is the decline in financial additionality, relative to private banks, due to high levels of liquidity in COOs.

4. Lessons, Opportunities and Recommendations for Future Public Sector Initiatives

This section addresses the question of: "what are the opportunities experience suggests for improving the performance of PSOs?"

Lessons:

- PPPs has high potential for mobilising private finance, but it is not being realised.
- EBRD incentives do not encourage staff to pursue projects that facilitate PSP in infrastructure.
- Weak results frameworks creates risks of misallocation of resources and inefficient projects ETI and PTI scores can be aligned with measures of expected value creation for clients.
- A simplified VFM methodology can be developed for appraising infrastructure projects, and communicating findings to the Board.
- VFM studies and updated results can be communicated with COOs as part of policy dialogue and during country strategy and project preparation.
- A top down approach can be used to design infrastructure programmes at the country level.
- Country strategies can be complimented with country operational plans.
- Project formulation can occur in the context of FAs to provide sufficient scale at the country level to measure changes from EBRD support.
- Institutional capacity can be developed in governments to create and manage infrastructure on a whole of life basis.
- PPP project structures can be made more attractive to governments.
- Project designs can be made more flexible to accommodate unforeseen events.
- EBRD can broaden the scope of traditional sovereign loans from directly financing projects
- EBRD can consider alternative types of advisory, guarantee and blended finance products.
- EBRD can enhance synergies with policy, and reduce potential conflicts of interest between providing advisory services and financing projects through organizational reform
- Priorities can be rebalanced to allocate grants towards non-transactional institutional capacity building in governments, rather than directly subsidising projects

4.1 Issues and Lessons for Enhanced Effectiveness and Efficiency

PSO risks of crowding out are high, and potential for mobilisation and meeting non-market goals in areas such as climate change and inclusiveness is not being realised. The PSO practice of pricing at below market rates is almost certainly crowding out private investment in potentially contestable markets. Low prices are typically justified on the grounds PSOs enable a high level of policy dialogue on structural and institutional reform but this potential is not being realised. PSOs are often perceived as meeting unmet needs in areas such as climate change mitigation and inclusiveness, but in practice these benefits are not being realised due to difficulties disbursing funds, focus on inputs, and limited institutional capacity within government to manage assets on a whole of life basis.

Corporatisation and privatisation have been the primary approaches used by EBRD to increase PSP, but demand for this type of reform has declined over time. At present, there is limited appetite in COOs for radical sector wide reforms, and there is a need for more targeted approaches to develop and maintain strategic assets that demonstrate public good characteristics. In many respects, PPPs may be a better instrument to meet infrastructure gaps than SOEs, due to their reliance on output specifications, alignment of incentives through contracts where payments are based on delivery (no service no payment), competitive procurement, opportunities for innovation, effective maintenance, and generation of data that can be used to benchmark existing PSOs using VFM principles and Public Sector Comparators (PSCs).

Evidence shows that PPPs can enhance PSP by mobilising private finance for large strategic infrastructure assets when government agencies have adequate institutional capacity. A review of conditions in COOs indicates that PPP institutional arrangements are in place and there is a high level of interest in these modalities in governments. There is also a growing availability of LCY finance, which provides opportunities for developing innovative financing structures based on blended LCY and FCY finance, refinancing, or use of guarantees. Governments lack experience in areas such as preparing national infrastructure plans that draw on private sector resources, asset management on a whole of life basis, preparing output specifications, preparing contracts that balance risks between the public and private sector, managing and modifying contracts, and using VFM principles.

Misalignment of incentives and limited scope for learning feedback undermines capacity to achieve expected results. Numerous evaluations have identified problems associated with misalignment of incentives, and an inability to learn from prior experience due to a focus on loan approvals and reporting results using ex ante data. The Kirk Report noted in 2019 the current results frameworks in EBRD were difficult to evaluate as they were broad and abstract, making them challenging to translate into a coherent approach to results identification and management. Structural reform has effectively stopped in most COOs, and institutional reforms needed to facilitate PSP in infrastructure are still in an emerging state. Most institutional reforms focus on project preparation, without addressing necessary upstream and downstream institutional capabilities in COO governments.

Weak results frameworks creates risks of misallocation of resources and inefficient projects. The TQs do not provide meaningful information on costs relative to benefits at the country or project level that can inform decision-making, create properly aligned incentives for staff, and provide a basis for monitoring and evaluation. Projects are prepared without information on country infrastructure plans, institutional capabilities with government, and availability of finance. These sources of data are critical for making decisions on allocation of resources at country level, and project designs that create VFM for COOs. ATQs and ETI scores are not transparent, and lack TOCs that provides a basis for evaluation. It is not credible that projects with an average size of EUR 20 million can make a discernible difference at the country level, raising questions about the utility of ATQ gaps. The ETI compendium of indicators has no TOC to inform the timing and scale of project costs and benefits, and sources of VFM. Most PSO projects finance inputs, with no reference to outputs and benefits, or confirmation of least cost design. PTIs only measure milestones and activities, rather than ex post net project benefits.

4.2 Opportunities for EBRD to Enhance Financing of Infrastructure

EBRD's procedures for preparing, monitoring and evaluating infrastructure projects are not in line with international best practice, or the practices of other MDBs such as ADB, IADB and WBG. These practices highlight the importance of measuring costs of supply (ie efficiency) and demand benefits (ie effectivess), and preparing VFM assessments that compare costs of private versus public sector provision to identify least cost source of procurement.[9] Large benefits can potentially be realised if EBRD shifts from a model that prioritises the approval of low cost finance inputs to a model that creates VFM for its clients.

(i) Objectives and Results Frameworks

ATQs and ATQ gaps can be revised to improve clarity of purpose and provide a basis for prioritising projects. The shift from ATC to ATQs has introduced a broader set of objectives EBRD can pursue, but it reduced the level of clarity about how and what TI is realised. There is a strong case to separate the ATQs into end goals (demand objectives) such as inclusiveness and climate change from means (supply objectives) such as competitiveness and governance:

- **ATQ indicators for inclusiveness and green objectives can be set at the country level to reflect effectiveness goals.** Green objectives such as reductions in GHGs can be contextualised using country plans to meet NDC obligations, supported by baselines and targets. Inclusiveness measures can be drawn from the SDGs.
- **ATQs for competitiveness, integration and governance can be based on the ATC framework.** The ATCs clearly reflected EBRD's transition mandate, mapped onto sectors and project structures, and identified efficiency gains. ATCs can be modified to reflect progress on both developing PPPs, and corporatisation and privatisation objectives.

ETI and PTI scores can be aligned with measures of expected value creation for clients. At present, ETIs are "black box" measures of TI that do not differentiate between benefits and costs and their contribution to value creation. ETIs need to measure both effectiveness in meeting end goals (green and inclusiveness), as well as efficiency (least cost). ETIs are based on a compendium of more than 150 indicators, many of which are drawn from WBG's "Doing Business" publication, which is due to be discontinued. The compendium will need to be updated, and this change provides an opportunity to revisit the ETI concept, and adapt it using VFM principles that refer to project benefits and costs, rather than implicit undefined contributions to TI at the country level. EBRD can draw upon the work of other top down studies such as IMF's PIMAs, and WBG's institutional capacity assessments to identify clearly defined priorities.

A simplified VFM methodology can be developed for appraising infrastructure projects, and communicating findings to the Board and borrowers. At present VFM assessments are only prepared on an ad hoc basis for some PPPs, and are not detailed in board documents or accessible on board information systems. In many cases, project benefits can be assessed qualitatively by reference to national infrastructure plans, and quantitatively using outcome measures such as GHG avoided as a proportion of COO carbon budgets, or proportion of users with access to essential infrastructure. The focus of quantitative VFM analysis can be on cost minimisation of expected outputs under public and private sector procurement on a whole of life basis. Costs are straightforward to measure and verify. It is inevitable estimates will be subject to optimism bias with under-estimated costs and inflated benefits. A key function of monitoring and evaluation can be providing error correction adjustments for future projects, in a similar way the UK Treasury provides automatic cost uplifts to all public sector projects based on evidence gained from prior projects.

VFM studies and updated results can be communicated with COOs as part of policy dialogue and during country strategy and project preparation. This action would provide an important first step to shifting from an EBRD offer based on low cost concessional finance, to value creation for client COOs. This shift in mind-set would help create incentives for both officials in COOs and bankers to invest more time on complex projects that have high potential to create downstream project pipelines suitable for PPPs and ultimately privatisation where appropriate. All infrastructure projects can be required to prepare VFM studies showing the preferred method of procurement, which is readily available to Board members and the public showing the rationale for the preferred method of procurement, and the expected sources of value creation. This approach would enable EBRD to differentiate its offer from other much larger MDBs, build on its private

sector strengths, and better meet clients' demand for physical infrastructure. This type of results framework would enable more effective monitoring and evaluation of projects that would contribute to learning and innovation within EBRD.

(ii) Country Strategies

A top down development approach can be used when designing infrastructure programmes at the country level. Infrastructure facilities require large coordinated investment across sectors and over time. Due to the inter-dependent long-term nature of infrastructure investments, country priorities are set years ahead of when investments are likely to occur and documented in country infrastructure plans. A top down approach to programme and project selection in infrastructure sectors would offer many benefits for EBRD and its clients. EBRD could provide policy inputs into COO infrastructure plans at the national, sector or municipal level based on institutional and financial gap analyses. Assistance could be provided to governments integrate PPP development within a country's public investment management operational framework and linked to medium term fiscal framework processes.

Officials could be offered support to help include private sector inputs in designing projects in infrastructure plans. VFM methodologies can be developed to ensure governments select the best projects with available funding (the investment decision), before deciding on the preferred method of procurement (TPI or PPP). Projects can be selected that maximise opportunities to capture third party revenues, and optimise technologies used to develop infrastructure. This type of approach would help minimise risks of costly unsolicited proposals from the private sector. EBRD can use policy dialogue to help identify areas where it can offer support to develop institutional capacity to prepare frameworks of projects, tender them, and manage operations post signing. This type of approach increases opportunities for maximising VFM and helps reduce risks of project failures.

EBRD's country strategies can be complimented with country infrastructure operational plans. Sovereign operations in MDBs such as ADB and WBG use country strategies to help define their strategic vision for infrastructure. These documents are complimented with three year Country Operations Business Plans (ADB), or Country Partnership Frameworks (WBG), that provide specific details on expected investments and KPIs, in a similar manner to the way EBRD's SCFs are complimented by SIPs. EBRD could adopt a similar approach operationalising its country strategies for infrastructure. Operational plans can provide a clear road map delivering support and measuring progress. These plans can be aligned with low carbon pathways EBRD intends to develop for COOs as part of the GET initiative.

Project formulation can occur in the context of FAs to provide sufficient scale at the country level to measure changes from EBRD support. This type of approach would provide opportunities to bundle public sector institutional reforms with development of infrastructure facilities and structural reforms to enable PSP. FAs could refer to SDGs and NDC low carbon pathways in infrastructure plans and provide a link between upstream country policy dialogue, technical assistance and operational priorities at the project level. These components can be used for formulate coherent and credible TOCs and results frameworks.

(iii) Project Selection and Structuring

Institutional capacity can be developed within both governments and EBRD for creating and managing infrastructure on a whole of life basis. In line with the ADB and IADB evaluation findings, it is apparent both EBRD's sovereign lending and SI3P advisory operations focus on midstream financing opportunities, and institutional capacity for procurement. There is limited attention to necessary upstream

institutional capacity to prepare projects, and downstream capacity to manage operations. Projects need to be developed in the context of comprehensive assessments of availability of public sector funding for infrastructure plans and commitments within medium-term fiscal budget and rolling sector ceilings.

PPP development can focus initially on simple project designs in stable environments before introducing further complexity. EBRD's PPPs are often developed in unstable countries, subject to rapidly changing technology (eg the hospital projects in Turkey and Kazakhstan), and designed with multiple revenue streams from multiple product lines (eg waste projects in Serbia). In all cases projects have a high risk-rating and financed in FCY, further adding to project risks. Similar to the UK, COOs could start in low technology sectors such as roads or bridges where demand and technical aspects of delivery are well known and unlikely to change over time. Initially, the focus can be on refinancing and refurbishing existing facilities, rather than developing Greenfield projects. Officials can then gain experience managing the dynamics of alternative procurement, financing and funding structures. In general, it would be better to start with more robust structures based on availability payments and incrementally add risk using market based user revenues to mitigate funding constraints as data on market demand and technology is generated. SI3P, IFC and GIF are using a similar approach to help increase the effective capacity of the Ukraine Road sector (see **Appendix 10**, Ukraine Country Case Study).

PPP project structures can be made more attractive to governments. Typically, PPP projects are highly inflexible to improve attractiveness to private financiers. This approach makes projects high risk for governments, as they are typically large, long-term contracts. By design, PPPs are not easy to exit without incurring large transaction costs due to factors such as breakage costs on fixed interest rate swaps, and expensive termination provisions. Compensation is often based on foregone earnings, rather than competitive return on capital invested, and costs are not adequately adjusted so the party at fault bears the excess costs of early termination. These costs need to be clearly defined during negotiations and steps taken to mitigate them using mechanisms such as clearly defined step in rights when there is a risk of default or risk of contract termination, and well defined grounds for termination.

Project designs can be made more flexible to accommodate unforeseen events. Projects need to be modular so that capacity meets actual demand, and capable of adjustment to accommodate unforeseen events. It is inevitable that macro-economic shocks will occur, and technology and demand change over time. Flexibility in contract design will enable the scaling of projects to match demand. Given these requirements, it would be better to structure projects so there are clear requirements for competitive tendering of changes in scale or scope of projects built into contracts. Flexibility of project structures can be enhanced by using variable interest rates so breakage costs are not artificially inflated. Perhaps most importantly, projects need to make use of LCY financing when possible to reduce project costs and mitigate risks of economic shocks (see **Annex 9**). Similar to developed countries, projects can be structured to facilitate refinancing once the project is through the construction period. Ideally, projects would be refinanced with LCY denominated project bonds that are attractive to institutional investors such as pension funds and insurance companies.

(iv) Scope and Type of Products

EBRD can broaden the scope of traditional sovereign loans from directly financing projects. EBRD could potentially broaden its offer by providing sovereign loans for project preparation funds, and guarantee funds. Project preparation funds provide government agencies with a source of working capital outside

normal budget appropriation processes. Guarantee funds are important for SNGs, which lack control over own sources of finance and have poor credit ratings.

EBRD can consider alternative types of guarantee products. There is high demand amongst institutional investors to finance infrastructure bonds in developed markets that are investment grade and EBRD could potentially play a role in this market by providing guarantees to governments to credit enhance PPP offtake obligations, as an alternative to sovereign loans. Guarantee funds can be established which are funded or unfunded, and sit on either EBRD's or the government's balance sheet. Guarantees can be structured as standby loan facilities, rather than insurance products. As noted in **Appendix 9**, LCY denominated guarantees backed by FCY capital from an MDB might be much more attractive to governments than self-funded guarantees. A further benefit of using an MDB guarantee is the absence of any conflict of interest if a dispute arises over payment by the government. Guarantees can amortise over time in line with PPP debt repayments, and can potentially only cover a partial share of outstanding government payment obligations.

SI3P can commercialise its advisory services and act as a product line, rather than support service. SI3P provides advisory services for sovereign projects using grants, and for PPPs with costs reimbursed from project finance at the time of tendering the projects. IFC charges a commercial fee for its transaction advisory services and WBG provides Reimbursable Technical Assistance in middle-income countries. A case can be made that SI3P should follow a similar practice.

(v) Organisation Structure and Resources

Organization structure can be reviewed to ensure it maximises synergies between policy and public sector institutional capacity building, and removes any potential conflicts of interest between providing advisory services and financing projects. There are two potential sources of conflicts arising from having SI3P sitting under the direction of a banking department whose primary objective is meeting annual ABI targets:

- Development of PPPs may be seen as cannibalising the sovereign project pipeline; and
- The design of PPPs may be biased in favour of lenders' requirements, rather than meeting the needs of the client governments.

There are several organization options that can be considered for maximising benefits and mitigating risks: (i) all of SI3Ps policy and project preparation functions can be transferred to VP3, (ii) SI3P's remaining policy advisory services can be transferred to VP3, or (iii) SI3P can be established as an independent advisory department. The Policy Unit in SI3P has recently been restructured, where half of its staff complement was transferred to VP3, raising the question of who will be responsible for institutional capacity development upstream and downstream from the project transaction teams. Given the apparent lack of synergies between SI3P project preparation and sovereign lending, and potentially high level of synergies between policy and institutional capacity development, a transfer of some or all of SI3Ps functions to VP3 may be the preferred organisation option. Alternatively SI3P could be established as a separate business unit, establish panels of pre-qualified consultants for upstream and downstream work and adopt mobilisation targets in line with agreed multiyear plans as the primary incentive and accountability mechanism to guide operations.

Priorities to allocate grants can be rebalanced towards non-transactional institutional capacity building, rather than directly subsidising projects. Given the high potential for creating downstream

financing opportunities for downstream PSO banking departments, there is a case for reallocating some of the transactional grant funding towards institutional capacity building, and setting up a team of pre-qualified consultants for this purpose in a similar way to the IPPF project preparation facility. The focus of institutional capacity building can be on developing templates replicated and scaled across government agencies at the national and municipal level, and across countries. The objective would be to motivate government agencies to do most of the work, by identifying projects with rapid paybacks such as refurbishing existing road projects. Frameworks can be established where officials can clearly see the benefits of using contracts, bundling construction and maintenance, accessing finance from markets rather than the budget, and regularly assessing and reporting on performance using VFM principles.

4.3 Recommendations

Strategic:

1. **Review priorities and scope of EBRD's Public Sector Operations to include a greater focus on institutional capacity building and provision of advice and knowledge for enhanced additionality and results:**
   a. Consider placing more priority on TC grants for non-transactional institutional capacity building.
   b. Consider broadening the scope of traditional sovereign loans, subject to demand, to also include funding facilities such as project preparation and guarantee funds and provision of advice.
2. **Maximize synergies between policy and institutional capacity building at the country level for greater results by adopting a holistic development approach to design infrastructure programmes.**
   a. Country Diagnostics and Country Strategies, as relevant, should include key information on the adequacy of infrastructure facilities and institutions, capacity of local banks to provide LCY and identiy clear opportunities to provide preparation and guarantee funds.
   b. Country Strategy Results Frameworks for infrastructure, as relevant, should be supported by measurable time bound indicators aimed to demonstrate expected VFM.

Operational:

3. **PSO results management should be underpinned by a well-articulated theory of change, using metrics that can be influenced and measured by the Bank to assess its long-term contribution towards narrowing the transition gaps, and provide a basis for identifying sources of VFM.**
   a. Mid-LT outcome indicators for PSOs should 1) reflect conditions within the country such as progress achieving Nationally Determined Contributions, and 2) corporatisation/privatisation/PPPs goals
   b. Board approval documents for infrastructure should be transparently supported by evidence of expected value creation for clients that integrate long term outcomes and project based sources of VFM.
4. **Prepare an approach paper that outlines a business model for infrastructure projects that focuses on creating VFM for EBRD Countries of Operations. Specific areas of focus would include:**
   a. Operational approach of G20's Quality Infrastructure Principles.
   b. Development / Refinement of a VFM methodology, aimed to identify costs-benefits when appraising and structuring EBRD's infrastructure financings at the project level, in line with international best practices.

c. Preparation of an updated Business Case for SI3P, taking into account the recent reorganization of VP3; this should include an articulation of the most effective and efficient organization structure to mobilise private finance through the delivery of advice on institutional capacity upstream at project identification, preparation, transaction, and downstream project management.

5. Sources

[1] Privatisation in Transition Countries, Lessons of the First Decade, Economic Issues, no 18, IMF (1999)

[2] IIF Green Weekly Insight Tackling the infrastructure jigsaw June 24th, 2021

[3] Financing Climate Futures, Rethinking Infrastructure, OECD, 2018

[4] "Who Sponsors Infrastructure Project?, PPIAF, 2017

[5] APMG Public-Private Partnerships Certification Guide

[6] https://www.instituteforgovernment.org.uk/explainers/funding-infrastructure

[7]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/191507/Optimism_bias.pdf

[8] Cost Overruns in Large-Scale Transportation Infrastructure Projects: Explanations and Their Theoretical Embeddedness," European Journal of Transport and Infrastructure Research. Cantarelli, C. C., Flyvbjerg, B., Molin, E.J.E., and van Wee, B. 2010

[9] Well Maintained: economic benefits from more reliable and resilient infrastructure, WBG, 2021

[10] National Audit Office, (2013), "Review of the VFM assessment process for PFI", Briefing for the House of Commons Treasury Select Committee

[11] See Quality Infrastructure Investment (QII) Partnership (worldbank.org)

[12] Supporting Quality Infrastructure in Developing Asia, ADB, July 2021

[13] Mobilisation of Private Finance by Multilateral Development Banks and Development Finance Institutions, 2017

[14] The definitions of what constitutes private and public sector are linked to the definitions set out in Article 11(3) and Article 11(1) of the Agreement Establishing the Bank. Article 11(3) covers the determination of the Portfolio Ratio (proportion of EBRD's State relative to Private finance, which is set at a maximum of 40%). Article 11(1) provides guidance on methods of EBRD operations and applicability of procurement policies and rules.

[15] EBRD Green City Action Plan methodology

[16] https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ratings.htm

[17] See https://infrastructuregovern.imf.org/content/PIMA/Home/Region-and-Country-Information/Regions/Europe.html

[18] https://www.mckinsey.com/industries/public-and-social-sector/our-insights/how-developing-economies-can-get-more-out-of-their-infrastructure-budgets

[19] Evaluating The Environment For Public-Private Partnerships In Eastern Europe, Central Asia And The Southern And Eastern Mediterranean, EIU, 2017

[20] https://www.oecd.org/gov/getting-infrastructure-right.pdf

[21] https://olc.worldbank.org/content/snapshot-who-sponsors-infrastructure-projects

[22] Bringing PPPs into the Sunlight, Synergies Now and Pitfalls Later? IADB, 2018

[23] Mobilising Finance for Infrastructure, A Study for the Department for International Development, Cambridge Economic Policy Associates Ltd, 2015

[24] https://ppp.worldbank.org/public-private-partnership/library/procuring-infrastructure-ppps-2018

[25] Evaluation of Public-Private Partnerships in Infrastructure, OVE, IADB, 2017

[26] Tariff Adjustment or Collection Ratio, O&M cost recovery ratio, Debt Service Coverage Ratio, Operating Margin Ratio, Capital Expenditure Coverage Ratio, Liquidity Ratio, and Debt to Asset Ratio.

[27] Source: World Bank. 2018. "Strategy for Prioritization of Investments, Funding and Modernization of Ukraine's Road Sector" Report No: AUS0000345, June 2018 and Global Infrastructure Facility 2021.

Annex 1: Evaluation Methodology

The evaluation assesses the objectives of EBRD's Public Sector Operations (PSO) and their contribution to EBRD's Transition Impact. Objectives and target presented in Board documents and EBRD's databases are used to determine benchmarks and assess results. The evaluation uses the OECD DAC criteria of relevance, additionality, effectiveness and efficiency. Relevance assesses the level of importance and political support for EBRD's assistance to the public sector, and its alignment with EBRD's transition objectives. Additionality considers the extent EBRD's assistance could be expected to add value to countries of operation (COO) from a financial and non-financial perspective. Effectiveness assesses the benefits derived from outputs provided, and the extent they achieved the outcomes and impacts identified at the time of Board approval. Efficiency considers costs to EBRD, based on factors such as financial sustainability, time to implement projects, and intensity of resource usage, particularly in areas such as mobilisation, staff and grants. On the basis of these findings, lessons are drawn on the main constraints on performance, and opportunities to strengthen future operations addressing similar types of challenges.

The results framework is presented in Table 1. As outputs are not recorded in EBRD databases, input indicators such as policy advice, guarantees, debt and equity are used as proxies for measures of the quantity, quality, availability and cost of outputs such as institutional and infrastructure capacity.

Table 1: Evaluation Results Framework

Criteria	Indicators	Components
Relevance and Additionality	Policy Alignment	(i) COO objectives (ii) EBRD objectives
	Value creation potential	(iii) Additionality (financial, non-financial)
Effectiveness	Impacts	(i) Improvements in Growth and Competitiveness (ii) Improvements in Social Conditions (iii) Improvements in Environmental Conditions
	Outcomes	(i) Achievement of Environmental Targets (ii) Achievement of Customer Service Targets (iii) Achievement of Economic Targets
	Outputs	(i) Institutional Capacity (ii) Infrastructure Facilities
Efficiency	Inputs	(i) Staff (ii) EBRD Profitability

	(iii) TC Grants and Other Financial Resources
	(iv) Internal and external (mobilised) capital

Source: EVD

Annex 2: Trends in Financing of Infrastructure

1. Overview

It is difficult to get accurate information on spending on infrastructure worldwide. In 2017 PPIAF, WBG published a report "Who Sponsors Infrastructure Project?"[10]. which tries to address this gap The study was not representative of total infrastructure investment, and covered publicly available information on investment occurring through project vehicles. The data set excludes informal or rolling, non-project infrastructure spending. As a result, the database is biased towards middle income and larger countries and projects. The results of the study are presented in **Section 2**.

Datasets typically do not include information on projects that failed to reach financial closure or cover only projects commissioned by a certain jurisdiction. The most comprehensive database is the World Bank's PPI database. This dataset only includes observations from low- and middle-income countries, it does not include projects in the early phases of development and it only covers four sectors: telecommunications, energy, transport, and water. Information on the social sector PPPs is limited for developing economies and totally absent from the World Bank database. The main trends in the PPPI database are presented in **section 3**.

2. Trends in Infrastructure Investment

2.1. Overview

Demand for infrastructure is growing, as it is seen a key driver of economic growth and development. Factors such as climate change and urbanisation are contributing to this demand. At the same time, investment in infrastructure in most countries has lagged rising demand, and averaged about 1.8% of GDP globally in 2017.

Most public sector (87%) infrastructure investment is concentrated at the national level, and 80% of PPP investment. Municipal governments account for about 8% of infrastructure investment. The core public sector splits investment equally between brown and greenfield investment, whereas SOEs and PPPs have a clear preference for greenfield investment.

2.2. Investment by Region

In 2017 public sector accounted for 83% of infrastructure investment. State Owned Enterprises (SOEs) accounted for 66% of total public investment, with ministries accounting for the balance. Public Private Partnerships (PPPs) has increased the available sources of finance over the last two decades, but volumes remain small as a proportion of total infrastructure investment. PPPS are most commonly used in Latin America and the Caribbean (LAC) and they are typically used to meet shortfalls in financing and provide a source of new technology.

Figure 1: Infrastructure Investment by Region, by Sponsor, 2017 (%GDP)

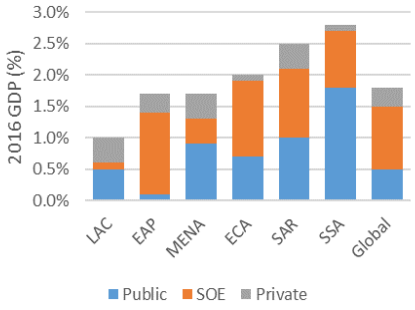
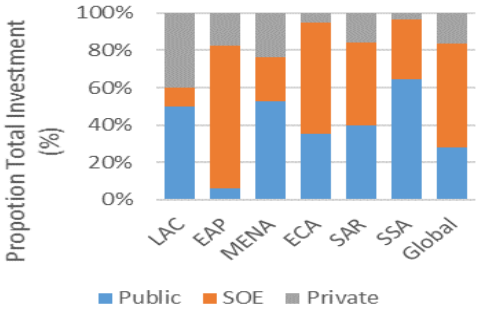


Figure 2: Infrastructure Investment by Region, by Sponsor, 2017 (% Total)



Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

Asia, including East Asia and the Pacific (EAP) and South Asia Region (SAR) attracted more infrastructure investment than all other regions combined. A small number of countries in each region tend to dominate infrastructure investment. China accounted for 60% of EAP, Russia 57% of Europe and Central Asia (ECA), Argentina and Mexico combined accounted for 64% of investment in LAC, Iran 60% of Middle East and North Africa (MENA) region, and India 53% of SAR. Important exceptions were Columbia, Mexico and Brazil in LAC, Egypt and Jordan in MENA and Turkey in ECA, and Cambodia, Philippines and Mongolia in EAP. Each of these countries has been pursuing a strong policy shift and implementing institutional reforms aimed at promoting PPPs.

Figure 3: Infrastructure Investment 2017, USD (Bn)

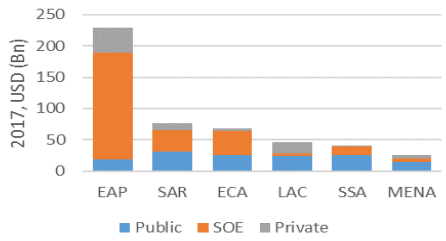


Figure 4: Infrastructure Investment 2017, USD (Bn) (% Total)

Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

2.3. Investment by Sector

2.3.1. Overview

By sector, 50% of total investment was in energy (80% public), 45% in transport (88% public), 4% in water (80% public) and 1% in ICT (34% public). SOEs dominate transport and energy sectors, public entities in water, and private sector in ICT. Within these totals there are important differences across regions in sector allocations. The Middle East and North Africa (MENA), Sub-Saharan Africa (SSA), and SAR directed more investment towards energy, whereas Europe and Central Asia (ECA) and EAP directed more

investment to transport. LAC had a clear split between transport projects mainly financed by the public sector, and energy financed by the private sector.

2.3.2. Energy

In the energy sector, SOEs dominate investment in EAP, whereas Private investment is the main source of investment in LAC (**Figure 5**). At the sub-sector level, SOEs are dominant in generation, transmission and distribution, with private investment mainly occurring in generation and distribution (**Figure 6**).

Figure 5: Investments Energy by Region (%)

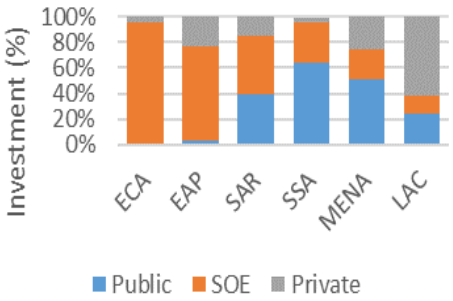
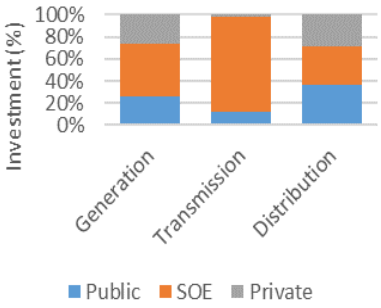


Figure 6: Investments Energy Sub-sector (%)



Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

Most private investment in generation is occurring in wind (95%), solar (85%), coal (51%), and waste (33%).

2.3.3. Transport

Most investment in the transport sector is sponsored by the public sector, with private sector only making a very minor contribution across all regions (**Figure 7**). By sub-sector, private sector only makes a material contribution in ports (**Figure 8**).

Figure 7: Investments Transport by Region (%)

Figure 8: Investments Transport Sub-sectors (%)

Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

2.4. Types Infrastructure Projects and Sources of Financing

SOEs account for about 66% of all public sector investments by value, and their average project size is about US$30 million. PPPs are much smaller by number, but average project size is large, being about US$100 million. Public sector projects are evenly split between greenfield and brownfield projects, whereas private sector projects are dominated by greenfield projects (**Figure 8**). Most projects are initiated at the national level (**Figure 9**).

Figure 8: Type Projects: Share of Projects by Number (%)

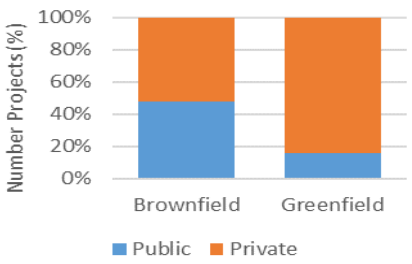
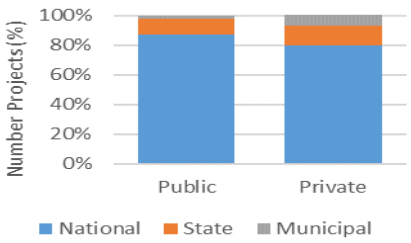


Figure 9: Grantor: Share of Projects by Value (%)



Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

Public sector was the most important source of financing for infrastructure, and it relied on a debt to equity ratio of 41:59, with debt mainly being sourced internationally (Figure 10). PPPs relied on more debt than public sector projects having debt to equity ratio of 70:30. Most debt finance for both public and private sector projects was sourced from international markets. Local debt raised for SOE infrastructure-project investment commitments in China accounted for 95% of locally sourced debts for SOE projects.

Figure 10: Source Debt Finance – Market (%)

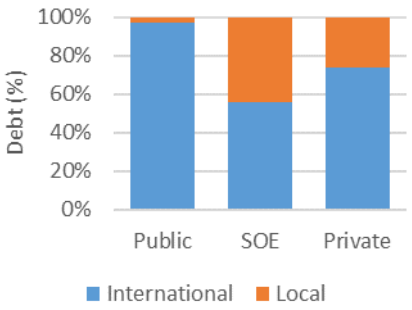
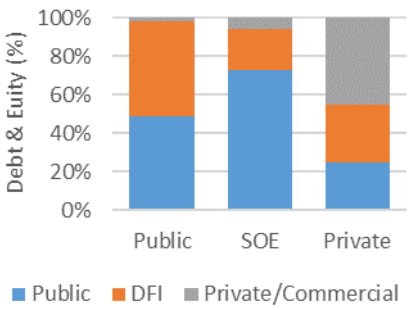


Figure 11: Source Debt & Equity Finance – Financier (%)



Source: Who Sponsors Infrastructure Project?, PPIAF, World Bank, 2017

Development Finance Institutions (DFIs) were the most important source of debt finance (30% of investment commitments), with 94% of their funds being allocated to public sector projects. Multilateral development banks (MDBs) were the dominant group of DFIs financing public sector projects (42% of public sector debt), followed by bilaterals (30%). Bilaterals were more prominent financing PPPs (24% of PPP debt), compared to MDBs (12%).

2.5. Trends in Private Participation in Infrastructure

2.5.1. Overview

Investment in PPPs in Emerging and Developing Economies (EMDEs) has demonstrated a downward trend over the period 2010 to 2019 (Figure 12). In 2020, the decline in PPP investments accelerated due to the impact of the Covid 19 Pandemic. In recent years.

2.5.2. Regional Trends

EAP has become increasingly dominant in PPPs, mainly due to the impact of China, which accounted for 69% of regional investment. LAC has been the most important source of PPP investment over the evaluation period, and started to increase its share again in 2019, largely driven by investment in Brazil. (**Figure 13**). ECA investment is mainly driven by the PPP program in Turkey, which has been negatively impacted by macroeconomic conditions in the country. Other countries with PPP programs in Europe and Central Asia (ECA) include Uzbekistan, Belarus, Bosnia and Herzegovina, Kosovo, Serbia, Armenia, Georgia, Kazakhstan, and Ukraine. The Middle East and North Africa (MENA) region is only a minor source of PPPs, although activity is occurring in Egypt, Morocco, Jordan and Tunisia.

Figure 12: Investment Commitments (US$Bn)

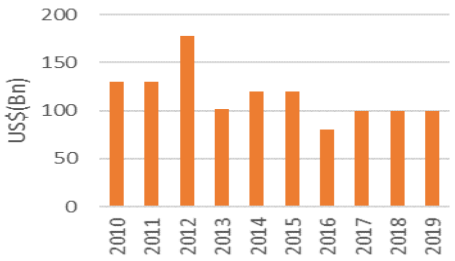
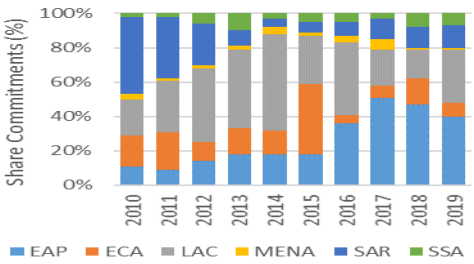


Figure 13: Share of Investment Commitment (%)



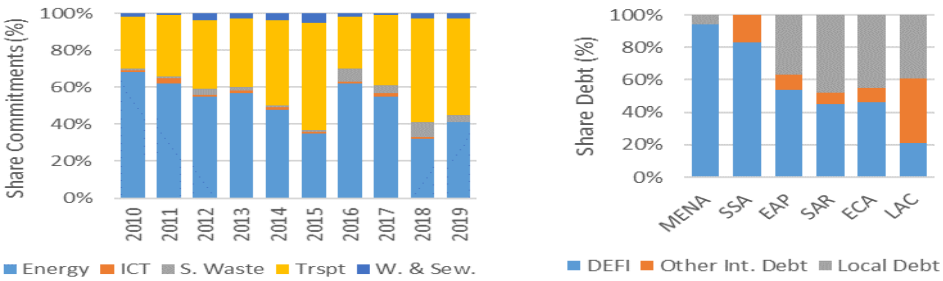
Source: Private Participation in Infrastructure (PPI) Annual Report: 2019, PPIAF

2.5.3. Sector and Financing Trends

At the sector level, transport has been increasing its share of PPPs over time, accounting for about 50% of PPP investment in 2019 (**Figure 14**). Roads accounted for 59% of investment, followed by railways, ports and airports. Most of the road investments in 2019 occurred in China and it was sponsoring many of the transport projects in other regions under the Belt and Road Initiative (BRI). Energy accounted for about 40% of investment in 2019, with about 80% in electricity, and 20% in natural gas. Energy investment has been trending down over time. The decline is energy investment has been driven by a reduction in energy subsidies in China. About 60% of energy investment has been in renewables from 2014-2019, with solar PV being the most popular technology. Municipal water and sewerage, and solid waste continue to be minor areas of investment, with most activity occurring in China. Foreign currency Development and Export Finance Institutions (DEFI) support accounts for more than 50% of financing.

Figure 14: Sector Commitment (%)

Figure 15: International & Local Debt 2019 (%)



Source: Private Participation in Infrastructure (PPI) Annual Report 2019, PPIAF

2.6. Conclusions

The results underscore the dominance of the public sector, particularly SOEs in financing infrastructure. EAP accounts for up to half of global public and private investments, with China alone accounting for a quarter. The study shows that the water sector remains seriously underfunded in comparison with energy and transport. The private sector's share of infrastructure investments remains relatively small, despite the numerous initiatives to mobilize more private-sector investments. Although the private sector is active in some sectors (e.g., wind, solar, airports and ports), infrastructure investment still remains a public-sector "business." At the same time, there are important variations across regions where PPPs have managed to gain traction, in particular LAC.

Annex 3: Constraints Privately Financing Infrastructure

This appendix provides an overview of demand and supply constraints on privately financed infrastructure. These constraints show that solutions promoting Private Sector Participation (PSP) need to prioritise institutional building in both infrastructure and financial markets.

1. Demand Constraints

Government agencies have strong incentives to pursue TPIs as they maintain control of funds, often under very weak governance arrangements on how they are spent. Projects lack clear output specifications, and implementation of project designs occurs on a piecemeal basis as funds become available. Due to the lack of output data, government agencies are primarily accountable for spending budgeted funds, and risk losing their allocation if it is under-spent.

There is a lack of institutional capacity in governments to develop pipelines of projects that are sufficiently attractive to encourage private sector firms to invest in project due diligence. In many cases government agencies do not have access to funds to prepare projects to a level suitable for private sector finance. Most projects developed using Traditional Public Investment (TPI) structures rely upon sovereign loans to fund project preparation and implementation after financial approval. The introduction of Public Private Partnerships (PPPs) can create tensions between line ministries responsible for spending funds and PPP units incentivised to develop privately financed projects, often without any clear governing body to decide on the preferred method of procurement.

Project designs and the risk allocation arrangements may not be fit for purpose. Infrastructure projects have long lives and it is difficult to capture all possible outcomes in a contract. Further risks arise when governments rush bidding processes for political reasons; technology in sectors such as health and education sectors is constantly improving; or demand is difficult to forecast. Private sector firms may under bid on PPP contracts and then seek renegotiations after contract award to change the scope and cost of operations. In some cases, risk allocation may be unbalanced, as governments retain residual risks and cannot cancel the contract due to costly early termination provisions.

It is expensive to prepare PPP projects, as they require capacity building and detailed due diligence up front. PPP projects require the preparation of complex documentation, financial advice and institutional capacity to monitor and enforce compliance with the contract over the life of the facility. Detailed due diligence is required to reduce the potential for changes to the scope during the project lifecycle, and ensure availability of revenues in a timely manner to service finance. PPPs may create contingent liabilities due to unforeseen changes in scope, force majeure events, foreign exchange (FX) risks, and early termination. Government's need to develop legislative frameworks, regulatory bodies, and contract structures to manage these obligations.

Public sector projects are seen as providing more flexibility than PPPs as future capital expenditure can be delayed until the risks are resolved. This flexibility comes at a cost of not knowing what was meant to be delivered, reduces potential for synergies in coordinating investments, and does not mitigate project risks. Most governments in developing economies have cash based accounting systems so there is no matching of costs and benefits of how sovereign funds are spent. There are no project output specifications as the focus of reporting is on inputs. Under TPIs, government officials can deliberately under

estimate the cost of projects to obtain financial approval, and shift capex costs into the future as additional expenditure for refurbishment and maintenance. As most governments do not define outputs, they lack means to mitigate associated risks. FX risks are equally applicable to debt servicing on foreign currency (FCY) sovereign loans and offtake obligations on PPPs denominated in FCY.

2. Supply Constraints

The most important constraint on the use of PPPs in developing economies are the difficulties banks experience accessing low cost long term local currency (LCY) finance. Foreign banks are constrained by shallow local financial markets and a lack of a long-term currency swap market. Local banks can access long term FCY, but they are dependent on deposits for LCY and there is often limited liquidity in wholesale markets, which creates refinancing risks. These problems have declined in recent years due to quantitative easing programmes that have substantially increased liquidity in countries of operation (COOs).

Commercial banks have difficulties providing long-term finance due to requirements of Basel 3 Accord. This regulation increased the amount of capital banks maintain as a capital buffer, and the amount of liquid assets needed to meet stress test requirements. These requirements have increased the cost of long-term loans and discouraged banks from extending long-term loans under project financing schemes. Governments have developed ways to offset the higher financing costs by use of existing assets, direct payments during operation to increase project revenues, or capital grants to reduce the total debt required. In countries such as Brazil, China, and India, PPPs rely on the use of subsidised interest from state banks.[11]

Financial institutions such as pension funds and insurance companies have limited interest in project finance debt as they seek liquid long-term assets with proven cash flows. Even in developed countries, institutional investors are only willing to bear construction risk with a guarantee from mono-line credit insurers and most of these entities disappeared after the GFC. In local markets, institutions can often only invest in investment grade, capital market instruments denominated in LCY. In developed markets, institutional investors often participate in operational PPPs following a refinancing by international project finance banks, in projects with investment grade publicly listed project bonds traded in capital markets.

Due to lack of availability of LCY, most PPPs continue to be financed by DFIs, primarily in FCY. Development Financial Institutions (DFI) financing is not sufficient to meet investment needs, and the use of FCY creates currency mismatches with LCY revenues. The use of FCY currency introduces significant risks into projects due to fluctuations in FX rates, and the potential for economic shocks in countries with limited capacity to manage these risks, leading to large LCY devaluations relative to FCY, which increase debt-servicing costs. Economic shocks have happened frequently over the last 30 years, particularly in countries with shallow FX markets.

Most greenfield PPPs in developing countries have only been able to raise commercial bank finance through the use of partial risk guarantees (PRG) or political risk insurance (PRI). These instruments normally come from MDBs, and they are dependent on a government counter-guarantee, which is not always forthcoming. These types of guarantees are powerful instruments to mobilise PSP as governments have to counter indemnify MDB guarantees, thereby aligning incentives to ensure offtake payments enable PPPs to repay debt. There is evidence these guarantees also reduce PPPs' cost of finance, and extend

tenors. Over time, coverage is reduced as financiers gain confidence in a country.[12] Government guarantees and ratings on project finance and project bonds can help local banks and institutional investors participate in the financing of local infrastructure.

Annex 4: Modalities for Facilitating Privately Financed Infrastructure

There has been a growing international acknowledgement of the importance of reducing the infrastructure gap, and the need to address constraints on the increased use of private finance. The G20 has stressed the need to scale up infrastructure investment and mobilize more private capital. A set of Quality Infrastructure Principles (QII) emphasise a focus on infrastructure governance including Value for Money (VFM), life cycle costs, climate resiliency, and fiscal affordability within the medium-term fiscal framework of the country. Multilateral development banks (MDBs) such as the World Bank Group (WBG) and Asian Development Bank (ADB) have formally recognised these Principles.[13]

In many countries, despite continued high levels of inefficiency, it has been difficult for political and economic reasons to unbundle SOEs, and privatise competitive entities in infrastructure. State Owned Enterprises (SOEs) are an important source of employment, and they provide a means of delivering public goods in areas such as inclusiveness and mitigation of climate change impacts. Offsetting these benefits, operations are often highly inefficient due to factors such as their ability to access to soft public sector budgets, complex and time-consuming bureaucratic procedures, and lack of incentives to pursue effective and efficient outcomes. As a result, the focus of reforms in many countries has shifted to identifying ways to procuring public goods and reducing risks for private sector investors using Public Private Partnership (PPP) contracts to develop strategic assets, rather than prioritise sector wide reforms such as privatisation.

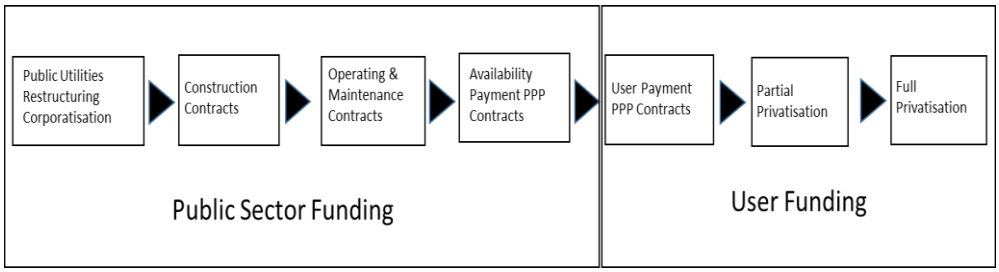
Progress on development of PPPs has been hindered by the complexity of financing arrangements for infrastructure. An important aspect of infrastructure is its reliance on both funding and finance sourced primarily from the government. Financing refers to the source of money required up-front to meet the costs of constructing infrastructure. Typically, governments source infrastructure financing through surpluses or government borrowing (for traditional procurement) or by the private sector raising debt and equity finance (for PPPs). Funding refers to the source of money required to meet payment obligations. In a PPP context, it refers to the source of money over the long-term used to pay the private partner for the investments, operating and maintenance (O&M) costs of the project, and repayment of financing.[14]

Availability of funding is a more important constraint than availability of finance, when considering options to develop infrastructure using either public or private finance, making VFM a critical consideration when designing projects.[15] Traditional Public Investment (TPI) projects have low potential for VFM as they focus on inputs such as construction or O&M contracts funded from the budget independent of project benefits. PPPs have high potential for VFM as they explicitly measure net costs and benefits of outputs. The source of funding for PPPs depends on the contractual structure **(Figure 1).** Funding comes from taxes (in government-pays availability payment PPPs) or from user charges (in user-pays PPPs). These PPP options are not mutually exclusive, and a single project can have aspects of multiple private sector participation (PSP) options.

User payment PPPs are the traditional source of PSP funding and finance for infrastructure, often referred to as concessions. Concessions are attractive to governments as they do not require any public sector funding and they transfer all the risk to the private sector. The main disadvantages with concessions

is their inability to monetise public goods, and they can contain risks, which the private sector cannot mitigate. In the 1990s, the government in the United Kingdom (UK) started to develop PPPs that relied on availability payments from the government. These payments provided a means of increasing PSP in infrastructure by the government directly paying for public goods and reducing project risks. Availability payments are now present in many developed and developing economies.

Figure 1: Spectrum of PSP Options



Source: EVD

The potential gains from PPPs relative to TPI projects can be substantial. There is a large body of evidence showing the public sector consistently over runs construction budgets and experiences time delays, reducing availability of outputs and project impacts. The UK Treasury has collated data on optimism biases and automatically applies cost uplifts to public sector projects of up to 51% for buildings and 66% for civil works, with similar adjustment for timing.[16] In developing economies, these costs are likely to be higher.

Several reasons have been identified for these biases: (i) technical difficulties forecasting requirements; (ii) economic incentives arising from confirmed availability of finance, without clear deliverables; (iii) psychological explanations such as optimism bias; and (iv) political explanations, which seem the most important, where planners and sponsors deliberately over estimate benefits and under estimate costs, to maximize chances of the project being financed.[17]

PPPs can mitigate these risks by linking revenue to delivery of outputs (no output no payment), with financial repayments providing the incentives needed to ensure delivery over the term of the contract. PPPs do not require sector wide structural reforms as they introduce competition for a facility, rather than the market as a whole. PPPs provide essential data through the payment mechanism on availability and usage of facilities, and costs of production for future planning and delivery of infrastructure.

Most importantly, PPPs provide a means of ensuring timely maintenance, which is critical for output delivery. WBG has estimated that effective and timely maintenance can reduce the total life-cycle cost of infrastructure by more than 50%. Under-investment in O&M is common as it is generally easier for government agencies to raise finance for intermittent new investment than cover continuous O&M costs. Maintenance is less visible than new investments and easily delayed, making it a target for budget cuts. Appropriate and reliable budgetary allocations—or use of contracts that pre-commit adequate maintenance expenditures such as PPPs and performance-based contracts (PBCs)—are necessary to ensure that good

maintenance can actually happen.[18] PPPs can provide this certainty as they can raise finance from the markets when required, rather than rely on uncertain budget appropriations.

The main disadvantages with PPPs have been issues associated with inflexibility, asymmetric information, pricing of capital based on project risks, and complexity of contracts. Governments have mitigated these risks by developing institutional capacity to prepare and manage contracts, simplifying contracts so they reflect the economic conditions and characteristics of the underlying assets, collecting data, and gaining an understanding of how to mitigate project risks, initially using simple contracts, before adding additional complexity. Over time, as public and private counterparts gain familiarity with the contracts, the government can augment their scope and target support more precisely.

Despite these reforms, the take up of PPPs in many developing economies has been slow. It is difficult for governments to measure the success or failure of a PPP, relative to a TPI, due to the absence of a counterfactual, and lack of data on sources of VFM. Once a financing method is decided, it determines the method of procurement. A public sector outcome can easily be rationalised using an ex post justification as there are no ex ante output specifications and benchmarks. Governments have tried to address this problem by developing VFM methodologies to measure the value creation (ie maximisation of both effectiveness and efficiency) potential of PPPs relative to a Public Sector Comparator (PSC). These methodologies can be complex and not used in many economies, either at the time of procurement, or during the operating phase of the project. This practice creates significant risks for governments, as demonstrated by a UK audit of VFM analyses, which found that conventional procurement was ill-defined, and in some cases, the conventional procurement option was in fact undeliverable.[19]

Annex 5: International Practices to Facilitate Private Participation in Infrastructure

1. Overview

World Bank Group prepared a study "Procuring Infrastructure PPPs"[20] in 2018 (updated in 2020), which assessed the legal and regulatory frameworks and recognized good practices that govern Public Private Partnership (PPP) procurement and management across 135 economies. The aim of the studies was to help countries improve the governance and quality of PPP projects. The study mainly focused on institutional arrangements and did not look at issues such as macro-economic instability and corruption, which are important, but were outside the scope of analysis.

2. Legal Frameworks

Most countries have PPP laws, and in many countries, they are combined with public sector procurement laws. Given the diversity of legal frameworks, the assessment focussed on the regulatory framework in place for the procurement of PPPs, and their alignment with international good practices.

3. Institutional Arrangements

Most countries (81%) have a PPP Unit, and most have a common set of core tasks: (i) PPP regulation policy and guidance (85%); (ii) capacity building for other government entities (88%); (iv) promotion of the PPP program (88%); (v) technical support in implementing PPP projects (80%); and (vi) oversight of PPP implementation (75%). These functions are consistent with the PPP unit performing mainly an advisory role supporting the actual procuring authorities (usually the relevant line ministry). Around 59% of the PPP units are also required to approve PPP projects, usually through their participation in the PPP feasibility assessment process. The assessment of the fiscal risks borne by the government in a PPP is not usually a function of the PPP unit and responsibility is with the Ministry of Finance or central budgetary authority.

4. Preparation

Due to the complexity of PPP contracts, and their long-term nature, effective due diligence is critical to ensure projects generate value for money (VFM) for governments and users of PPP facilities. Good practices help ensure that the decision to procure a PPP is justified and the procuring authority is ready to initiate the procurement process:

- The Ministry of Finance or central budget authority approves the long-term financial implications of the project;
- There is a specific budgetary and accounting/reporting treatment for PPP projects;
- The project is assessed and prioritized along with all other public investment projects in the context of the national public investment plans;
- The project is adequately justified on the basis of:

  - socioeconomic analysis;
  - fiscal affordability assessment;
  - financial viability;
  - risk assessment;
  - comparative assessment of PPP versus public procurement;
  - market assessment; and
  - environmental impact assessment.
- The results of these assessments are included in the request for proposals and/or tender documents and published online, together with the tender documents;
- The procuring authority prepares a draft PPP contract and includes it in the request for proposals and/or tender documents, and these are published online; and
- The procuring authority has standardized PPP model contracts and/or transaction documents to expedite and guarantee consistency.

The study found that most countries undertake preparatory studies, but only about 30% have defined methodologies, or make the assessments available online. Market sounding is the least commonly performed assessment among the surveyed economies.

When entering into PPP contracts, governments may incur fiscal commitments such as direct liabilities (such as availability payments or shadow tolls) and contingent liabilities (such as guarantees or compensation clauses). The occurrence, timing, and value of the obligations depend on uncertain future events. Without these liabilities being accounted for (through public financial management), PPPs can be used to bypass budgetary and fiscal controls and become a hidden burden to the public sector, affecting the overall fiscal sustainability of the economy.

Despite the importance of this issue, the assessment of the fiscal implications of PPPs is not common practice. A large majority of the surveyed economies (81%) require an approval by the Ministry of Finance or the central budgetary authority before initiating a PPP procurement process. Only 54% of economies surveyed require an additional approval before contract signing. This second approval is required to ensure the project is still fiscally affordable for the government after any significant changes that may have occurred during the tendering process. Only 36% of the economies have introduced regulatory provisions on the accounting and/or reporting treatment of PPPs and 24% have specific provisions about the budgetary treatment for PPPs.

5. Procurement

The private partner is usually selected through a public tendering process, with the application of either the general public procurement rules or rules especially tailored for PPP procurement. Most PPP procurements take more time and are more complex than conventional procurement. A high degree of transparency is required during this process. Good practices that help ensure fair competition, VFM, and transparency during the PPP procurement process include the following:

- The bid evaluation committee members meet minimum technical qualifications;

- The procuring authority publishes the public procurement notice online;
- The procuring authority grants at least 30 calendars days to potential bidders to submit their proposals;
- Foreign companies are not prohibited from participating in PPP procurement processes;
- The procuring authority can choose among a range of competitive procedures based on their suitability;
- The tender documents explain in detail the procurement procedure providing the same information to all bidders;
- The tender documents specify any prequalification/shortlisting criteria, if applicable;
- Potential bidders can submit questions to clarify the public procurement notice and/or the request for proposals and the answers are disclosed to all potential bidders;
- The procuring authority conducts a pre-bid conference to further inform potential bidders and the clarifications provided are disclosed to all potential bidders;
- Bidders prepare and submits a financial model with their proposal;
- The procuring authority evaluates the proposals strictly and solely in accordance with the evaluation criteria stated in the tender documents;
- The procuring authority follows a specific procedure to guarantee value for money if only one proposal is submitted;
- The procuring authority publishes the award notice online;
- The procuring authority provides all bidders with the results of the PPP procurement process, including the grounds for the selection of the winning proposal;
- There is a standstill (or pause) period after the intent to award the contract has been shared with the bidders and before the contract is awarded to allow unsuccessful bidders to challenge the award decision, and this period is specified in the Request for Proposal (RFP) documents and intent to award notice;
- Any negotiations between the selected bidder and the procuring authority after the award and before the signature of the PPP contract are restricted and regulated to ensure transparency; and
- The procuring authority publishes the signed PPP contract and its amendments online.

Most regions score reasonably well on procurement practices, and Europe and Central Asia (ECA) is at the same level as Latin America and Caribbean (LAC). East Asia and Pacific (EAP) has the lowest score, followed by Sub Saharan Africa (SSA).

6. Contract Management

6.1 Overview

Due to the long-term nature of PPP contracts, it is not possible to foresee every future development, and institutional arrangements need to be established to adjust the terms of the contract, provide a dispute resolution mechanism that is fair to both parties, and clearly detail effects of early project termination. Good practices to ensure a successful implementation and delivery of the PPP project include the following:

- The procuring authority has a system to manage the implementation of the PPP contract, including establishing a PPP contract management team; involving some contracts management team members in the project starting at the procurement stage; and adopting PPP implementation manuals and risk mitigation mechanisms;
- The procuring authority establishes a system for tracking progress and completing construction works under a PPP contract, with relevant information made publicly available;
- Monitoring and evaluation systems are in place to oversee the implementation of the PPP contract after the construction stage, with relevant information publicly available;
- Foreign companies are not prohibited from repatriating the income generated by the operation of a PPP project;
- Potential changes in the structure of the private partner are expressly regulated, requiring the replacing entity to be at least as qualified as the original private partner;
- Modification and renegotiation of the contract is regulated to reduce incentives to use changes opportunistically by either the private partner or the procuring authority;
- Specific circumstances (force majeure, material adverse government action, change in the law, refinancing) that may arise during the life of the contract are expressly regulated;
- Dispute resolution mechanisms are in place allowing the parties to resolve disputes in an efficient and satisfactory manner without adversely affecting the project;
- Lenders are given step-in rights for cases when the private partner is at risk of default or if the PPP contract is under threat of termination for failure to meet service obligations; and
- Grounds for termination of the PPP contract and its associated consequences are well defined.

6.2 Renegotiation or Modification of Contracts

A mechanism needs to be defined in the contract that allows adjustments within the contract, or amendment to the contract. Standardised PPP contracts are an important way of providing predictability and balanced outcomes. Of the countries surveyed, and amendment procedures were addressed in the contract, only 14% used standardized contracts. In some countries, particularly in LAC, the procuring authority can unilaterally change the contract without clearly defined limits. Provisions are required such as external approvals, and compensation if the private partner incurs additional costs arising from changes outside the original scope of the contract. EAP and South Asian Region (SAR) had no provisions for unilateral changes

in contract, SSA and ECA had provision in 18-19% of cases, MENA 32%, and LAC 56%. In OECD high income countries, 31% of contracts have these provisions.

6.3 Termination of Contracts

PPPs have a defined term and handover to the Government is made in accordance with the terms of the contract. Usually the contract term is aligned with the life of the asset, when loans and have been repaid, and handover is accompanied by tasks such as clean-up. In these circumstances, termination is straightforward, costs are known in advance, and mechanisms are in place such as termination provisions to ensure required tasks are implemented.

In some cases, it may be necessary to terminate the contract early such as when contractual obligations are not met by one of the parties, or circumstances arise where neither party is at fault (force majeure). Public order or interest is an often-cited ground for unilateral termination on the part of the public entity.

The frequent exercise of unilateral termination powers may weaken private investors' confidence in the PPP market. Outlining the grounds for termination, and their outcomes in detail in advance boosts the level of trust and reduces uncertainty for PPP project's stakeholders, decreasing risk premiums and providing greater VFM. Grounds for early termination or unilateral termination, and their consequences should be specifically identified and set out in the contract. Most countries address termination of contracts and its consequences through the regulatory framework.

Once a contract has been terminated, either on schedule or prematurely, many consequences emerge, such as the requirement to provide monetary compensation or project site handover. The identification of these consequences in the contract ensures that neither party is put in a disproportionately disadvantaged situation should the other party decide to end the contract.

Safeguards are required on the continuation of services to the public in the event of termination. Termination consequences in many economies include transfer of technology, buildings, and equipment; compensation for the fair value of works; and service continuity. In Colombia, a mathematical formula is established to determine any reciprocal benefits between the parties as a result of the PPP contract's early termination either by mutual agreement or unilaterally.

6.4 Unsolicited Proposals

Unsolicited proposals (USPs) are an alternative to government-initiated infrastructure projects. Instead of the government identifying and assessing the need and suitability of an infrastructure project as a PPP, a private sector entity approaches the government with a proposal to develop a specific infrastructure project. USPs have been increasingly used in recent years. According to the World Bank Group's Private Participation in Infrastructure (PPI) Database, approximately 4% of infrastructure projects within the low- and middle-income economies are USPs.

Many governments lack the technical expertise and experience to develop projects successfully, or they lack the financial resources to hire external advisors to support them in developing and procuring projects. Countries with limited public-sector capacity typically rely on USP proponents to develop the projects, in return for which the USP proponents typically expect the projects to be awarded to them.

USPs can introduce several challenges, such as diverting public resources away from governments' strategic plans and priorities, failing to attract competition, and ultimately leading to opportunities for corruption. A balance is required between allowing the private sector to propose viable and necessary infrastructure projects and the need for those projects to be in the public interest and achieve the VFM.

In the majority (62%) of OECD high-income economies, the regulatory frameworks are silent about the treatment of USPs, and in practice, they do not take place. In countries where USPs are permitted, in particular low income countries, procedures need to put in place to ensure there is sufficient time for competing bids to be prepared, and tendered in a transparent and competitive bid process.

Good practices to ensure transparency and competition during the procurement of projects originated as USPs include the following:

- The procuring authority assesses the merits of the USP and ensures that it is aligned with the government's investment priorities;
- There is a vetting procedure and/or a pre-feasibility analysis before moving forward and fully assessing the unsolicited proposal;
- If the USP is justified, the procuring authority initiates a competitive procurement procedure to select the private partner; and
- The procuring authority grants at least 90 days to all potential bidders (besides the proponent) to submit their proposals.

Similar to other PPP parameters, USP scores are closely correlated with income, and LAC and SAR are more advanced than other middle and low-income regions such as ECA and MENA.

7. Conclusions

The higher the income level of the group, the higher the performance in the assessed thematic areas. Preparation and contract management are the areas that have the most room for improvement across all income level groups. The high-income economies of the Organization for Economic Cooperation and Development (OECD) and the LAC regions perform at or above the average in all thematic areas.

Less than one-third of economies have adopted specific methodologies and standard contracts that ensure consistency across projects. An even smaller percentage make those assessments available online. In turn, the private sector often reports a lack of quality projects in the pipeline as a constraint to invest in infrastructure.

Despite the importance of the identification of fiscal implications of PPPs, this practice is not common. During the preparation of PPPs, the approval by the Ministry of Finance to ensure fiscal sustainability is not required in 19% of the surveyed economies. Only 30% of the economies surveyed have regulations on the accounting and/or reporting of PPPs, and even fewer have introduced some type of regulatory provision on the budgetary treatment of PPPs.

Most economies perform relatively close to recognized good practices in the procurement phase, but there is a need to strengthen PPP contract management arrangements. The long-term nature of these contacts means that renegotiations may be required and arrangements need to put in place to prevent opportunistic behaviour by either party. In practice, 15% of the economies do not address PPP contract renegotiation in

their regulatory frameworks; 31% consider it a contractual issue, yet do not use standardized contracts to preserve consistency; and 35% of economies do not regulate either of these issues.

There is a lack of clarity in most countries about how they deal with USPs.

Annex 6: Regional Practices to Facilitate Private Participation in Infrastructure

1. Overview

The Economic Intelligence Unit (EIU) was contracted by MDBs such as ADB, EBRD, IDB and the World Bank to conduct a series of studies over time of institutional capacity of governments to prepare Public Private Partnership (PPPs) at country level. The methodology assesses capacity by dividing the PPP project life cycle into five components:

- Investment and Business Climate: The business, political and social environment for investment;
- Regulations: A country's legal and regulatory framework for private participation in infrastructure;
- Institutions: The design and responsibilities of institutions that prepare, award and oversee projects;
- Maturity: The experience of implementing PPP projects and governments' ability to uphold laws and regulations; and
- Financing: The financial facilities for funding infrastructure.

The scoring framework is mostly based on binary or dichotomous indicators (1=yes and 0=no). Scores are based on evidence obtained by researching local laws and regulations, examining specialised reports and conducting interviews with experts and key stakeholders. Countries' capacity is categorised from developed to nascent.

2. Latin America

2.1 Overview

The first Infrascope study was conducted in 2009 for countries in the Latin America and the Caribbean (LAC) region. An updated study was prepared in 2019. In 2009 EIU reported that only one country had all the institutions required to oversee, implement and manage PPPs. By 2019, 16 countries had developed institutional capacity to manage PPPs. PPPs had become more diverse, moving beyond the traditional sectors of power, transport and water to encompass operations such as government offices, health care, sports and justice. Chile was the highest performing country, followed by Columbia and Peru.

2.2 Investment and Business Climate

This category measures the business, political and social environment for investment in general, not just PPP projects. The category includes four indicators that examine Political effectiveness, Business environment, Political will, and Competition environment. While the first two indicators look at a country's overall political and business environment, the second two are specific to PPPs, measuring high-level political will in favour of PPPs and social opposition to them. Political support for PPPs remains strong across the region; every country in the 2019 Infrascope had some level of political support for PPPs. Fallout from infrastructure corruption scandals had pushed political support for transparency in some countries and reorganised the market in Brazil

2.3 Regulations

The regulatory framework in 17 of 21 countries was classified as "Developed". This category measures a country's legal and regulatory framework for private participation in infrastructure via eight indicators (and their associated sub-indicators): Conducive regulatory environment; PPP selection criteria; Fairness/openness of bids and contract changes; conciliation schemes; regulators' risk-allocation record; co-ordination among government entities; Renegotiations; and Sustainability. The sub-indicators measure specific aspects of the legal and regulatory framework, including the existence of a PPP-specific framework, PPP selection criteria, procedures for handling unsolicited proposals, conciliation schemes and arbitration, appropriate accounting for contingent liabilities and others.

National infrastructure plans provide a long-term vision across sectors and priorities. All but seven countries in the 2019 Infrascope have issued national infrastructure plans that prioritise sectors and projects and guide investments over the long term. Nine countries in the 2019 Infrascope prioritise PPPs in their national infrastructure plans. Almost all countries have regulated renegotiations, but assurances of transparency and independence are lacking

2.4 Institutions

The Institutions category is the second lowest scoring category for LAC in the 2019 Infrascope, although there was a high degree of variability within the category. The indicators include the PPP institutional framework, the stability of the PPP dedicated agency, project preparation facilities, and transparency and accountability. The sub-indicators measure the existence and adequate staffing of a dedicated PPP agency, reporting lines and independence of the agency, existence of facilities and funds to prepare projects, transparency around reporting on PPPs, and other aspects of the institutional framework.

Adequate staff and funding are necessary to ensure PPP agencies are able to fulfil their missions. Three-quarters of countries have dedicated PPP agencies, but only half of these agencies have their own dedicated full-time staff. More than two-thirds of the countries have established processes to guide the preparation, procurement and implementation of PPPs. Project preparation facilities are usually found within the dedicated PPP agency.

Project development funds can play a significant role in assisting agencies and private partners in evaluating and structuring projects. Only seven countries had such funds. In Brazil, the national development bank houses a fund to help companies prepare PPP projects, after undergoing a competitive selection process. Brazil is in the process of establishing another fund to promote the development of PPPs at the municipal level.

2.5 Maturity

Maturity posted the highest category average score in 2019. This category examined a country's experience implementing PPP projects and the government's ability to uphold laws and regulations. The category comprises three indicators—Experience with infrastructure PPP contracts, Expropriation risk, and Contract termination—made up of six sub-indicators. In contrast with the Regulations and Institutions categories, scores for Maturity are based on quantitative data from the World Bank's Private Participation in Infrastructure (PPI) database, including the size of PPP investment during the past five years as a proportion of current GDP and the number of reported PPP cancellations during the previous five years.

The ability to appeal contract termination, and to receive fair compensation if early termination occurs, is an important requirement as it provides investors greater certainty when they commit to PPPs. A clear regulatory framework and a clean track record, unencumbered by arbitrary expropriations and price adjustments. The region continues to demonstrate progress on the Maturity domain; most countries feature investor protections, and three-quarters of the countries in the index allow investors to appeal contract terminations by the government. Cases of cancellations and expropriations were relatively rare.

2.6 Financing

Financing was the lowest scoring category in the 2019 Infrascope for LAC, demonstrating that financial facilities for funding infrastructure are still emerging. Indicators in this category measure Government payment risk, capital market for private infrastructure finance, institutional investors and insurance market, and currency risk.

Institutions had started to participate in financing, and there was some progress issuing new instruments such as impact and green bonds. Despite this progress, most countries in the region were still classified as emerging with respect to use of alternative financing tools, and there were no locally issued impact or green bonds. In many countries pension funds did not have the ability to invest in private equity funds for infrastructure. Risk ratings and other investment services are key to ensuring that institutional investors can participate in these types of project.

3. Eastern Europe, Central Asia and the Southern and Eastern Mediterranean

3.1 Overview

The regions in Eastern Europe, Central Asia and the Southern and Eastern Mediterranean (EECA-SEMED) comprise a culturally diverse and economically varied group of countries. They range from Bulgaria and Albania, which are aligning their political and market systems with the legislation of the European Union (EU), to economies such as Kazakhstan, which are primarily oriented towards Russia and China. Many countries are undergoing profound domestic changes, notably Turkey. In most of these countries, infrastructure and the ability to finance it needs significant improvement.

3.2 Investment and Business Climate

There is strong political support across most nations for the PPP model in principle. There is also strong bipartisan or multi-party backing for PPPs across most countries. Support for PPP programmes is further evidenced by the passage of new PPP-specific legislation in a number of countries, including Belarus (2016), Jordan (2014), Kazakhstan (2015), Morocco (2014) and Romania (2016). The majority of the countries in the study are utilising PPPs to deliver investments in transport, water and energy, and solid waste management, and some countries are exploring PPP models in health and education facilities management.

3.3 Regulations

Countries' regulatory frameworks are converging with international best practice. All countries in the Infrascope study had developed regulatory frameworks for PPPs, either through legislation or through broader public procurement regulations. The diversity of legal mechanisms used to support PPPs shows that different arrangements can contribute towards a conducive environment as long as some key principles are present, such as transparency, competition and oversight and control. However, in some countries (Georgia, Romania and Turkey) the rules on PPPs have not been codified in clear manuals for easy interpretation by stakeholders, which may create inefficiencies and confusion.

Best practices for project selection and procurement are found across countries, but full transparency is not yet the norm. All countries have regulations requiring competitive bidding, all require cost-benefit analysis by regulatory agencies, and all but two have a "value for money" requirement in selecting PPPs. While all countries require the publication of bidding documents, only two mandate the publication of full contracts, and only three require disclosure of contract changes. Only four countries (Georgia, Kazakhstan, Slovakia and Turkey) link project identification and selection to national infrastructure plans.

Regulatory gaps remain in risk allocation and renegotiation procedures. On average, the lowest performance in the Regulations category concerns risk allocation criteria and renegotiations. Only three countries (Kazakhstan, Serbia and Slovakia) provide clear frameworks to account for contingent liabilities, and there is only evidence in Slovakia that it is applied in practice. Rules on renegotiations are becoming increasingly important around the world to prevent opportunistic practices by private partners in the bidding processes, which may lead to cost overruns. Only seven countries have established transparent systems to manage renegotiations, and only four have specific mechanisms to provide transparency around renegotiations (Georgia, Morocco, Romania and Turkey). While all countries allow for international arbitration, only seven define technically adequate conciliation schemes to reduce the potential for costly and lengthy litigation by the courts.

All countries conduct environmental impact assessments, and half have regulations requiring public consultations on PPPs. All countries make environmental impact assessments (EIAs) a required part of PPPs, and seven have legal requirements for consultations with communities affected by projects. Only Georgia and Morocco require the publication of consultation findings. In Morocco, Albania, Georgia, Slovakia and Turkey consultations are conducted as part of the EIA. Gender and social inclusion criteria are absent in regulatory frameworks in all countries, which shows that sustainability has been addressed only from an environmental perspective.

Sustainability criteria are not sufficiently embedded in PPP frameworks. Very few countries include disaster and climate-risk considerations in their laws and protocols. No country accounts for disaster risk management or adaptation in PPP regulations, and none incorporates climate-change commitments in its criteria for project identification, selection or implementation. Disaster risk is accounted for partially, through a requirement of project insurance, in only three countries (Bulgaria, Turkey and Kazakhstan). Gender and social inclusion criteria in project implementation are absent in all countries.

3.4 Institutions

PPP agencies exist in most countries, providing technical support and co-ordination, and quality control for PPPs. PPP units vary across countries in terms of their structure and roles, but in general their contribution

involves supporting contracting agencies through knowledge dissemination, policy development, capacity building, co-ordination and oversight. All but two countries (Bulgaria and Georgia) have a PPP-dedicated agency or sector-specific PPP agency that reports directly to a line ministry. While some countries have developed central units located in ministries of finance (for example, Egypt and Jordan), others have created sector-specific entities, such as Slovakia in transport.

PPP agencies face a variety of challenges, including a lack of independence, skills and clear guidelines regulating agency interactions. There is a need to expand technical and practical skills in Egypt, Serbia and Romania. There is high staff turnover (Slovakia) and too many staff vacancies (Jordan). Morocco, Romania, Serbia and Ukraine score in the "Emerging" category for the stability of their PPP agencies. Challenges include too few checks and balances to ensure the independence of PPP agencies and a lack of guidelines outlining interactions between different agencies. PPP units need to be empowered with the right technical and human resources, a clear remit and the independence to fulfil their role.

Countries lack project preparation facilities and project development funds. Project preparation facilities provide technical assistance, capacity-building and the financing resources to support the early stages of PPP projects. All but four countries (Jordan, Kazakhstan, Egypt and Morocco) lack project preparation facilities, and only two countries (Jordan and Kazakhstan) have project development funds. Jordan, Egypt and Kazakhstan have budgets for project preparation facilities, administered through their PPP units, which finance feasibility studies. In the absence of such institutions, costs of project preparation are borne by the contracting agencies, sometimes with assistance from international financial institutions or regional bodies (such as the EU).

Greater transparency is needed across the PPP cycle, from open bidding to the publication of contracts and project evaluations, and the creation of accessible public registries. All countries require the publication of bidding documents, and eight have procedures for dealing with unsolicited proposals; all but two countries have had a relatively low ratio of unsolicited bids in the past five years. However, only two countries (Albania and Slovakia) have a regulatory framework that requires the publication of full contracts. Only three countries (Bulgaria, Egypt and Serbia) have a publicly accessible online PPP registry. Only two countries publish the findings of their public consultations on PPPs (Georgia and Morocco). No country publishes the results of PPP project evaluations.

3.5 Maturity

Turkey, Morocco and Jordan are the most mature PPP countries, based on the number of projects in the past five years and the size of projects relative to GDP. Turkey is the most experienced country in terms of national PPP projects reaching financial closure in 2012-2016, at 60. Turkey is followed by Jordan and Romania at 17 each, revealing a marked gap between the leader and the rest of the countries in the region. Morocco has delivered seven PPPs projects and four other countries have delivered between one and four PPP projects in the past five years. Belarus and Kazakhstan, had no projects in this period.

Over the past five years there had been low rates of expropriation or unilaterally enforced price revisions. Only one of the 13 countries studied had expropriated a PPP project over the past decade, and even that exceptional case was eventually settled. Only two countries show evidence of unilaterally enforced price revisions. In the majority of cases, pricing issues are resolved through mechanisms stipulated in contracts and regulations. Most countries have clarified rules on contract termination and provide flexibility

to negotiate reasons for termination in the project agreement. All countries provide for fair compensation in the event of early termination by the government.

A successful record of project delivery is not synonymous with a strong regulatory framework. Turkey and Morocco have a strong record of project implementation, and yet they have not fully adopted best practices for regulations and institutions governing PPPs. Countries such as Belarus and Kazakhstan have adequate regulatory frameworks, but had not implemented full projects. While regulations are not an indicator of project success, refining and standardising the rules for PPP preparation and implementation is recognised as essential to improve the efficiency of PPP transactions.

While all countries in the study have developed enabling regulatory frameworks, there is a lack of coordination of PPPs across government agencies. PPPs are complex, inter-agency endeavours that require significant collaboration across different government entities, including ministries of finance, sector ministries and PPP units. Roles and responsibilities should be clearly defined in the country's legal framework, and manuals to guide implementation. A country's PPP programme should be aligned with a national infrastructure plan.

The Infrascope index finds that co-ordination is one of the most important determinants of overall country performance. Countries with the highest scores for co-ordination among their government entities also score in the top five for the index as a whole (Kazakhstan, Slovakia and Jordan). Ten countries have developed national infrastructure plans, but only four use them to prioritise PPP projects. Seven countries have co-ordination mechanisms or guidelines to address overlapping jurisdictions, but only three (Egypt, Jordan and Slovakia) have a regulatory framework providing clear guidance on the interaction between bodies that award PPPs and those that regulate tariffs and service standards.

Health and education PPP facilities is an emerging area of activity. Turkey is by far the most active implementer of facilities PPPs, followed by Albania, Egypt, Georgia and Kazakhstan, which have each delivered, or are at the pre-tendering stage of, single projects. In Turkey, 34 healthcare projects have been developed, with a typical project term of around 30 years. PPP Facilities management contracts are complex. Challenges affecting facilities management PPPs include lack of lack of clarity about regulations, lack of experience, insufficient budgets for project preparation, lack of guarantees and regulatory uncertainty. Lack of experience is especially challenging constraint given the technical complexities involved in projects such as hospitals.

3.6 Financing

Financing had the lowest overall performance, with no country scoring higher than 56 out of 100 (where 100 equals the best possible environment for PPPs). Seven countries score in the "Nascent" or "Emerging" category for government payment risk overall, and eight countries score in the same low category for currency risk. Government payment risk is very low in Morocco and Serbia, and only minor risks are assessed in a further four nations (Jordan, Bulgaria, Ukraine, Georgia). Eleven of the 13 countries have had no government defaults on PPP contracts during the last decade. Eight countries have used government payment guarantees in PPP projects in the last five years. These risks deter private participation in infrastructure projects because of their long timelines and large outlays required to implement projects.

There is limited development of local capital markets for infrastructure and there is a reliance on multilateral financing. The share of PPP projects with financing and loans from international financial institutions is above 50% in around half of the countries that have implemented a PPP project. Institutional investors, a major source of funds for infrastructure in some parts of the world, have only been active only in Jordan and Turkey. Other sources of investment include regional infrastructure funds such as InfraMed, which has been active in Egypt.

Guarantees from international institutions protecting against political risk, such as those offered by the Multilateral Investment Guarantee Agency, were only available in Jordan. Green bonds, used to finance environmental projects, had only been issued in Turkey and Morocco. Turkey was the only country that has used development impact bonds, with a focus on development targets in the healthcare sector.

Annex 7: MDB Operations to Promote PSP and Evaluation Lessons

1. MDB Operations

Asian Development Bank (ADB) put in place an operational plan to scale up PPP operations in the 2012-2020 period. The plan focused on four pillars: (i) advocacy and capacity development, (ii) the enabling environment, (iii) project development, and (iv) project financing. ADB's PSO was responsible for upstream work (Pillars i-iii), and Private sector operations Pillar (iv). In 2014 ADB established a separate PPP office that provides transaction advisory services to expand private sector development, strengthen ADB's role as project developer, and improve project planning and preparation. The Office of Public-Private Partnerships manages an Asia-Pacific Project Preparation Facility (AP3F). ADB can provide lenders PRIs and PCGs indemnified by the host government.

European Investment Bank Group (EIBG) does not have a formal PPP strategy, but it is a major financier of European PPP projects. The EIBG houses the European PPP Expertise Centre (EPEC), which helps strengthen the capacity of its public sector members to enter into PPP transactions. EPEC is a network of PPP units and public policy-makers that brings together the collective expertise of its members to address issues implementing PPPs, provide market intelligence, and develop PPP guidance and tools. EPEC helps governments with PPP policy development and, to a lesser extent, project preparation. EIB can provide guarantees to lenders either directly, or on behalf of the European Union (EU).

Inter-American Development Bank Group (IDBG) does not have a PPP strategy, but it has financed many PPP projects in LAC. During the period 2006-2015 IDBG directed support at improving the enabling environment and financing PPP projects. IDBG's PSO focusses on enabling environment work, which consisted of assisting governments to identify where PPPs could be effective; addressing technical, institutional and legal challenges; and creating the regulatory environment. IDBG's private sector arm, IDB Invest provides advice directly to the private sector for the structuring of bankable PPP contracts, design of tender documentation and support throughout the tender process. Following an evaluation in 2017[21], project preparation has become more important, with the cost of services recovered through reimbursable grants, paid back over time by the winning bidder under terms built into the contract. IDBG can provide lenders PRI and PCGs indemnified by the host government.

World Bank Group's (WBG) public sector arm, International Bank for Reconstruction and Development (IBRD) carries out upstream work on enabling PSP in association with its sovereign lending programmes. WBG's Maximising Finance for Development Strategy prioritises private finance ahead of public sector lending. The Infrastructure Finance, PPPs & Guarantees (IPG) Group in IBRD takes the lead on PPPs, and sits within IBRD. International Finance Corporation (IFC) concentrates on project preparation (advisory) and non-sovereign financing activities, which sit in separate departments to minimise risks of conflicts of interest. IFC Advisory prepares projects for tender and charges governments in Middle Income Countries for its advice using retainer and success fees, and uses these funds to cross subsidise advice in Low Income Countries. IFC created a new Upstream Department in 2019 and 2020, which develops upstream institutional capacity using non-reimbursable grants. Multilateral Investment Guarantee Agency (MIGA) provides guarantee support to cover political risk and more recently, non-honouring of national and sub-national government obligations.

Collectively, multilateral development banks (MDB) support a series of "knowledge platforms" to facilitate the development of PPPs. Platforms include Public-Private Infrastructure Advisory Facility (PPIAF), PPP Knowledge Lab, Global Infrastructure Facility (GIF), the PPP Legal Resource Centre, and International Infrastructure Support System (IISS). GIF has played an important role in initiatives such as the FAST Infrastructure Initiative (FAST Infra), which was established in 2020 and it is a partnership between HSBC, IFC, OECD, and CPI (Climate Policy Initiative). FAST Infra uses a technology platform, standard contracts, revenue guarantees, a managed co-lending portfolio programme (MCPP) and a financing facility to lend to national banks.

2. Evaluation Lessons

IMF:

In 2020 IMF provided an analysis of SOEs globally:

- SOEs have doubled in importance amongst the world's largest corporations over the last decade, and now account for 20% of the total;
- Most of this growth is accounted for by China, and other emerging economies;
- Evidence shows that SOEs under-perform private firms by about 30%, and crowd out the private sector;
- SOEs have difficulty providing basic services such as access to water due to their inability to charge cost recovery tariffs and problems of weak governance;
- SOEs are often not visible and there is a need to require them to provide annual reports, integrate results into fiscal accounts, be compensated for non-commercial services under universal service obligations, and permitted to set cost recovery tariffs;

In 2019, IMF issued a report Reassessing the Role of SOEs in Central, Eastern and Southern Europe:

- Rapid income convergence with Western Europe in the early 2000s had slowed dramatically and past privatisations had not always met expectations;
- SOEs account for from 5-30% of total employment in the region and are concentrated in natural monopoly sectors, particularly in the Western Balkans, Croatia, Ukraine, and Serbia;
- SOEs typically justified on the grounds of provision of public goods, and national strategic interests;
- SOEs systematically underperform relative to private sector counterparts, primarily due to poor governance, the inefficient use of labour, and access to national budgets;
- Improvements in governance alone are not sufficient and politically difficult choices are required to restructure SOEs to realise improvements in performance;

World Bank Group:

Independent Evaluation Group (IEG), at the WBG, has produced numerous evaluations on performance of reform public sector programmes to strengthen transition.

- **Privatization**

In 2005, IEG issued a report Economic Growth in the 1990s: Learning from a Decade of Reform, which presented the following finding:

- Results of privatisation and deregulation achieved some spectacular results, as well as outcomes that fell well short of expectations, particularly in some of the Eastern European Countries;
- There was relative success in the Czech Republic, Hungary, and Poland, and costly transitions in most other countries;
- Macroeconomic stability, domestic liberalization, and openness lie at the heart of any sustained growth process, but options to achieve those goals vary widely;
- Initial conditions in the form of policies, quality of existing institutions, political economy, the external environment and the sequencing of reforms matter;
- The choice of policy and institutional reforms need to be based growth diagnostics to identify binding constraints, rather than a formulaic approach to policy making based on best practices;
- It is important to promote growth as well as efficiency – in addition competition, there is a need for a stable investment climate to create incentives for growth;
- While the Washington consensus remain valid, there are numerous ways of achieving these goals;
- Government discretion needs to be managed and checked, not replaced by rules;
- Prudent macro-economic management is at the heart of successful growth strategies;
- Design privatisation and deregulation based on institutional strengths and weaknesses;
- In infrastructure sectors expectations of private investment were too optimistic as under-pricing continued to be a problem, investment risks were not appreciated and governments often could not credibly commit to policies and regulations;
- Regulation is complex, and capable institutions are required to develop effective regulations and correct regulations that are not working as intended;
- Privatisation is not essential in infrastructure sectors for growth, and in many countries SOEs continue to be the dominant provider;
- Financial markets remain fragmented, and liberalisation did not led to the emergence of capital markets due to concentrated political power, weak institutions and macro-economic shocks;
- State owned banks often continued to dominate the financial sector and allocate resources to unproductive investments in large SOEs due to weak governance arrangements;
- Private pensions have not emerged as expected due to small formal labour markets, and pension funds' inability to invest outside COOs, being limited to a small range of local financial instruments;
- Incremental reforms are more likely than rapid radical change to achieve sustainable change, but there is a need to avoid risks of ad hoc incrementalism independent of a well-defined strategy;
- Development strategies should reflect country contexts, diagnostics of market structures and institutional capacity, and clear ownership by governments.

- **SOEs and Corporatisation**

In 2020 IEG issued a synthesis report looking at WBG support provided to SOEs from 2008-2018 (State Your Business!):

- While state ownership in sectors such as banking infrastructure have declined globally, in 2020 SOEs continued to play a dominant role in emerging markets
- SOEs present complex performance and governance challenges due to their mixed political and commercial mandates
- These conflicting roles reduce transparency of decision making, make them difficult to regulate and often result in inefficiency and unresponsiveness to market demands, create fiscal losses and liabilities, and crowd out the private sector;
- Evidence shows that private and privatised firms consistently outperform SOEs in the financial and energy sectors, and SOE banks have especially negative performance;
- The main drivers of improvements in performance were stronger corporate governance and competition;
- From 2008-2018 WBG provided loans totalling $71.5 billion to support reforms of SOEs at the policy and institutional level (upstream), and enterprise restructuring (downstream), with upstream work focused in upper MICs and downstream in lower income countries (LIC);
- World Bank accounted for 90% of the SOE portfolio in the energy and finance sectors, mainly as loans, followed by IFC financing (5.4%) and MIGA guarantees (3.9%) in the energy sector, and IFC advisory (0.1%) in both upstream and downstream activities;
- Sub-Saharan Africa (SSA) accounted for the greatest number transactions, whereas East Asia and the Pacific the highest volume, with support mainly being directed to Lower MICs (46%), and LICs 29%), followed by Upper MICs (23%);
- SOE reforms targeted corporate governance, business operations, competition and regulation, privatization (and PPPs), public financial management
- Support for privatization and PPPs has declined over time (6% of portfolio), and is not part of WBG's new Integrated SOE Framework
- Contrary to the Maximising Finance for Development (MFD) strategy, despite evidence of growing demand and frequent recommendations in diagnostic work for increased engagement in this area;
- Sovereign projects had a success rate of 78% overall, with development policy lending having a success rate of 85%, versus investment project success rate of 67%;
- IFC had a success rate of 73% for investment services and 56% for advisory services, and the MIGA projects evaluated were all successful;
- Privatisation and corporate governance reforms had the highest level of success, with financial programmes for SOEs having a success rate of 77%, and in the power sector transmission and distribution tended to be more successful than generation;
- WBG analysis of competition in country strategies and loan documents, and requirements for competitive neutrality in IFC and MIGA projects is limited;

- A range of success factors were identified including corruption, commitment to reform, coordination amongst donors and other stakeholders, client institutional capacity, vested interested, external shocks;
- Project design factors influencing success included suitability of instrument and simplicity, availability of in-country supervision, a strong results framework for monitoring and evaluation, and sequencing and complementarity of reforms, particularly prior analytical work and internal collaboration;
- Collaboration across WBG institutions was rare, and can increase probability of success in areas such as diagnostics and development of client institutional capacity;
- MDF highlights the expectation of WBG institutions working together to stimulate private investment, but it is not clear how it is operationalised in sector strategies, and examples of its application are rare;
- WBG can increase project selectivity based on level of corruption and competition and be more pro-active mitigating these risks;
- Proposed reforms should be based on detailed diagnostics of competition, focussing on committed clients, increasing supervision, and simplifying project designs using appropriately sequenced reforms;
- Apply MFD principles to SOE reform and make privatisation and PPPs part of a comprehensive WBG approach

  - **Public v Private Sector Infrastructure**

In 2020 PPIAF issued a study Who Sponsors Infrastructure Projects? Disentangling public and private contributions:

- Population growth, rapid urbanisation and a growing middle class is creating large, and often unmet demand for infrastructure;
- Very little data available on infrastructure investment, particularly from the public sector;
- Study did not include in-house government rolling spending on a non-project basis, focussed on publicly reported projects in 2017, and as a result may be biased towards MICs;
- Public sector accounted for 83% of investment in infrastructure, split 34% public entities (treasuries and ministries) and 66% from SOEs;
- Public sector has been the main source of funds, with growth in PPPs over the last two decades;
- Core public financed both brownfield and greenfield projects, whereas both SOEs and private sector had a preference for greenfield projects;
- Most infrastructure spending was concentrated at the national level, although there was a significant number of smaller sub-national projects;
- China accounted for a large proportion of the public sector expenditure, although public sector accounted for more than 75% of expenditure in all regions apart from Latin America (60%);
- Overall spending in infrastructure by region ranged from 2.16% in Europe and Central Asia (ECA), to 5.61% in East Asia and the Pacific;
- Private investment in infrastructure accounted for only 0.1% of GDP in ECA, compared to 0.4% in Latin America and the Caribbean (LAC);

- Private investment accounted for only 6% of infrastructure financing in ECA, compared to 40% in LAC;
- Transport accounted for 50% of infrastructure investment, followed by energy (45%),
- Core government agencies focused on roads and airports, SOEs rail, and the private sector ports;
- In the energy sector, SOEs focussed on conventional energy and the private sector on RE;
- Water projects accounted for 4% of investment and ITC 1%, with minimal private investment in water due to low tariffs (20%), whereas ICT was mainly private (76%);
- Public sector was the main source of finance, followed by Development Finance Institutions (DFIs) which focused on public sector finance;
- Most financing for PPPs (55%) came from non-private sources – DFIs(30%) and governments (25%), with commercial banks and equity financing the balance;
- Public sector relied primarily on equity (59%), and debt was most important in private projects (71%);
- International sources of finance were far more important, with local currency only playing an important role in China where projects were financed by large state banks;

- **Energy**

In 2020, WBG issued a report Rethinking Power Sector Reform in the Developing World that provided a stocktaking of experience in the Energy Sector from the 1990s:

- The power sector reform programme based on PSP that emerged from the Washington Consensus consisted of four components: (i) establishing independent regulatory body and cost recovery tariffs; (ii) restructuring of SOEs through vertical and horizontal unbundling; (iii) PSP in generation and distribution; and (iv) competition ultimately through a wholesale power market;
- The Washington consensus model has not materialised in most developing countries due to lack of political support in areas such as pricing, complexity of reforms in areas such as wholesale markets;
- There has been continued reliance in developing countries on the traditional centralised state model in distribution and transmission, which achieves efficiencies through economies of scale and coordination of supply and demand using a single buyer market, and gradually introducing PSP in generation;
- Corporatisation and privatisation have led to improvements in operational and financial performance, but reforms were subject to reversals in distribution and transmission, and achievement of cost recovery tariffs has been very difficult;
- Results were critically dependent on initial conditions in countries such as attitudes to PSP and capacity to manage reforms, and different institutional arrangements could achieve good outcomes;
- MIC and countries with larger power systems were more likely to implement reforms, but rate of reform has slowed markedly after 2005;
- Reforms tended to occur in the context of a crisis and were most successful creating independent regulatory bodies and introducing PSP in in power generation as independent power projects (IPPs);
- Independent regulators were not effective in sectors dominated by monopolistic state operators at enforcing cost recovery tariffs and quality of service is generally not considered due to lack of data;

- Utilities were not generally compensated for below market pricing, and cross subsidisation across customer groups has result in under-investment and misallocation of investments;
- IPPs were high risk and usually needed to be supported by take or pay capacity charges and sovereign guarantees in the event of early termination;
- There are examples of successful PSP in transmission, using IPPs, but distribution was more difficult, due to dependence on full costs recovery as their solvency is a key driver of power sector performance;
- Focus of reform has shifted from outcomes such as security of supply and fiscal sustainability to SDGs such as universal access and Paris Accord priorities such as decarbonisation of the power sector;
- Governments have been developing RE by adapting supply auction criteria to meet low carbon targets;
- RE has complicated market pricing as they have zero marginal costs, leading in some cases to negative prices, and variable output needs to be balanced with alternative rapidly mobilised sources of power;
- Innovations based on decentralised renewable energy (RE), battery storage and digitalisation are challenging the traditional model;
- Consumers with access to rooftop solar power are no longer captive to under-performing utilities once battery storage becomes effective, introducing potential for competition;
- Future reforms should be shaped by context, driven by outcomes, and informed by alternatives;
- Greater emphasis should be placed on building institutional capacity for power sector planning and associated implementation, and plans should include new technologies;
- Unbundling should not be the first priority where fundamental governance and financial challenges persist;
- Greater emphasis should be placed strengthening corporate governance and managerial practices, particularly in areas such as human resources, and participating in regional trade whenever possible;
- Competitive procurement of IPP contracts should be mandatory, and government guarantees should be minimised in line with the level of risk in the sector;
- IPP contracts should provide flexibility through the use of mechanisms such as two part tariffs that separate capacity and energy charges;
- PSP in distribution should only be only considered once enabling conditions are in place;
- Privatisation of generators should occur before establishing wholesale markets to ensure competition;

- **Energy and Water Sectors**

In 2020, IEG prepared synthesis report presenting lessons learned from WBG's work with public sector utilities in energy and water sectors from 2008-2018:

- In the water sector, institutional reform to improve service delivery was WBG's main priority;
- Institutional reform included both operational and financial reforms covering supply to customers, commercial activities, corporate resource management functions such as planning, accounting, finance, human resources (HR), procurement, logistics, and information technology (IT);

- Institutional accountability and financial viability in line with WBG strategic priority outcomes are the main challenges faced by public utilities;
- Institutional issues included adequacy of policy and regulatory frameworks, and payment discipline require correct accountability and incentive frameworks to be in place;
- Strengthening sector planning, utility management, capacity and skills are needed to improve sector outcomes;
- Enabling environment for private investment such as fiscal, financial and regulatory frameworks are critical for leveraging private investment and market outcomes;
- Maintenance of commercial viability of utilities to service debt and support growth essential for provision of adequate and reliable services, irrespective of whether entities and publicly or privately owned;
- Operational efficiency is a primary determinant of financial sustainability;
- WBG projects achieved high rates of success on policy and regulatory reforms (90%);
- Financial viability reforms relied on a range of measures such as tariff policies, improvement in payment collections, reduction of technical and financial losses, financial management capacity, improvements in technology to meet demand;
- WBG mainly supports financial viability through Development Policy Operations (DPO) and Investment Project Financing (IPFs)
- DPOs focus on policy reform and provide direct budget support loans with loan covenants in areas such as cost recovery tariffs, payment collection, cost rationalisation, and improvements in transparency, accountability and governance;
- IPFs are more common, and focus on development of infrastructure projects, or commercialisation and privatisation, and use financial covenants governments to improve performance in areas such as implementation of plans for cost recovery tariffs, payment collection, and investments;
- Both DPOs and IPFs achieved similar levels of results overall, but DPOs were less successful achieving improvements in financial performance, whereas IPs were less successful at achieving tariff increases;
- DPOs tended to achieve quick responses as governments were required to enact reforms, prior to dispersals of funds, while IPFs provided a longer period of implementation that enabled WBG to provide hands-on operational support;
- Programmatic DPOs achieved better outcomes than single tranche facilities which were too complex, and multi-tranche DPOs had conditionalities that were too inflexible;
- DPOs were not commonly used in the water sector, and reliance was placed on IPF loan covenants to effect reform, with compliance with financial covenants[22] ranging from 23-56%, primarily focussing on improvements in revenue, operating costs and debt servicing;
- Ex post evidence indicated both WBG's energy and water projects had difficulty maintaining financial sustainability due to political constraints adjusting tariffs and weak incentives to maintain assets;

- Facilities were too optimistic and over-estimated political commitment to national strategies and policies;
- Complementary and sustained support had a higher chance of sustainable improvements;
- Government subsidies maybe required during early stages of reform as utilities transition to financial sustainability, to help mitigate political risks and negative social consequences of reform;

- **Transport**

In 2008 IEG issued an evaluation of the transport sector over the period 1995-2005;

- In the early 1990s there was an expectation that private capital would finance a large part of transport infrastructure and services, but it did not occur in practice;
- Risks were perceived by the private sector as being too high due to factors such as macro-economic instability and long life of projects;
- Most private sector participation (PSP) in toll road concessions occurred in large middle income countries (MICs) such as Brazil and Turkey;
- Port concessions in MICs were generally successful, but railway projects less so as governments often intervened in pricing and labour issues, security had become an issue at border crossings;
- While demand for private participation was limited, WBG had stepped up the provision of advice using reimbursable technical assistance (TA) and partial guarantees to facilitate PSP;
- For the foreseeable future public sector was expected to be the major owner and operator of transport infrastructure, with private sector participation through competitively bid maintenance contracts;
- While many governments had established road funds to stabilise cash flows, maintenance continued to inadequate;
- WBG had achieved limited success limiting corruption in procurement, and institutional capacity building targets had been over ambitious;
- Project monitoring and evaluation had been hampered by lack of data on baselines and key performance indicators (KPIs);
- WBG sovereign financing for transport infrastructure was a core business, lending had increased by 40% from 2000, mainly for inter-city highways, and there had been a shift to programmatic lending and increased size of projects;
- Safeguard policies were creating perverse incentives that discouraged staff from developing projects with complex social and environmental impacts, even when they had high economic rates of return;
- Work on sector diagnostics for project prioritisation was limited despite the size of the WBG portfolio;
- Roads accounted for 80% of the WBG portfolio, and limited attention had been given to multi-modal integrated urban transport and cross border facilities;
- There were opportunities to develop projects that increased accessibility; mitigated costs of congestion, safety, and pollution; linked urban and rural areas; and promoted international trade;

- **Municipal Transport**

In 2017, IEG prepared an evaluation of Urban Transport for the period 2007-2016 that focussed on access to transport services, sustainability and institutional development:

- More than 50% of the global population now live in cities and is forecast to reach 60% by 2030;
- Rapid urbanisation is putting increase pressure on urban systems and services, leading to increasing congestion, declining mobility and safety problems;
- Cities account for 60% of energy consumption and 75% of carbon emissions;
- In the 1990s, WBG strategy focused on efficiency, competition, and financial viability, and evolved to address multiple dimensions of sustainability: economic, social, and environmental;
- WBG has advocated policies to decentralise sector responsibility, mobilise PSP in urban transport, increasing safety and protecting the environment;
- WBG volumes of financing declined 23% over the evaluation period, and operations increasingly targeted Upper MICs;
- WBG sector coverage consisted of urban roads, buses, metro and urban rail, with metro systems becoming dominant in the latter half of the evaluation period;
- Projects that reduced demand through integrated transport and land use plans, and measures to shift transport from private cars to public transport were not broadly supported;
- Projects were generally successful, but few provided evidence of improvements in mobility for disadvantaged groups, or affordability of services;
- Financial sustainability was a challenge, and time and costs estimates were frequently too optimistic;
- There was a high level of support for PSP, found in 66% of projects, and private MRT projects were more financially sustainable that public;
- Environmental sustainability (reductions in emissions) was most commonly pursued through downstream mitigation, and were generally successful;
- More than 80% of projects combined upstream institutional development with downstream investment, and a sustained comprehensive programmatic approach was a key success factor;
- Monitoring and evaluation of institutional outcomes was consistently weak;

EBRD, EVD

The Regional Integration evaluation (2020) found a lack of a framing strategy for regional integration; projects mainly focused on sovereign financed roads. Most physical infrastructure components were completed, with substantial delays. Many of the projects had low usage and inadequate maintenance. Policy dialogue objectives in areas such as increased PSP were not successful. Staff were not rewarded for pursuing policy related work, or implementing complex projects.

Management prepared an analysis in 2021 of why PSP projects and policy objectives of large regional integration infrastructure projects were unsuccessful. Critical constraints included:

- dominance of SOEs, and lack of competition from private sector;

- public sector did not have capacity (knowledge and experience) to design, implement and manage PBCs and PPPs – risk profile of projects was inadequate, poorly developed national procurement rules, unrealistic timelines;
- inadequate incentives in public sector to pursue PSP, protection of public sector budgets and staff, misallocation of resources, inconsistent and/or insufficient maintenance of existing assets, delays and cost overruns in delivering new infrastructure;
- projects were too large to tender out within smaller economies, and consequent risk premiums bid by [foreign] private sector firms made the projects too expensive, leading to cancellation of PPP projects;
- poorly defined property rights and spatial planning procedures led to long delays in project implementation;
- no standard metrics for measuring regional integration, compared to other measurable metrics such as connectivity (ie changes in traffic flows);
- lack of historical data for benchmarking changes in traffic and distributional impacts, and no ex post monitoring due to high cost and complexity of these assessments; and
- TQ metrics are limited to two per project, and higher level indicators such as integration may not be prioritised, as they are already counted as part of overarching frameworks.

Lessons proposed by management included using pilots, and providing support to government agencies to build up experience. Design PPP projects that balance benefits and costs to both public and private sector and scale size relative to capacity of the country. Introduce a results framework of suitable indicators, and conduct post completion assessments.

Evaluation of PSP in Municipal and Environmental Infrastructure (MEI) Projects (2014) found PSP in MEI in COOs was well below other regions, and had declined in importance as an EBRD priority:

- Early unsuccessful experiences of using TC grants to create markets had meant EBRD shifted to an approach of waiting for opportunities to emerge.
- EU accession grants displaced a number of PSP projects, and acted as a disincentive for governments to create legislative frameworks to allow PSP.
- Examples of policy dialogue on PPPs were not common.

Infrastructure Project Preparation Facility (IPPF) evaluation (2018) found it was an effective means of scaling up projects by establishing a dedicated pool of grant funds from the Special Shareholders' Fund (SSF), and a prequalified team of consultants.

- This new arrangement improved project preparation performance but most grant funds were allocated to sovereign rather than private sector PPPs.
- Private projects' cost recovery requirements created significant risk for government agencies, relative to non-reimbursable grants for PSO projects.
- Assistance was based on expected short term lending targets; there were conflicts of interest between policy advice and provision of financing.
- Policy dialogue function was limited to low impact workshops and seminars, rather than investment in institutional capacity and development of project pipelines.

- EVD recommended the IPPF create an upstream policy unit and expand PPP advisory to include institutional capacity building.

Health Evaluation (2021) included a review of the PPP hospitals program in Turkey. Five out of eight projects co-financed by EBRD in the program were in financial distress. The Ministry of Health decided to suspend the PPP programme in 2019 and include the remaining hospital projects in Turkey's 2020 public sector Annual Investment Program.

- Problems arose due to undocumented contract variations, substantial depreciation of the Turkish Lira, and problems with the tariff mechanism.
- An important challenge was lack of institutional capacity for project preparation, contract management and assessment of delivery modes.
- Availability-based PPP models have specific fiscal management and budgetary affordability considerations that need to be properly analysed and managed by the public sector.
- There is a need to reduce and manage FX exposure in PPP projects; ensure compensation on termination payments is balanced; assess budget affordability (including FX risk); and apply a VFM methodology that accurately reflects costs and benefits of different procurement options.
- Engagement in a country's health sector should occur at the stage of PPP project identification, rather project financing. Upstream support may be required in sector planning if it is not in place.
- A thorough review is required of the capacity of the procuring authority to prepare, transact and manage PPP projects. Where possible EBRD should use frameworks (as opposed to ad hoc projects).
- There is a need to identify new structures to reduce costs and/or mitigate or eliminate FX risk through mechanisms such as combining state and private finance.

Infrastructure projects in Advanced Transition Countries (2021). The study covered RE projects in Poland, Transport projects in Hungary and Municipal projects in Croatia.

- There had been difficulties enforcing FIT agreements, in part because they were seen as expensive by governments, and remuneration was open to adjustments by the regulator.
- The transport study focussed on the Regional Framework for Development of a Secondary Market for Maturing Infrastructure PPPs - about 50% of the facility was utilised, mainly because proposed refinancing projects were not approved, as they did not align with EBRD definitions of TI.
- The municipal projects were all state non-sovereign projects and they had difficulties achieving transition goals, and were subject to increasing competition from EU grants.
- Projects were increasingly reorienting towards green in recent years, but not always aligned with government priorities.
- Financial additionality had declined over time due to high levels of domestic liquidity.
- Non-financial additionality was supported by policy dialogue and TC, but loan conditionalities were not always enforced.
- There was a lack of reporting on actual ex post results, creating difficulties for green projects requiring data on physical indicators to support use of concessional finance from donors.

Annex 8: Sustainable Infrastructure Group Strategies

1. Energy

The Energy Operations Policy guided the Bank's operations in the sector from 2006 to 2013, and focussed on structural reform to promote competition and private sector participation.

In the Energy Sector Strategy 2014-18 EBRD prioritised energy efficiency across all its Countries of Operations (COOs) due to its reducing carbon intensity, improving competitiveness and mitigating affordability pressures. At the heart of this transformation are the networks, and in particular the development of smart grids.

Sector investments are integrated with technical cooperation (TC) and policy dialogue activities. EBRD typically deploys donor-funded TC in the energy sector in two main areas: project preparation and implementation, and reform and restructuring. Projects of this nature include support for the development of energy sector roadmaps and renewable energy regulation, advice on improving tariff methodologies in the electricity and gas sector and support for the commercialisation of public sector entities.

In advanced countries the European Union's (EU) directives were the main driver of reforms. The legal and regulatory framework necessary to implement reforms and to follow EU requirements are mostly in place. An adequate legal and institutional framework for sustainable energy is also in place. The process of unbundling had largely been completed in all advanced transition countries. However, Private Sector Participation (PSP) remains limited due to the dominant position of State Owned Enterprises (SOEs).

In early and intermediate countries such as South Eastern Europe EU accession had encouraged reform and integration with the EU's internal market. Without an equivalent reform anchor, reform progress in the former Commonwealth of Independent States (CIS) has been slower. Across the region countries face large investment needs to upgrade and replace their ageing and polluting energy infrastructure. Lack of competition and dominance of SOEs persist in most of the early and intermediate countries.

The Energy Sector Strategy 2019-23 promotes secure, affordable, and sustainable energy through the transition to a market-oriented low-carbon energy sector. Central to this is a major scaling-up of renewable energy in line with Green Economy Transition (GET). A performance monitoring framework was introduced, with indicative indicators used in countries strategies that are mainly based on numbers of projects.

2. Transport

The Transport Sector Strategy 2005-2012 emphasised the key role of an efficient transport sector in the operation of regional markets, as the drive to integration of national economies. Over the previous 15 years, there had been a shift in the transport patterns in Eastern Europe and the Former Soviet Union from public to private passenger transport and from rail to road in freight transport. Throughout the region, car ownership had risen sharply, traffic volumes were growing, and the motorway network had grown. The volume of non-sovereign transactions was expected to grow faster than sovereign.

It was expected there would be an increase in the number of public sector non-sovereign and private sector transactions, as COOs adopted Public Private Partnerships (PPPs) in the Advanced Transition Countries. EBRD's involvement in these projects is especially important given the history of

setbacks and delays associated with PPPs in these countries (e.g. D47 in Czech Republic, and M1-M15 in Hungary) and the negative impact on market confidence. EBRD-financed PPPs in the transport sector had only been implemented in Hungary, namely the M1/M15 and M5 motorways. EBRD intended to support the development of a market for secondary finance from sponsors seeking to refinance project and exit

In advanced countries – the focus would be on financing projects with demonstration impacts. In Intermediate Transition Countries, the regional dimension in sectors such as roads and rail networks where the market benefits from regional integration was an important rationale for projects. In the smaller and poorer early transition countries, the challenge is to achieve transition impact notwithstanding that larger projects are likely to be scarce and that there will be impediments to borrowings by the sovereign if the sovereign is subject to restrictions imposed by the IMF.

EBRD would continue to cooperate with the EU. It would work on the development of the Trans-European Network corridors and implementation of regional initiatives, such as the REBIS ("Regional Balkans Infrastructure Study") initiative in the Western Balkans and the TRACECA ("Transport Corridor, Europe-Caucasus-Asia") initiative in Central Asia and the Caucasus. EBRD would continue to work closely with EIB and regional development banks. In Central Asia and the Caucasus, EBRD anticipated further opportunities to co-finance road projects with the World Bank and ADB, mainly on a sovereign basis.

The Transport Strategy 2013-2018 had a vision of safe, secure and sustainable transport systems. The strategy noted implementation difficulties with sovereign projects and/or transition objectives. Many of the transition milestones are linked to sector reform, such as the adoption of new legislation or institutional restructuring, and are reliant on difficult political decisions being taken which are often subject to delay. Despite these constraints EBRD had steadily increased the proportion of private sector operations and loans to SOEs structured on a commercial basis. In 2005, private and non-sovereign projects accounted for just 10% of net cumulative business volume. In 2012 this figure had increased to 51% due to the risk taking ability of EBRD in an advancing transition process.

EBRD supported structural reforms to separate transport infrastructure policy and management functions. EBRD pursued this reform through the creation of autonomous SOEs outside of direct government control, for example independent road agencies. This reform had been achieved across most modes in most countries in the region. A common area of policy dialogue is supporting the development of the legislative and regulatory framework for the successful implementation of PPPs in collaboration with EBRD's Legal Transition Programme. Sovereign and sovereign guaranteed loans are an important instrument through which EBRD supports sector reform by providing a platform for project led policy dialogue. Similar to the Energy Sector Strategy, a performance-monitoring framework was presented in the 2013-2018 transport strategy with a set of illustrative performance targets.

The Transport Sector Strategy 2019-2024 identifies four sectoral challenges: (i) Widening Infrastructure Gap, as growth in demand outstrips investment infrastructure, estimated at €1.4 trillion; (ii) State Ownership and Governance and the slow pace of sector reform; (iii) Increasing PSP to promote competition and innovation, including new technologies; and (iv) Low Carbon approach across the sector.

The strategy noted the importance of IPPF (now renamed Sustainable Infrastructure Advisory (SIA)). The SIA provides a source of funding for institutional capacity building and project preparation to support PPP pipeline development. Coordinated MDB efforts are needed to develop credit enhancement mechanisms to reduce risk and deepen market appetite for PPPs in COOs. In the context of constrained

public resources, environmental and social challenges and a sector where externalities are difficult to quantify, sector reform, capacity building, innovation and private sector engagement will require strong on-going support. The strategy presents a more detailed a performance-monitoring framework, and set of indicators such as number of PPP contracts implemented.

3. Municipal and Environmental Infrastructure

The Municipal and Environment Infrastructure (MEI) strategy for 2013-18 updated a previous policy approved in 2004. Similar to other infrastructure sectors, it emphasises decentralisation, commercialisation and environmental improvement in areas such as urban transport, water and sanitation, and heating. The majority of MEI's clients are public sector, and it would continue to emphasise support for private sector initiatives. Institutional weaknesses and affordability represent important constraints that are addressed through TC and capex grants. In some countries, IMF conditionality in respect of public debt requires a minimum level of concessionality for international finance.

EBRD would promote institutional change. Projects would focus on strengthening contractual relationships, improving planning and regulatory capacity, building capacity in local utilities and attracting the private sector. Policy dialogue would pursue matters such as budget code reform, concession framework amendment, regulatory reform to introduce cost recovery tariffs, and new ways to do business such as performance-based contracts. Mobilisation of local currency (LCY) financing was an important priority. Outsourcing and PPP in their various legal structures will continue to be an important means of engaging the private sector, even though the process is resource-intensive and there is no guarantee of EBRD finance.

The MEI Strategy for 2019-24 reflected a shift in direction and it focuses on Green and smart cities, targeting:

- Providing green and sustainable financing to at least 100 cities by 2024;
- Advancing asset management and environmental solutions, and addressing emerging socio-economic challenges, including regional disparities;
- Driving the environmental, economic, and social sustainability of the sector through capacity building and improved corporate governance;
- Promoting diversified and innovative financing structures, including a strong focus on sub-sovereign lending, to address funding gaps and harness private capital.

Although municipal authorities and public sector entities will remain the main sector investors, EBRD will promote where feasible, private sector investments, including the development of robust legal and regulatory frameworks that support such investment. MEI's portfolio has grown steadily due to the Hospital PPP programme in Turkey, sizeable projects addressing SEMED infrastructure gaps, large-scale metro projects as cities move towards carbon-neutral transport, and increased availability of grant funding to support project preparation and implementation, including through SI3P team.

Annex 9: FX Risks and Possible Mitigation Measures

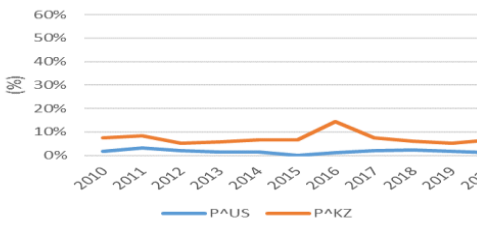
1. Overview

This analysis looks at economic conditions and their impacts on exchange rates (FX) in United States (US) dollar terms in four countries: Kazakhstan (KZ), Serbia (SB), Turkey (TKY) and Ukraine (UKN). This analysis provides assumptions to estimate the costs of foreign currency (FCY) versus local currency (LCY) loans. The analysis compares the relative cost of debt under a 15 year and 30 year tenor debt instrument under a scenario of "no economic shock", and "with economic shock". A comparison is made between alternative funding strategies, consisting of blended FCY and LCY parallel loans, and FCY loan refinanced at year 5 with LCY Loan. The relative cost of FCY versus LCY loans under differing tenors and real interest rates is assessed. The analysis then looks at the cost of unfunded LCY guarantees using FCY.

2. Economic Conditions and FX Effects

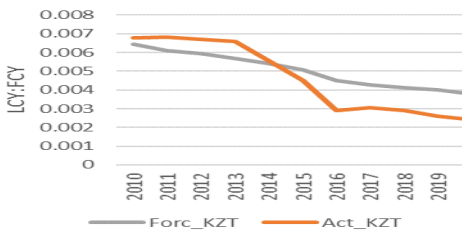
The inflation rates in foreign country (P^US), and the domestic country (P^KZ) are shown **in Figure 1.** The impact of these differences in inflation rates on the KZ exchange rate (LCY:1FCY), assuming purchasing power parity (ppp) holds (ie cost of goods is the same in both countries), relative to the actual FX rate is shown in **Figure 2**. There was an economic shock in KZ in 2015 that led to higher inflation, causing the FX rate to overshoot by about 50%, persisting to 2020. The effect of the overshoot has meant that a basket of goods in KZ is more expensive than the same goods in the US.

Figure1: Kazakhstan & US Inflation Rates (%)



Source: WDI

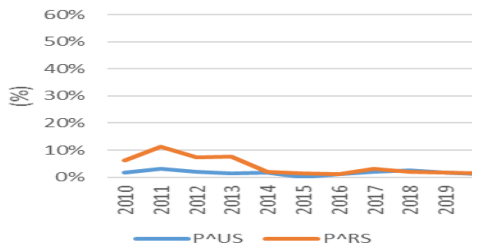
Figure 2: Forecast & Actual Exchange Rate 1 KZT Per USD



Source: WDI

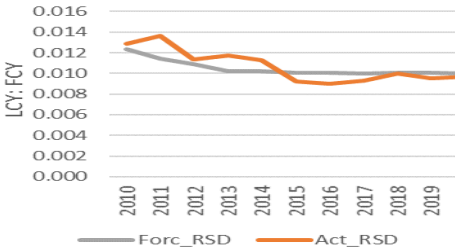
The same analysis is undertaken for SB, which shows low and stable inflation rates, and FX movements reflect ppp (**Figures 3 and 4**).

Figure 3: Serbian & US Inflation Rates (%)



Source: WDI

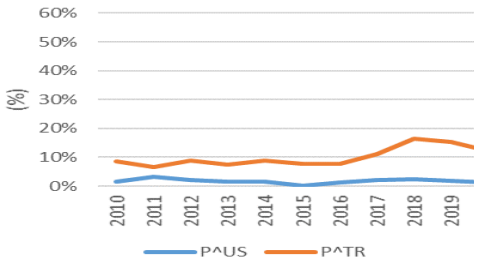
Figure 4: Forecast & Actual Exchange Rate 1 RSD Per USD



Source: WDI

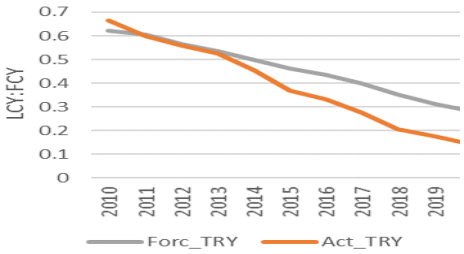
An analysis of TKY, shows a similar pattern to KZ, with the actual exchange rate forecast FX using ppp steadily increasing over time to reach 50% by 2020 (**Figures 5 and 6**).

Figure 5: Turkish & US Inflation Rates (%)



Source: WDI

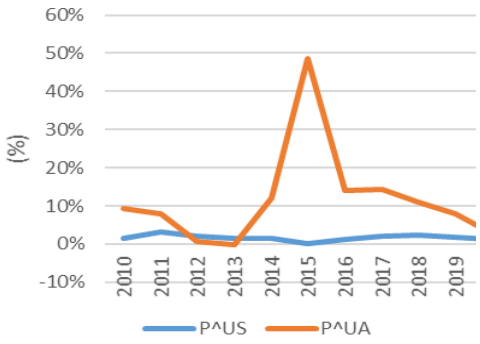
Figure 6: Forecast & Actual Exchange Rate 1 TRY Per USD



Source: WDI

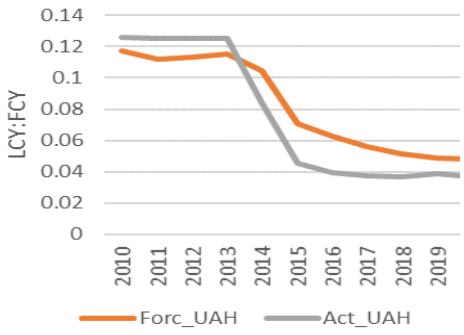
An analysis of Ukraine's FX rate shows a similar pattern to KZ and TKY (**Figures 7 and 8**).

Figure 7: Ukrainian & US Inflation Rates (%)



Source: WDI

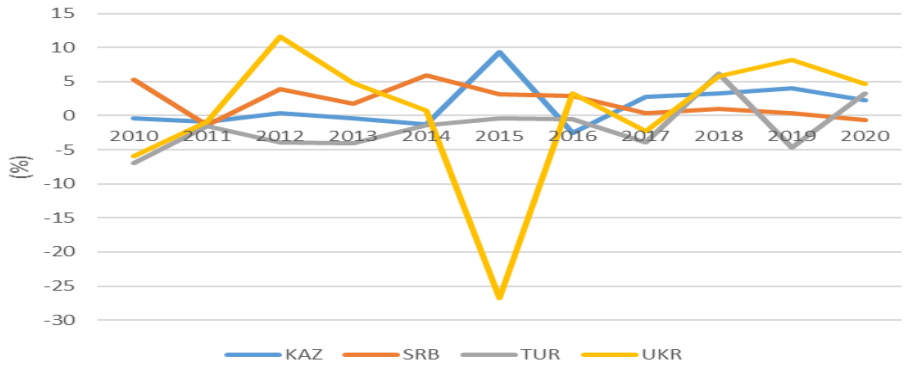
Figure 8: Forecast & Actual Exchange Rate 1 UAH Per USD



Source: WDI

A comparison of real interest rates across these countries shows real interest rates range between -25% to 11% for UKR, -2% to 10% for KAZ, -5% to 5% (TKY) and 0%-5% (SRB) (**Figure 9**).

Figure 9: Real Interest Rate



Source: Based on WDI Data

Based on this analysis, the following assumptions were defined to compare the costs of a local government loan in LCY, versus a sovereign loan from an multilateral development bank (MDB), with an original loan amount of FCY20,000:

Government LCY Loan: A real rate of interest in LCY of 5%, adjusted for inflation of 7%, deriving a nominal LCY annual interest rate of 12.4%.

MDB FCY Loan: A real rate of interest in FCY of 3% adjusted for inflation of 1.2%, and a margin of 1%, deriving a nominal FCY annual interest rate of 5.2%.

3. Funded Instruments

This section looks at the relative costs of funded instruments denominated in FCY and LCY.

Scenario 1: 15 Year FCY Loan – No Economic Shock:

Under this scenario, ppp holds and there is no economic shock. **Figure 10** shows the expected FX rate, and **Figure 11** the loan profile in FCY terms at year end (ie from the perspective of the MDB lender).

Figure 10: Forecast Fx Rate – No Economic Shock–15 Years

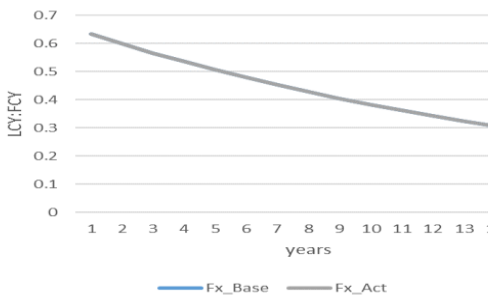
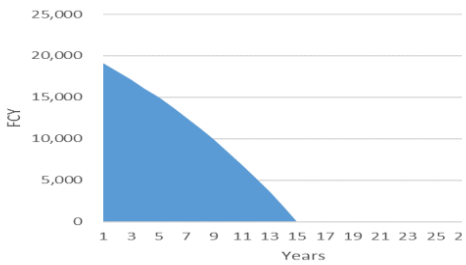


Figure 11: FCY Loan Balance – No Economic Shock–15 Years

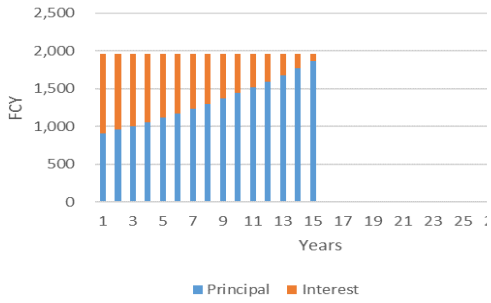


Source: EVD

Source: EVD

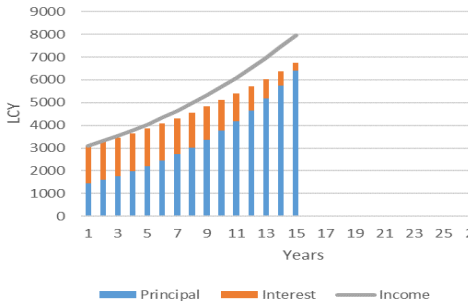
Figure 12 shows the loan repayment profile in FCY from the perspective of the MDB lender. **Figure 13** shows the debt repayment profile from the perspective of the borrower in LCY terms. The Income line is based on cost of first instalment of loan repayment in LCY terms, inflated at the local inflation rate over the balance of the term of the loan. **Figure 13** shows that affordability of the loan in LCY improves slightly over the term of the loan.

Figure 12: Debt Service FCY Loan in FCY – No Economic Shock–15 Years



Source: EVD

Figure 13: Debt Service FCY Loan in LCY – No Economic Shock–15 Years

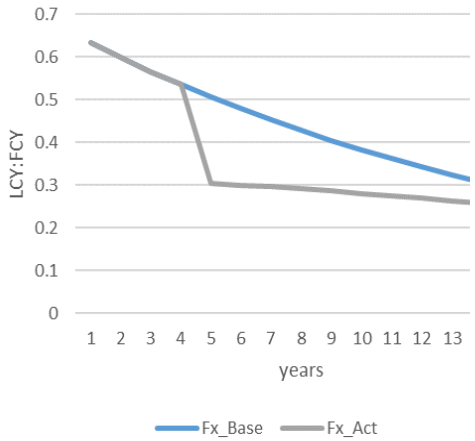


Source: EVD

Scenario 2: 15 Year FCY Loan – Economic Shock:

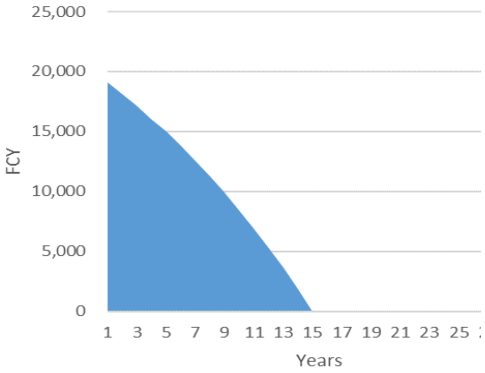
Under the second scenario, it is assumed there is an economic shock of 40% in year 5, and it takes 10 years to return to ppp.

Figure 14: Forecast Fx Rate if Economic Shock–15 Years



Source: EVD

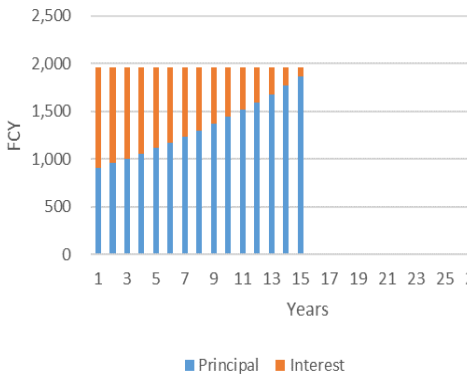
Figure 15: FCY Loan Balance if Economic Shock–15 Years



Source: EVD

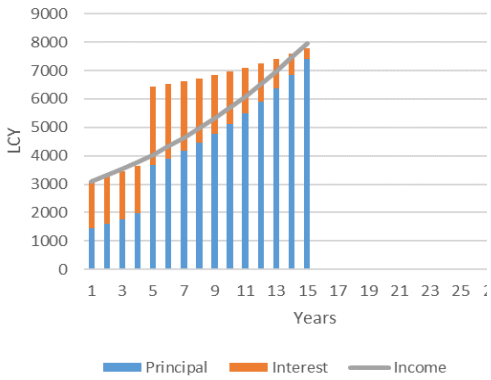
Figure 16 shows the loan repayment profile in FCY from the perspective of the MDB lender. **Figure 17** shows the repayment profile in LCY from the perspective of the government borrower, indicating a substantial increase in the cost of borrowing in LCY terms.

Figure 16: Debt Service FCY Loan in FCY if Economic Shock–15 Years



Source: EVD

Figure 17: Debt Service FCY Loan in LCY if Economic Shock–15 Years

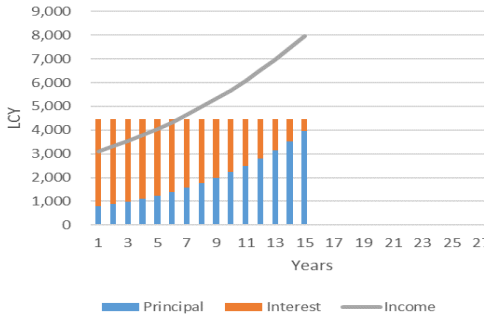


Source: EVD

Scenario 3: 15 Year LCY Loan:

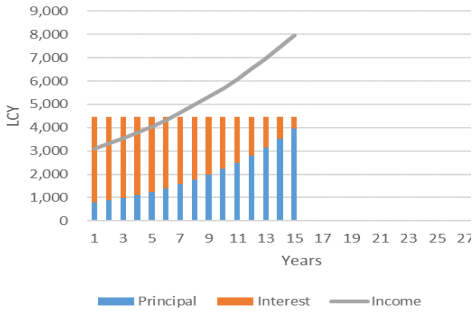
Under this scenario the original loan of FCY20,000 is converted to LCY, and the loan repayment profile is presented based on ppp (**Figure 18**), and under an economic shock (**Figure 19**). The grey income line reflects the original cost of the first instalment of the FCY loan in LCY terms under scenarios 1 and 2, inflated at the local inflation rate. The LCY loan is more expensive up to year 5, and then the cost drops off significantly, relative to the FCY loan. An economic shock has no impact on the cost of the LCY loan.

Figure 18: Debt Service LCY Loan No Economic Shock–15 Years



Source: EVD

Figure 19: Debt Service LCY Loan if Economic Shock–15 Years

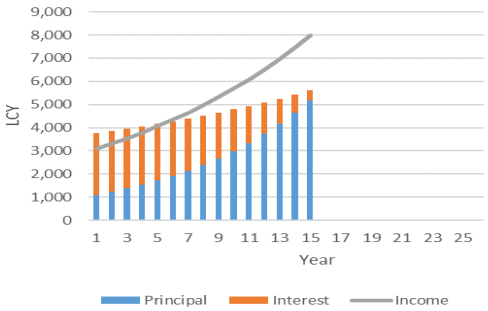


Source: EVD

Scenario 4: Blended FCY and LCY Loan

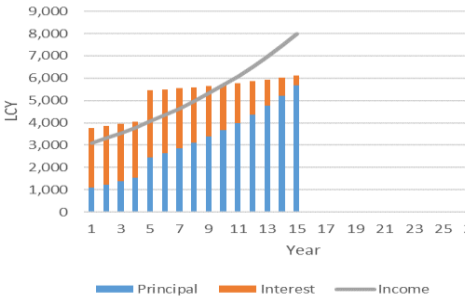
Under scenario 4, a combination of parallel FCY and LCY loans is combined 50:50. The profile under a no economic shock (**Figure 20**), and with economic shock (**Figure 21**), indicates a slight increase in upfront costs and a dampening of the economic shock in LCY terms.

Figure 20: Debt Service Blended FCY & LCY Loan (50:50) – No Economic Shock– 15 Years



Source: EVD

Figure 21: Debt Service Blended FCY & LCY Loan (50:50) – With Economic Shock– 15 Years

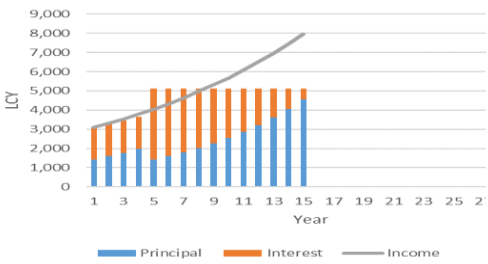


Source: EVD

Scenario 5: Refinance FCY loan at Year 5

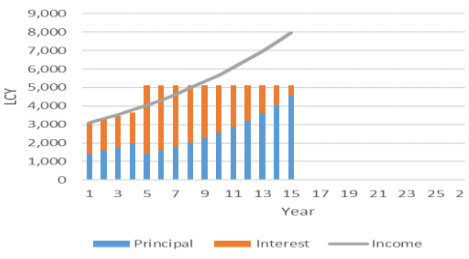
Under this scenario 100% FCY debt is refinanced with 100% LCY at year 5.

Figure 22: Debt Service of FCY Loan Refinanced Year 5 – No Economic Shock– 15 Years



Source: EVD

Figure 23: Debt Service of FCY Loan Refinanced Year 5 – With Economic Shock– 15 Years

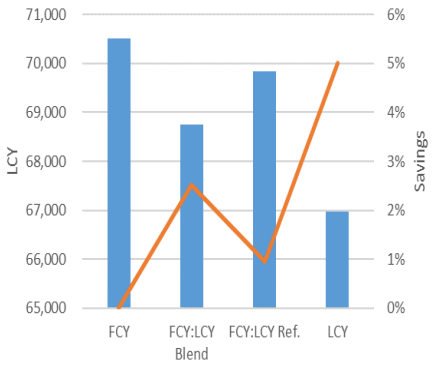


Source: EVD

Cost Savings in LCY Terms

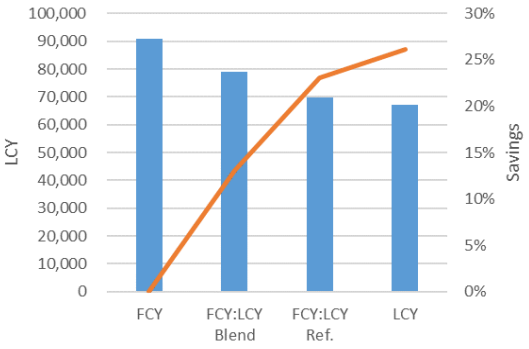
Figures 26 and 27 show the relative cost savings in LCY terms using the various structures in scenarios 1 -5. For a 15 year loan, if there is no economic shock, an LCY loan is about 5% cheaper, and it increases to almost 20% if there is an economic shock.

Figure 26: Cost Savings to Local Borrower – No Shock – 15 Years



Source: EVD

Figure 27: Cost Savings to Local Borrower – With Shock – 15 Years



Source: EVD

The same analysis was then conducted for a 30 year loan, and it shows the LCY savings increase substantially, both in the no economic shock (**Figure 28**), and with economic shock (**Figure 29**) scenarios. Under the no shock scenario the cost in LCY terms increases to about 19%, and in the case of economic shock, 23%. The effects of the economic shock are diluted by the longer tenor of the loan.

Figure 28: Cost Savings to Local Borrower – No Shock – 30 Years

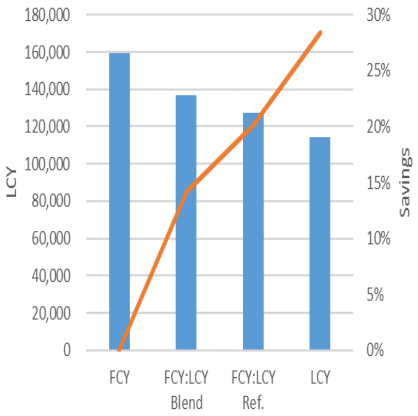
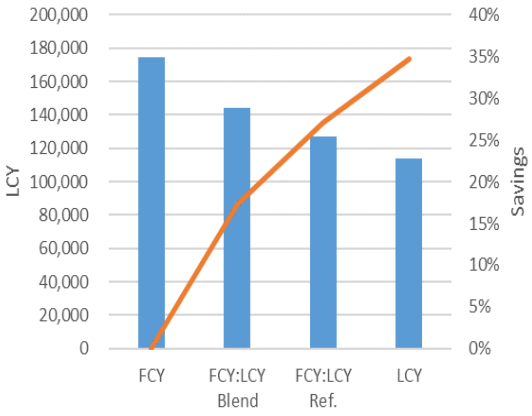


Figure 29: Cost Savings to Local Borrower – With Shock – 30 Years

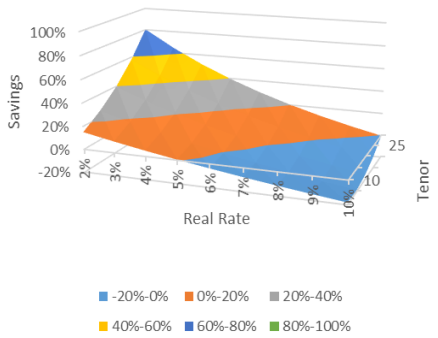


Source: EVD

Source: EVD

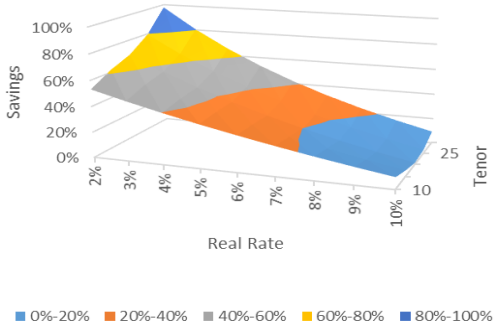
A sensitivity analysis of changes in the underlying real interest rate versus tenor under a no shock scenario (**Figure 30**), and with shock scenario (**Figure 31**), indicates LCY cost savings increase dramatically, once the real rate falls below 5%, and these cost savings increase exponentially with the length of tenor of the loans.

Figure 30: Sensitivity Analysis – No Economic Shock



Source: EVD

Figure 31: Sensitivity Analysis – With Economic Shock

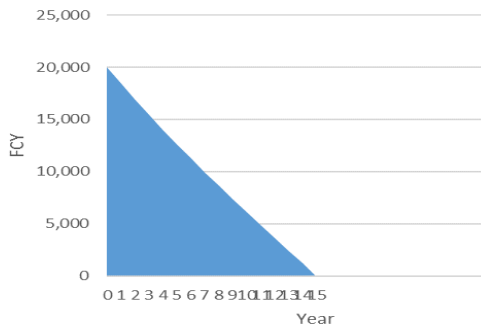


Source: EVD

4. Unfunded Instruments

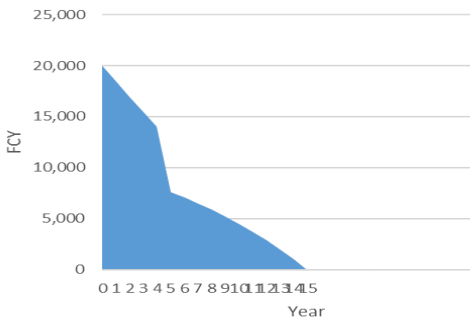
The capital requirements for a guarantee denominated in LCY, and funded in FCY was assessed for a 15 year facility under a no shock scenario (**Figure 31**), and with shock scenario (**Figure 32**).

Figure 31: FCY Guarantee on LCY Loan Balance – No Economic Shock– 15 Years



Source: EVD

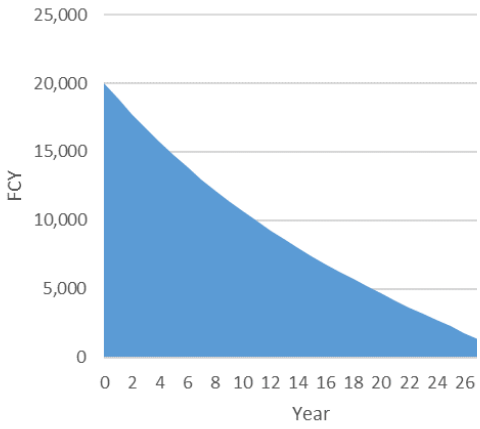
Figure 32: FCY Guarantee on LCY Loan Balance – With Economic Shock– 15 Years



Source: EVD

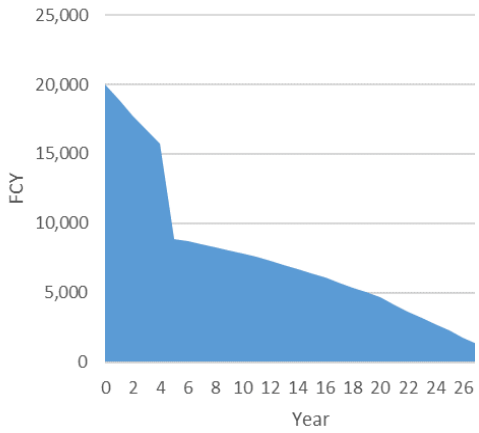
A similar assessment was made for a 30 year facility (**Figures 33 and 34**).

Figure 33: FCY Guarantee on LCY Loan Balance – No Economic Shock– 30 Years



Source: EVD

Figure 34: FCY Guarantee on LCY Loan Balance – With Economic Shock– 30 Years



Source: EVD

The results indicate it would be much more efficient for an MDB to offer guarantees than the government, which needs to rely on LCY to back its undertakings.

5. Conclusions

The analyses indicate funded instruments denominated in LCY will be cheaper than FCY if the real interest rate is less than 5%, and these savings will increase markedly if an economic shock occurs. In section 1, the review of the sample of EBRD countries of operations indicates these shocks happen frequently and the effects can persistent for many years..

A brief review of capital requirements for guarantees on LCY obligations are much less if they are denominated in FCY. This result indicates that MDBs are potentially a more efficient source of guarantees than governments. It also suggests that guarantees may be a cost effective means of lengthening tenors of LCY funded instruments.

Annex 10: Country Case Studies

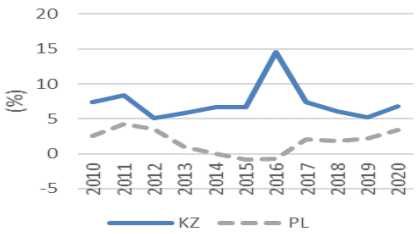
1. Kazakhstan

1.1. Overview

Kazakhstan (KZ), officially the Republic of Kazakhstan, is the world's largest landlocked country, and the ninth-largest country in the world by area. It has a population of 18.8 million residents, and has one of the lowest population densities in the world, at fewer than six people per square kilometre. Since 1997, the capital is Nur-Sultan, formerly known as Astana. The country's largest city is Almaty. Kazakhstan is the largest economy of Central Asia, generating 60% of the region's GDP, primarily through its oil and gas industry and mineral resources.

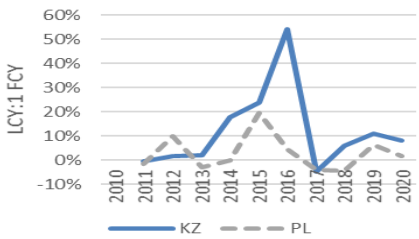
The country's central location on the new Silk Road between China and Europe, makes trade and integration central aspects of its economy, and there are important opportunities associated with the Belt and Road Initiative (BRI), strengthening linkages with the European Union (EU). Kazakhstan joined the World Trade Organisation in 2015. Unemployment was 6% in 2020. The country has an inflation rate that averaged about 7% pa over the evaluation period, and it has been unstable, spiking at 15% in 2016 (**Figure 1**). The country devalued its currency by 18% in 2014, 24% in 2015, and 54% in 2016 (**Figure 2**). Over the evaluation period, the currency has depreciated at a compound annual rate of about 11%. These rates are much higher than the comparator country of Poland (PL).

Figure 1: CPI (% Change)



Source: WDI

Figure 2: Annual Rate Depreciation (LCY:1USD) (% Change)

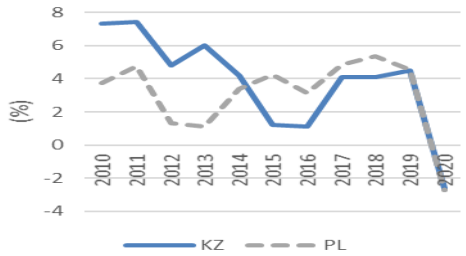


Source: WDI

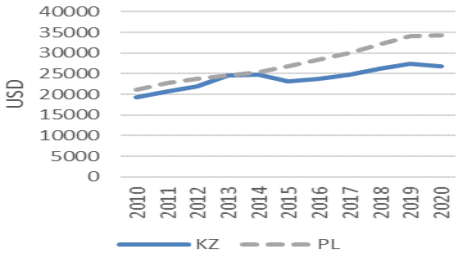
GDP growth rate has been declining over time, due to volatile oil prices, and most recently the Covid Pandemic (**Figure 3**). GDP per capital has been growing steadily, and it was similar to PL up to 2014 when the macro economic situation deteriorated (**Figure 4**)

Figure 3: GDP Growth Rate (%)

Figure 4: GDP Per Capita PPP



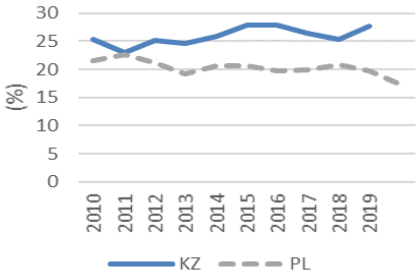
Source: WDI



Source: WDI

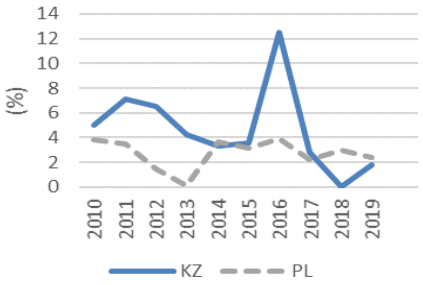
The country has been investing a high proportion of its GDP (about 25%) over the evaluation period, relative to PL (**Figure 5**). FDI has played an important though declining role in domestic investment (**Figure 6**).

Figure 5: Gross Capital Formation (% GDP)



Source: WDI

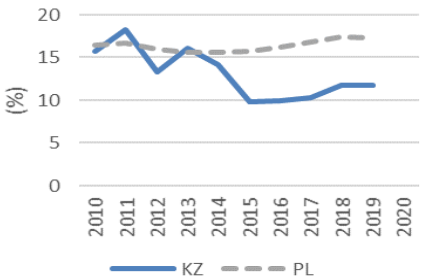
Figure 6: FDI (% GDP)



Source: WDI

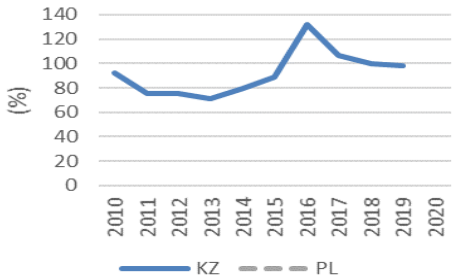
Tax take as proportion of GDP at 10% is low by international standards (**Figure 7**), while external debt levels are high at 100% of GNI (data for PL is not available) (**Figure 8**).

Figure 7: Tax (% GDP)



Source: WDI

Figure 8: External Debt (%GNI)

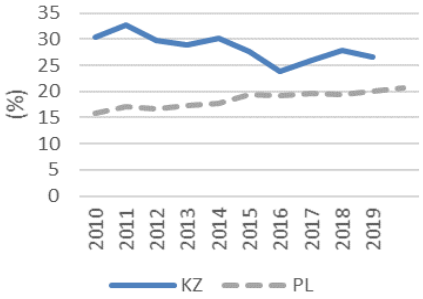


Source: WDI

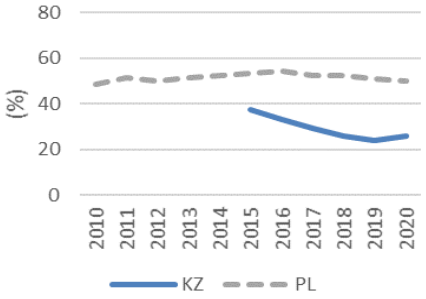
The saving rate is high in KZ, although on a downward trend (**Figure 9**). Domestic credit available to the private sector is low and declining (**Figure 10**).

Figure 9: Savings (% GDP)

Figure 10: Domestic Credit – Private (% GDP)



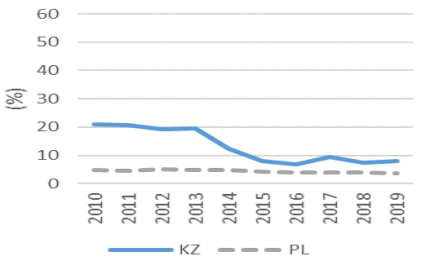
Source: WDI



Source: WDI

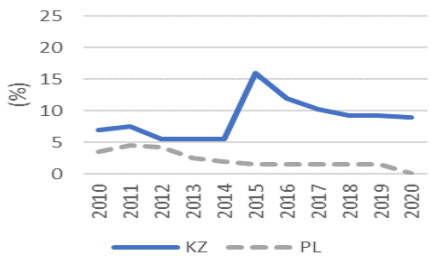
Despite economic shocks starting in 2014, nonperforming loans (NPLs) are low (**Figure 11**). Nominal interest rates increased by 10% in 2015, and remain high relative to countries such as Poland (**Figure 12**).

Figure 11: Non Performing Loans (% GDP)



Source: WDI

Figure 12: Central Bank Policy Rate (%)



Source: IMF

EBRD's Country Strategy for 2017 noted that Kazakhstan has a reasonably well developed corporate bond market in comparison to many countries in Central and Eastern Europe, although it is still smaller than those in developed countries and emerging Asia. Listed corporate bonds issued by the financial industry account for 49 per cent of bonds outstanding, with the energy sector second with 31.2 per cent of the total outstanding. The equity market is highly concentrated and illiquid due to a lack of quality investment opportunities and limited presence of active institutional and retail investors. Equity and corporate bond markets are largely buy and- hold with the Unified National Pension Fund (ENPF) acting as the major investor. The capital market lacks private sources of capital, especially domestic and foreign institutional investors.

The Government is implementing the "100 Steps" programme introduced by the President in 2015 to strengthen public sector institutions and the role of the private sector. The Government announced an ambitious privatisation plan 2016-2020, which aims to offer ownership stakes to foreign investors in strategic state-owned enterprises. In January 2017 the President announced a new development strategy, "Third Modernization: Global Competitiveness", which aimed to accelerate modernization and digitalization of key sectors of the economy. The current Government reform program is elaborated in the Kazakhstan 2050 development strategy. Its overarching objective is to accelerate the transformation of Kazakhstan into a modern society with a knowledge-based, diversified, and private sector-driven economy

1.2. Structure of the Public Sector

Kazakhstan is a democratic, secular, unitary, constitutional republic. The country is comprised of fourteen regions, and 177 districts .The districts are further subdivided into rural districts at the lowest level of administration, which include all rural settlements and villages without an associated municipal government. The cities of Almaty and Nur-Sultan are classified "state importance" and do not belong to any region. Municipalities exist at each level of administrative division in Kazakhstan.

The bulk of subnational budget revenues come from central government transfers. Tax revenues accounted for 41% of subnational revenues, slightly below the OECD average in 2016 (45%). Capital grants accounted for 19% of transfers in 2016. The shares of tariffs and fees and property income in Sub National Government (SNG) revenues is well below the OECD averages (18% and 2%, respectively). SNGs are able to borrow through loans from the central government or from another SNG at a higher level (oblast) to cover fiscal deficits and finance investments. The two special-status cities of Almaty and Astana are able to borrow through bond issuance to cover their budget deficits and to finance the construction of public social housing

SNGs often act as paying agents of central government to implement national investment plans. Local governments' are primarily responsible for the delivery of public services in the education and health sectors. Education is by far the largest sector of SNG expenditure, accounting for almost 32% of total SNG spending and 71% of total public spending on education. The second sector of is health (16% of total SNG spending and 45% of total public spending in this category). Other large categories of SNG expenditure include economic affairs (transport) and housing and community amenities.

1.3. Infrastructure and PPPs

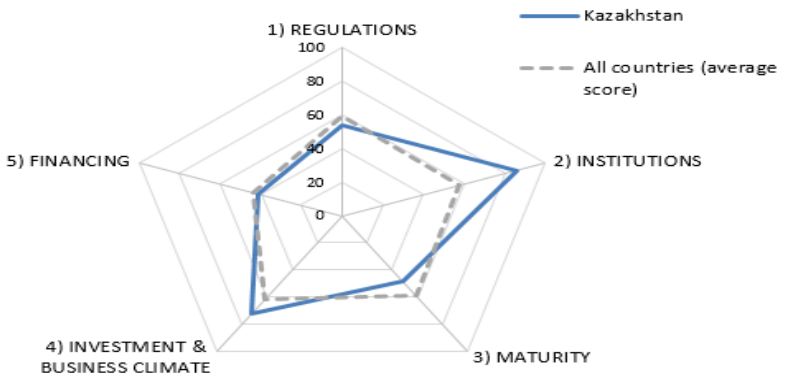
The government has prioritised public-private partnerships (PPPs) as a delivery mode for both economic and social infrastructure. It has put in place a legal and institutional framework for preparing PPPs at both the national and regional level, including a Concessions Law adopted in 2006 and a PPP Law adopted in December 2015. Kazakhstan has set up a Kazakhstan PPP Centre, a Project Preparation Fund and several PPP units for developing PPP projects. The BAKAD road project was officially awarded in 2016, and the Shymkent ring road and the Almaty rail bypass were announced. Most regional governments have established PPP Units.

The new PPP law was supported by a development plan to promote PPPs, and responsibility for the development of regulations and the establishment of projects was assigned to the Ministry of National Economy and the PPP Centre. A series of regulations were introduced, covering procurement processes, bidding documentation and contracts. In 2016 the Kazakhstan PPP Advisory Centre was restructured as the Kazakhstan Project Preparation Fund. Despite this progress in legal and institutional development, projects remain slow to materialise due to weaknesses that became apparent with the previous generation of PPPs, where revenues were less than expected. The new legislative framework has not been tested, and there are questions about availability of state subsidies, ability to index tariffs, and limits on international arbitration.

Between December 2015 and March 2018 266 PPP contracts were signed by regional governments in sectors such as health care, education and sports and recreation facilities. This proliferation of contracts raises questions over the quality and sustainability as regions often have a limited and uneven capacity and

inadequate resources to prepare and maintain projects. Overall, EIU rated Kazakhstan's PPP framework highly on institutions, but regulations and financing capability were low (**Figure 13**).

Figure 13: EIU Infra-scope Ratings



Source: EIU

1.4. EBRD Country Strategies

In 2010 EBRD was the largest financial investor outside the oil and gas sector in Kazakhstan. The strategic priorities in 2010 were:

- Fostering modernisation in the infrastructure sector by facilitating restructuring of the national railway company, and supporting viable PPP's in the road sector, as well as by broadening the Bank's involvement in the municipal sector
- Implementing the Sustainable Energy Action Plan in the power and energy sector through investment in modern and 'clean' generation and transmission companies.

In 2013, the priorities were as follows:

- Diversifying and supporting the non-resource sector;
- Balancing the role of the state and the market; and
- Promoting low-carbon growth and energy efficiency.

EBRD with the Government signed An Enhanced Partnership Framework Agreement in May 2014 to facilitate investment and policy dialogue. The government signed similar agreements with Asian Development Bank (ADB), European Investment Bank (EIB), the Islamic Development Bank (IsDB) and World Bank Group (WBG).

Despite high lending volumes, progress in the area of structural reforms has been slow. Involvement of the state has increased in a number of key sectors, while progress with privatisation, diversification of the economy away from excessive dependence on oil and gas sector, tariff reform and restructuring of non-performing loans had been very limited, if any. Gaps in terms of market structure and market institutions were assessed in the country strategy as Large or Medium in all sectors.

EBRD intended to address these concerns by ensuring the implementation of loan conditionalities, and support entry of new private firms, and privatisation. EBRD would selectively seek PPP opportunities directly financing private concessionaires. EBRD would focus on developing an enabling environment for the private sector, and reforming public sector enterprises, including institution building and strengthening of market mechanisms.

In the energy sector, the focus would be on improving energy efficiency, strengthening regulation, tariff improvements and facilitating development of renewable energy. In the transport sector, EBRD would work closely with other MDBs such as ADB and WBG to develop institutions such as a road agency and finance road projects under programmes such as the BRI.

In 2017 a new country strategy was approved which had the following priorities:

- Balancing the roles of the state and the private sector;
- Enhancing inter-regional connectivity and international integration;
- Promoting green economy transition; and
- Broadening access to finance, strengthening the banking sector and developing local capital markets.

The country strategies did not provide an assessment of ATQs or targets. The most recent strategy provided qualitative tracking indicators, but they are not linked to outcomes.

1.5. EBRD Programmes

The transport ABI private non-sovereign approvals were dominated by the Bakad Road Concession, which was financed in 2020 at a project value of EUR183 million. The majority of the transport state non-sovereign transactions went to Kazakhstan Temir Zholy (KTZ), the state owned national railway company. The state sovereign projects were standalone facilities to rehabilitate roads such as the reconstruction of the Atyrau-Astrakhan road, as well as sections of the corridor connecting Nur-Sultan to Almaty (**Figure 14**).

The energy private non-sovereign projects were comprised of about 26 solar generation projects, most of them being financed under the Kazakhstan Renewables Framework (KAZREF) approved in 2016. KAZREF delegated authority to management to provide EBRD debt financing of up to EUR 200 million, for 6 - 9 senior loans for renewables projects. The main transition impact (TI) indicator for KAZREF was expected GHG emission reductions of approximately 600,000 tonnes of CO2 annually (**Figure 15**).

Figure 14: Transport ABI (EUR Mn)

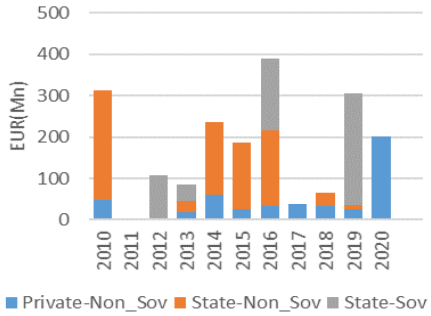
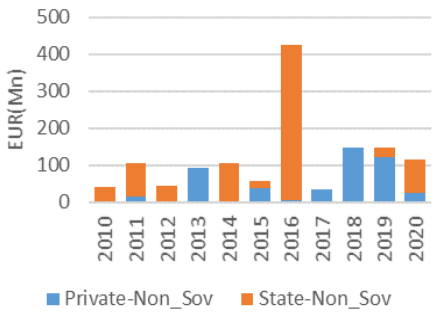


Figure 15 : Energy ABI (EUR Mn)



Source: EBRD Database

Source: EBRD Database

There were about 30 MEI projects, most of them for urban transport, street lighting district heating, water, and solid waste. Most of the projects by value were classified as state non-sovereign (**Figure 16**). An important feature of the Kazakhstan infrastructure portfolio was the prominent use of Local Currency (LCY) (**Figure 17**), particularly in the energy sector (**Figure 18**).

Figure 16 : MEI ABI (EUR Mn)

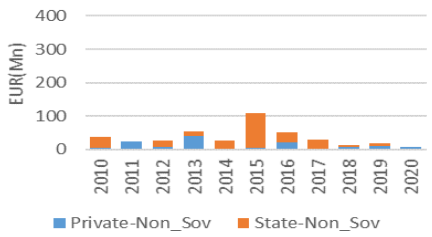
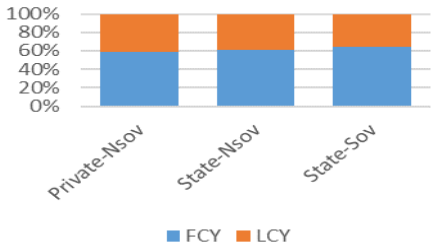


Figure 17 : Infrastructure Finance by Category & Currency (%)



Source: EBRD Database

Source: EBRD Database

TC data is available from 2016 to 2020. MEI received most grant funding from 2016-2018, with about EUR20 million being sourced from the Enhanced Partnership - Regional Infrastructure Modernisation Programme Framework, agreed with the Government of Kazakstan. In 2019-2020, Energy became the main recipient of donor funds, mainly in the form of co-investment loans from multilateral climate funds. The Kazakhstan PPP Hospital project received EUR2.1 million in TC grants from a bilateral source in 2020 (**Figure 19**).

Figure 18 : Infrastructure Finance by Sector & Currency (%)

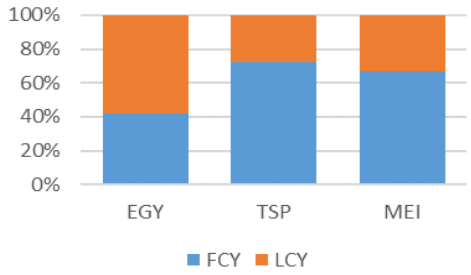
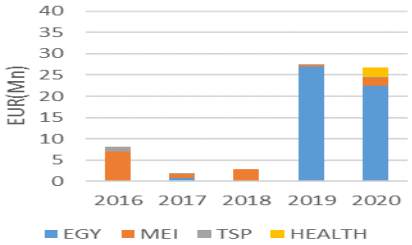


Figure 19 : Infrastructure TC (EUR Mn)



Source: EBRD Database

Source: EBRD Database

Specific activities included supporting the national road agency with a view to better managing road construction, maintenance and repair, supporting road-sector reform, such as tolling, better procurement and planning for new funding sources and safety standards. EBRD provided support with IFC to develop PPPs and improve the PPP legal framework, leading to the financing of the country's first road concession project, the 66 km ring road in Almaty (BAKAD), the largest PPP in Central Asia.

EBRD and IFC took the lead on structuring the BAKAD ring road project in Almaty. The project was approved by the Board in 2019, and it has a project cost of about EUR740 million. It will be implemented

under a 20 year concession contract based on an availability payment scheme. The project was financed in FCY using 78:22 debt to equity structure with EBRD providing an A Loan of USD 225 million and a B loan of USD 200 million, both with a 15.5 year tenor. EBRD's exposure will be further reduced using Unfunded Risk Participations (URP) for a further EUR75 million that will result in total AMI of EUR275 million. The other co-financiers were development finance institutions (DFIs) and commercial lenders.

The primary TQ was "Resilent", and the secondary TQ was "Competitive". The Probability of Default (PD) Rating was 6, with a margin of 4%. The Environmental Rating was A, indicating it could have potentially significant environmental and/or social impacts. The board approval documents do not provide details on the quantitative assumptions associated with forecast FX risks or land acquisition programme, to assess the project risks. All financials are in Euros and there is no reference to a Value for Money (VFM) assessment in the Board document.

At the municipal level, EBRD supported the modernisation of water and wastewater, district heating and electricity distribution infrastructure in eight regional capitals across Kazakhstan (Aktau, Aktobe, Kostanay, Ust-Kamenogorsk, Semey, Petropavlovsk, Kyzylorda, Taraz and Shymkent) to enhance operational efficiency and service quality. EBRD supported the modernisation of street lighting in East Kazakhstan (Ust-Kamenogorsk) to reduce power consumption, by installing more energy efficient equipment and introducing new management systems. SI3P is currently working on the Almaty Hospital project, which will provide a 300-bed hospital and clinic diagnostic centre under an 18 year PPP contract.

1.6. Other MDB Programmes

1.6.4. Asian Development Bank

Asian Development Bank (ADB) has prepared a Country Partnership Strategy (CPS) for the period 2017-2021. The aim of CPS is for the ADB to assist Kazakhstan in achieving its medium-term development targets and fulfilling its global obligations under the Sustainable Development Goals' (SDGs) agenda.

ADB's support will meet three main objectives. (i) help lessen the dependency on commodity exports, it will support economic diversification by promoting private sector development and improving access to finance;. (ii) help reduce inequalities, realize quality infrastructure and improve the quality of public and social services; and (iii) to lessen vulnerabilities associated with climate change, support achieving sustainable growth in line with the country's greenhouse gas mitigation targets and commitments to improve resilience to climate change.

ADB will contribute to financing Kazakhstan's infrastructure investment needs, delivering public and social services, promoting structural reforms, implementing SOE reforms and privatization plans, and supporting private sector development and investments. ADB operations will contribute to creating jobs, fostering innovation, generating and disseminating knowledge, introducing international best practices, and building the capacity of public institutions. Interventions will complement public sector investment projects and help implement the country's economic diversification plans.

ADB estimated it would provide about US$3 billion in loans to Kazakhstan during 2017 – 2021, including project financing from sovereign operations, non-sovereign operations, and co-financing. Available sovereign resources were about $2 billion for country and regional projects. Detailed assistance amounts would be set annually, at the time of preparation of the country operations business plan (COBP).

The government had indicated a preference to IFIs for a financing modality directed toward non-sovereign and sub-sovereign financing than sovereign operations. To reduce the currency risk associated with local procurement, the government had requested all IFIs to lend (almost exclusively) in tenge. To limit contingent liabilities, the government also invited IFIs to accept corporate guarantees from government-owned public holding companies to secure attractive borrowing terms without directly affecting the state budget.

To help meet these requests, ADB would foster synergies between its sovereign and non-sovereign operations by:

i) supporting an improved business-enabling environment for PPPs;

ii) building public sector capacity to develop and prepare PPP projects;

iii) developing relationships with public holding and SOEs to identify new business opportunities and explore accepting corporate guarantees from such entities; and

iv) working towards introducing schemes for blended finance solutions as part of non-sovereign operations.

There were no details on the size of the existing portfolio. The results framework did not specify outputs, and focussed on outcome indicators such as "Contractual close of at least two health-sector PPPs passing fiscal affordability and value for money test by 2021 (2016 baseline: 0)."

1.6.5. World Bank Group

World Bank Group (WBG) has prepared a Country Partnership Framework (CPF) for Kazakhstan for the period 2020-2025. The WBG's Systematic Country Diagnostic (SCD) identified the main constraint to achieving Kazakhstan's development goals was Institutional and governance capacity. The CPF provides a framework to assist Kazakhstan meet its development goals and graduate from WBG support by focussing on institutional reform to enable private sector led growth.

The CPF will deploy all WBG instruments, especially Reimbursable Advisory Services (RAS), implemented under the Joint Economic Research Program (JERP) in Kazakhstan, to support institutional strengthening and capacity building. As part of the 'One World Bank Group' approach, the International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA) support will be leveraged strengthen market institutions. There will be a shift to a more results based approach and increased focus on the private sector using the Maximising Finance for Development (MFD) Approach. All new financing will be expected to contribute to significant institutional building in a significant way.

Central bank and financial regulation independence and maintaining flexibility of the exchange rate are vital for fostering de-dollarization of the economy and enhancing its competitiveness. Public sector agencies need to become more accountable and responsive and there is a need for improvements in allocation of resources and responsibilities to local governments. Planning systems are too rigid and do not align development priorities with financing. Weak public financial management including reporting, control, and audit especially for subsidy schemes. There is low trust in judicial institutions and dispute resolution systems.

State owned enterprises (SOEs) dominate the economy and crowd out the private sector. Inefficient credit allocation and poor banks' risk management practices. Despite considerable investment, key national and regional road and rail corridors still need to be completed. Kazakhstan is among the world's 10 most energy

intensive economies. There are high levels of greenhouse gas (GHGs) and pollution, which harm the environment and health.

During the previous CPS period covering FY12–17, US$3.6 billion of IBRD lending was approved. During the two years, FY18 and FY19, there was no lending to Kazakhstan. The largest amount of the WBG's portfolio is in sovereign financed road projects (US$1.1 billion in the East-West Roads, and US$2.1 billion in South West Roads), and the World Bank will continue to support this area over the CPF period. The IBRD lending pipeline is expected to be around US$2.0 billion. US$1.0 billion is planned for FY20–21 and the rest up to FY23. IFC will focus on support for SMEs, PPPs in energy and transport, and selective engagement in the government's proposed privatisation programme. MIGA will seek opportunities to provide political risk insurance and non-honouring guarantees to foreign investors for infrastructure PPPs.

Similar to ADB, the results framework did not provide outputs and presented outcome indicators such as "Number of MSME clients supported by IFC and IBRD through various projects; Baseline: 224,000 (2018); Target: 300,000 (2024)"

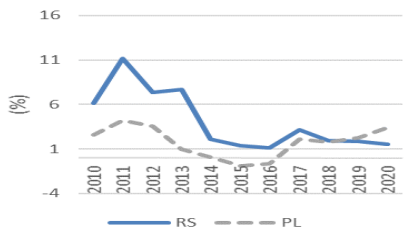
2. Serbia

2.1. Overview

Serbia, officially the Republic of Serbia, is a country at the crossroads of Central and Southeast Europe. Serbia has a population of roughly 7 million, with Belgrade as its capital and largest city. Serbia is an upper-middle income economy. Since 2014, the country has been negotiating its EU accession, with the aim of joining by 2025. The global financial crisis (GFC) had a negative impact on growth. In 2018 23% of the population lived below the poverty line, and unemployment was 9.1% in 2020. The services economy accounts for 68% of GDP, followed by industry with 26% of GDP, and agriculture at 6% of GDP. The energy sector is one of the largest and most important sectors due to large coal, oil and gas reserves. Serbia has a strategic transportation location as it represents the easiest land route from continental Europe to Turkey and the Near East. The road network is low quality by Western European standards because of lack of financial resources for their maintenance in the last 20 years.

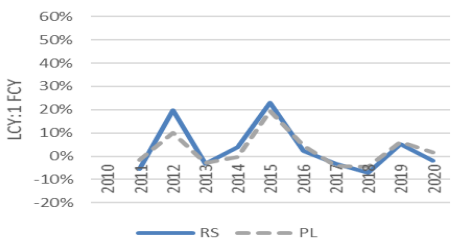
Since 2014 inflation has been low (**Figure 20**), and the exchange rate stable (**Figure 21**).

Figure 20: CPI (% Change)



Source: WDI

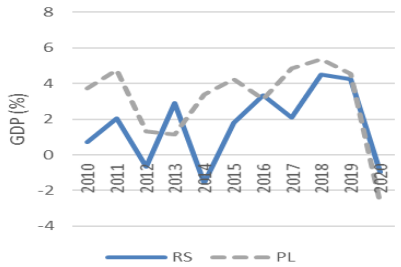
Figure 21: Annual Rate Depreciation (LCY:1USD) (% Change)



Source: WDI

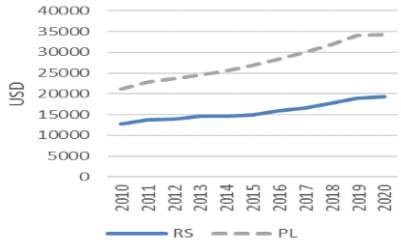
The economy was growing over the evaluation period, but it was negatively impacted by the Covid crisis in 2020 (**Figure 22**). GDP per capita has been growing steadily from a low base (**Figure 23**).

Figure 22: GDP Growth Rate (%)



Source: WDI

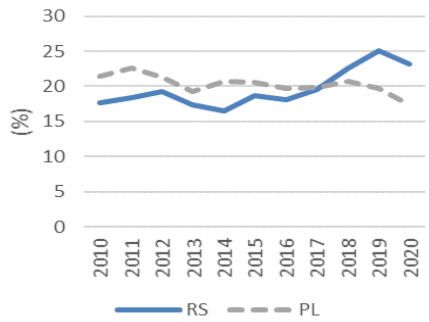
Figure 23: GDP Per Capita PPP



Source: WDI

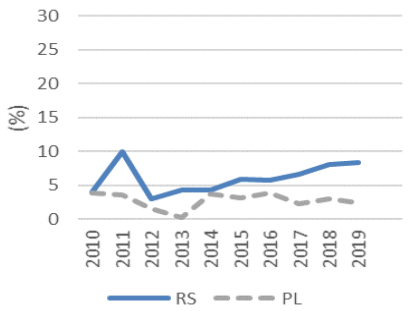
Investment levels are high, and exceed rates in Poland (**Figure 24**). FDI is accounting for a growing share of investment (**Figure 25**).

Figure 24: Gross Capital Formation (% GDP)



Source: WDI

Figure 25: FDI (% GDP)



Source: WDI

The tax take is steadily increasing and exceeds Poland by almost 10% of GDP (**Figure 26**). External borrowing at 80% of GNI is moderately high by COO standards, but it is stable (data for Poland is not available) (**Figure 27**).

Figure 26: Tax (% GDP)

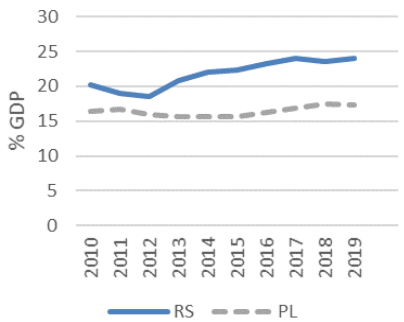
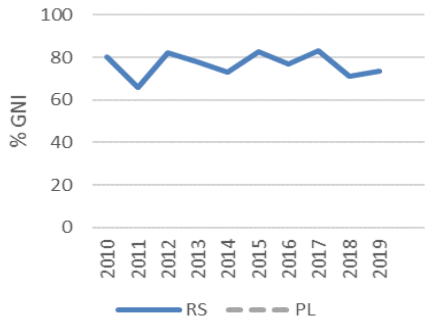


Figure 27: External Debt (%GNI)



Source: WDI

Source: WDI

Savings rates are growing over time, and are now almost equivalent to Poland (**Figure 28**). Private sector access to credit is almost twice as high as Kazakhstan, in 2020 was equivalent to Poland (**Figure 29**)

Figure 28: Savings (% GDP)

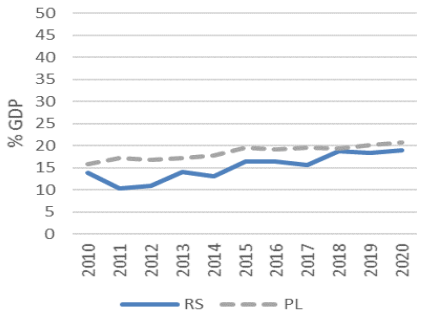
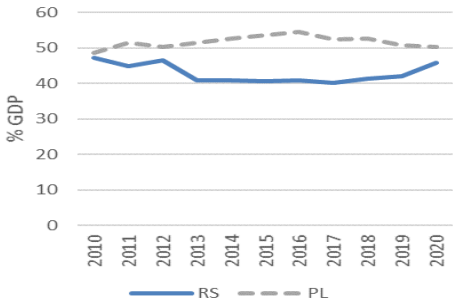


Figure 29: Domestic Credit – Private (% GDP)



Source: WDI

Source: WDI

In line with strong economic performance in recent years, NPLs (**Figure 30**) and nominal interest rates (**Figure 31**) are low by international standards.

Figure 30: Non Performing Loans (% GDP)

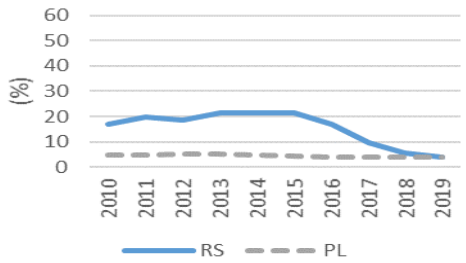
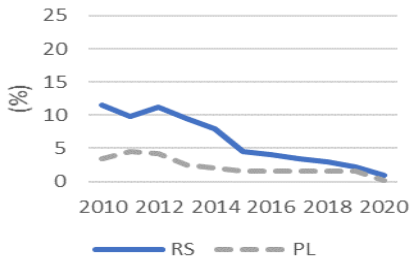


Figure 31: Central Bank Policy Rate (%)



Source: WDI

Source: IMF

2.2. Structure of the Public Sector

Serbia is a parliamentary republic, with the government divided into legislative, executive, and judiciary branches. The Government operates under a constitution and it is responsible for proposing legislation and a budget, executing the laws, and guiding the foreign and internal policies. Serbia is a unitary state composed of municipalities/cities, districts, and two autonomous provinces. There are 145 municipalities and 29 cities, which form the basic units of local self-government.

Local self-government units are financed through direct revenues, the budget of the Republic of Serbia, and the budget of the Autonomous Province of Vojvodina. Revenues of local self-government units include taxes (own-source and shared), user charges and fees, and block grants from the central government. Personal income tax, followed by a large margin by corporate income tax, property tax, and grants, are the most important sources of revenue for SNGs.

Under the Public Debt Law, local government bodies can borrow if they obtain the approval of central government authorities. Loans and bonds can be contracted both in the domestic and foreign markets. Local government cannot borrow long term, except for the financing or refinancing of capital investments that are included in an approved local government budget. In 2016, local government debt amounted to 2% of GDP and 2 % of public debt. In addition, close to 58% of total local government debt was issued in foreign markets.

About 80% of SNG expenditure goes to economic affairs and transports, general public administration, education and housing and community services. The remaining 20% is split across recreation, culture and religion (11%), social protection (6%) and environmental protection (3%). In 2016, SNG expenditure accounted for 7% of GDP and 17% of public expenditure, below the average of OECD unitary countries (9% of GDP and 29% of public expenditure in 2016). The share of spending undertaken by municipalities has increased over the years, reflecting the devolution of public competencies to them. Despite devolution, SNG expenditure is concentrated, with the city of Belgrade accounting for close to 32% of the total.

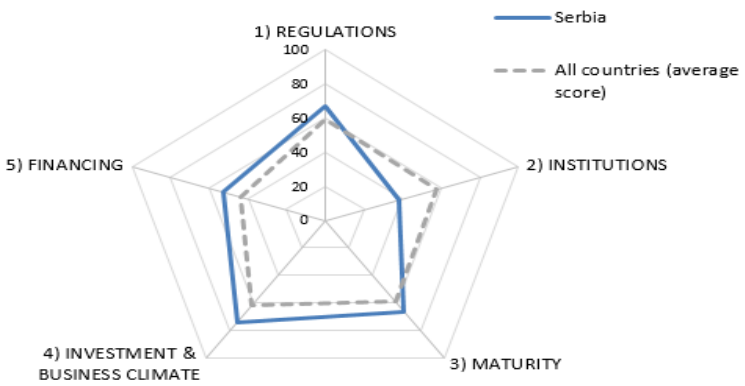
With the bulk of SNG expenditure allocated to current expenditure, there is little room for investment (13%), which is substantially below the average for OECD unitary countries (51%) and EU28 (51%). Local investment spending has decreased in recent years, from 1.5% of GDP in 2011 to 0.9% in 2016.

2.3. Infrastructure and PPPs

A PPP and concessions law was enacted in 2011, and there is official support for PPPs. The Commission for Public-Private Partnership linked to the Ministry of Economy and Regional Development is responsible for implementation. Projects have been prepared in public lighting, public transport, solid waste management, energy (including renewables), telecommunications, water and sewerage. EIU reported 43 project proposals approved through the PPP/concession model, 41% had reached contract signing, with ten contracts signed in 2015 and eight in 2016. Municipalities developed most PPP proposals, with only two occurring at the national level.

The main challenges developing PPPs were difficulties with the PPP law, which contradicted the Public Procurement Law, and the PPP Unit lacked permanent staff, policies, guidelines and project preparation facilities. Overall, EIU rated the PPP institutional arrangements as low, relative to other EBRD COOs, with slightly better rankings for regulations and financing (**Figure 32**).

Figure 32: EIU Infra-scope Ratings



Source: EIU

2.4. EBRD Country Strategies

In 2007, EBRD's strategic priorities for infrastructure were as follows:

- Transport would support the completion and development of a modern highway and railway network on Corridor X.
- Municipal Infrastructure aimed to i) continue cooperation with the city of Belgrade and work on completing signed projects, and ii) diversify its financing to medium-sized cities and regions.
- Energy sector would provide continued support for commercialisation of the energy utilities and possible private sector participation (PSP) and developing operational activities in the area of sustainable energy and energy efficiency.

EBRD provided policy dialogue and support to develop public procurement by enhancing the legal framework, capacity building and an outreach to the private sector. In 2012, EBRD provided technical assistance for the development of the new Law on PPPs and concessions, and capacity building for the recently established PPP Commission

In 2014 EBRD's objectives became more generic and less focussed on individual sectors:

- Enhance the role and competitiveness of the private sector;
- Bolster the banking sector and deepen financial intermediation; and
- Develop sustainable and efficient public utilities

Key challenges included the slow pace on restructuring and privatisation, limited PSP in energy, transport and municipal infrastructure, with no examples of successful PPPs. Serbia had limited access to finance, with two thirds of total public debt financed externally from official sources (IMF and MDB loans), and private sector (government bonds and bank loans). Domestic capital markets were still in an intermediate stage, with most issuances being government bonds to banks, and limited liquidity in secondary markets.

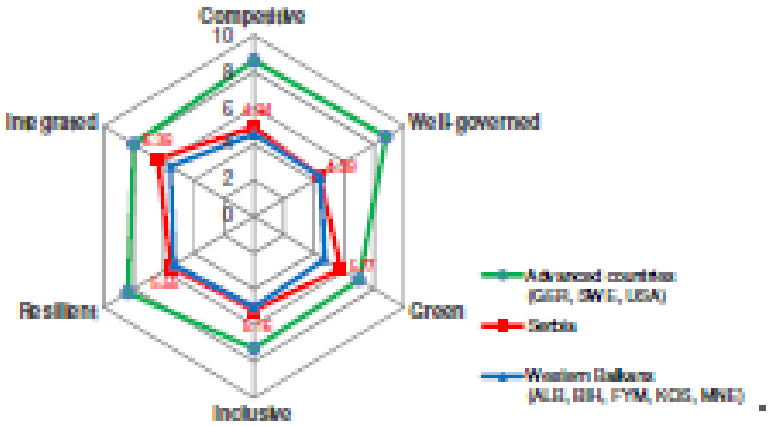
MDBs such as EBRD, European Investment Bank (EIB) and World Bank were providing substantial sovereign support to facilitate integration under programmes such as the Western Balkans Investment Framework (WBIF).

In 2018 a new country strategy was approved, with three priorities:

- Foster competitiveness;
- Enhance Integration by improving the transport network, supporting regional economic connectivity reform, and advancing energy interconnectivity; and
- Support Green economy by fostering energy efficiency, enhancing renewable energy, and promoting sustainable practices.

Key challenges included the low interest rate environment and high liquidity in the banking system. SOE restructuring and/or privatisation remained a key priority. The government remains committed to EU accession, as well as to the Berlin process and Regional Economic Area, opening opportunities for regional integration in trade, infrastructure and energy. The assessment of ATQs indicated the country had made good progress on Green and Integrated (**Figure 33**):

Figure 33: Serbia Country Strategy, 2018-2023



A results framework was presented in the most recent strategy based on indicators such as number/volume of loans, but there were no targets, or outcome indicators.

2.5. EBRD Programmes

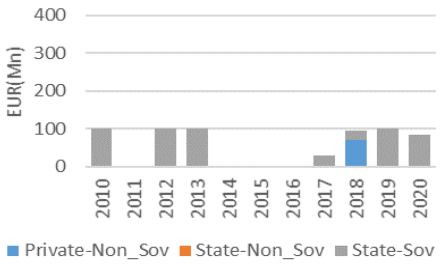
All of the infrastructure projects in Serbia were financed with FCY. In the transport sector, the majority of the projects are state sovereign financings on a mix of road and rail financings. The main private non-sovereign project related to a 25-year concession for Belgrade Airport signed in 2018. (**Figure 34**). The airport project was financed by EBRD with an A Loan of up to EUR 100, and a B Loan of up to EUR 100 million. The A loan would have a tenor of 17 years and the B Loan 15 years. The EBRD loan was part of a broader debt package provided together with IFC, Proparco, DEG and commercial banks.

The TQs were Resilient and Integrated. The project had a PD of 6 and the margin on the debt was 4%. The environmental rating was B. The board approval documents do not provide details on the quantitative assumptions associated with forecast FX risks or land acquisition programme, to assess the project risks. All financials are in Euros and there is no reference to a VFM assessment in the Board document.

To promote Renewable Energy (RE) projects, Serbian government adopted a Feed in Tariff (FiT) programme in 2016. The most important energy private non-sovereign projects were two wind farm projects

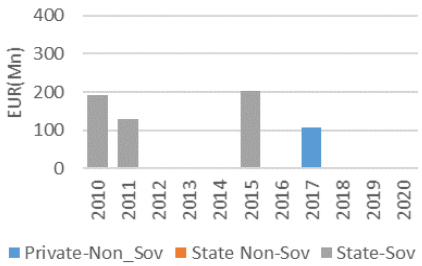
financed in 2017. The balance of the projects were mainly state-sovereign, to the Public Enterprise Elektroprivreda Srbije (EPS), the state-owned electricity utility (**Figure 35**).

Figure 34: Transport ABI (EUR Mn)



Source: EBRD Database

Figure 35: Energy ABI EUR (EUR Mn)



Source: EBRD Database

Most of the MEI financings have been comprised of state non-sovereign projects, primarily to the Belgrade municipality. In 2019, there was a private non-sovereign financing of the Belgrade Solid Waste Concession. (**Figure 36**). The Project involves the construction of an Energy for Waste facility, a construction and demolition waste facility, a leachate treatment facility and landfill gas facility, a new landfill and the remediation of an existing landfill, under a 25-year PPP agreement. Revenues will come from three sources: (i) service payments from the City, (ii) revenues from selling heat under a 25-year fixed price Heat Offtake Agreement, and (iii) electricity sales to the national electricity utility provider under a Power Purchase Agreement with guaranteed FiT for the first 12 years of operation.

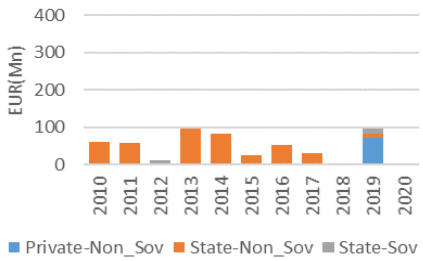
Total Project costs for the concession were EUR 361.4 million, envisaged to be financed by 22.5% from the Sponsors' equity and 77.5% from senior debt provided by a combination of IFIs and commercial banks. EBRD provided an A loan of up to EUR 77.5 million and B loan of up to EUR 35 million, with a tenor of 18 years for A loans and 15 years for B loans. The TQs were resilient and green. TC of EUR 185,000 was funded by the IPPF to establish a PPP monitoring unit. The project had a PD of 6 and the margin on the debt was 4%. The environmental rating was A, indicating it could have potentially significant environmental and/or social impacts. The board approval documents do not provide details on the quantitative assumptions associated with forecast FX risks or land acquisition programme, to assess the project risks. All financials are in Euros and there is no reference to a VFM assessment in the Board document.

There are also preparatory works underway for several street-lighting PPP projects in different municipalities.

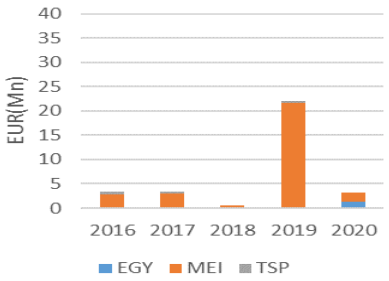
Most TC went to MEI, which included a EUR21 million co-investment loan in the Belgrade Concession (**Figure 37**).

Figure 36: MEI ABI (EUR Mn)

Figure 37 : Infrastructure TC (EUR Mn)



Source: EBRD Database



Source: EBRD Database

2.6. Other MDB Programmes

2.6.1. Western Balkans Investment Framework

Western Balkans Investment Framework (WBIF) provides a forum for MDBs to discuss key priorities and financing schemes for proposed actions. The WBIF provides financing and technical assistance to strategic investments in the energy , environment, social, transport, and digital infrastructure sectors. It also supports private sector development initiatives

2.6.2. European Investment Bank

European Investment Bank (EIB) does not publish country strategies in the same way as other MDBs. In a fact sheet published in in 2017 it indicated it had been active in the Western Balkans since 1977. From 2001 - 2017, EIB had provided finance totalling EUR4.8 billion to projects in Serbia supporting all major infrastructure sectors, as well as small and medium sized enterprises, industry, services and local authorities. In the public sector, EIB's main engagement is to upgrade infrastructure, encompassing projects in motorways, roads and rail, and other investments such as research and development, health, education, justice, energy, local municipalities and water and sanitation. In the private sector, we lend to SMEs through the local banking sector.

2.6.3. World Bank Group

WBG has prepared a Serbia Country Partnership Framework for the period 2016-2020. The strategy supports the country in creating a competitive and inclusive economy and, through this, to achieve integration into the EU. Key areas of WBG support to Serbia include restoring fiscal and macroeconomic stability, creating conditions for accelerated private sector growth and job creation, and strengthening public sector management and service delivery.

WBG engagement will focus on the following selected SCD priority areas:

- Fiscal sustainability, financial and macro stability - analytical, policy design and implementation support on structural aspects of the fiscal consolidation and expenditure management agenda;
- Governance and institutional capacity – WBG is working closely with EU and focussing on elements of Government's Public Administration Reform strategy and Action Plan;

- State Owned Enterprise reform – WBG is leading on efforts to corporatize and enhance performance of three critical SOEs: EPS (Electricity), Railways of Serbia and Roads of Serbia;
- Business climate reform - assisting the Government in pursuing the legal and regulatory reforms aimed at improving the business environment;
- Infrastructure - WBG has been heavily engaged in infrastructure development, both through investment support to highway and national road construction, improvements in road and rail sector management systems, and support to energy sector reconstruction and rehabilitation;
- Labour market institutions - WBG has been assisting the government in knowledge work around the job creation and skills agenda.

These priorities are mapped onto two focus areas:

- Economic governance and role of the state
- Private sector growth and economic inclusion

In the infrastructure sector, WBG indicated it would work closely with EIB and EBRD to complete the Corridor X highway and to put in place an effective system of managing and maintaining other major national roads. The WBG will engage on Railway Sector reform, primarily by supporting the reform of Railways of Serbia, with a focus on creating efficient cargo services. For the development of the energy sector WBG would link Elektroprivreda Srbije (EPS) to the Region's Energy networks, thus contributing to economic growth through enhanced international and local connectivity.

The results framework presented indicators such as "Increase Serbia's renewable energy generation capacity in wind increases by 100 MW Baseline (2015): Wind energy: 0 MW Target (2019): Wind energy: 100 MW". Supplementary progress indicators are presented such as "Enabling regulations for investment in renewables enacted, Power Purchase Agreement adopted". A completion and learning report provides details on progress achieving targets set in the previous CSF. Analysis mainly focuses on IBRD, rather than IFC and MIGA.

3. Turkey

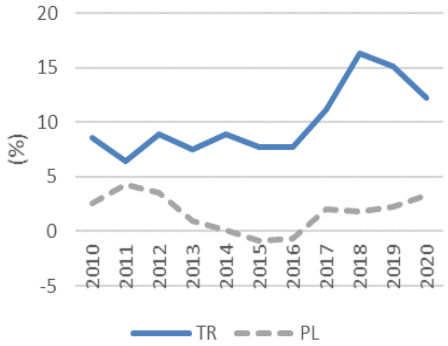
3.1. Overview

Turkey, officially the Republic of Turkey, is a country bridging Europe and Asia. Turkey's capital is Ankara while its largest city and financial centre is Istanbul. It is the twentieth largest country in the world by nominal GDP, and the eleventh largest by purchasing power parity. Turkey started accession negotiations with the EU in 2005. Turkey is categorised as a newly industrialized country, with an upper-middle income economy. Despite relatively high GDP per capita compared to other COOs, income inequality is high and unemployment was 13.6% in 2019. The Syrian conflict has imposed significant challenges on the country.

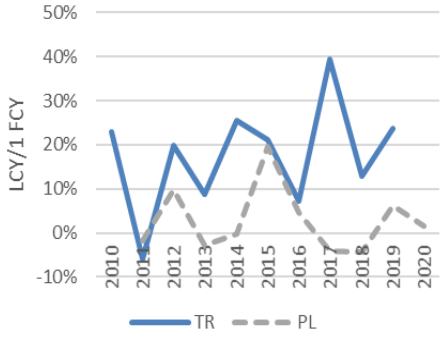
The economy has been experiencing high rates of inflation (**Figure 38**) and the currency appreciated at a compound rate 17% pa over the evaluation period (**Figure 39**).

Figure 38: CPI (% Change)

Figure 39: Annual Rate Depreciation (LCY:1USD) (% Change)



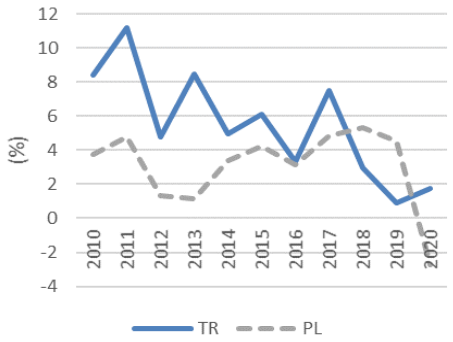
Source: WDI



Source: IMF & WDI

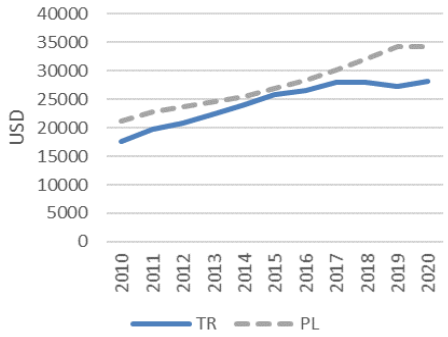
Annual growth rates for GDP have fallen steadily over the period 2010:2020 (**Figure 40**), and GDP per capita stopped growing in 2017 (**Figure 41**).

Figure 40: GDP Growth Rate (%)



Source: WDI

Figure 41: GDP Per Capita PPP



Source: WDI

The rate of investment at about 30% pa is high by international standards (**Figure 42**), and most of this investment has come from domestic sources, with FDI playing a minor role (**Figure 43**).

Figure 421: Gross Capital Formation (% GDP)

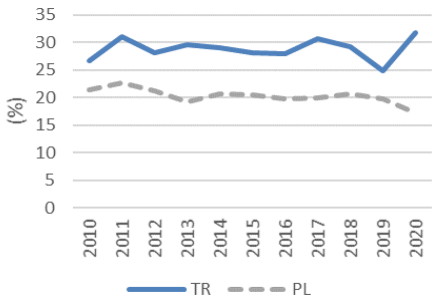
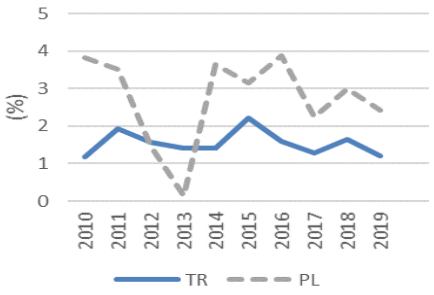


Figure 43: FDI (% GDP)

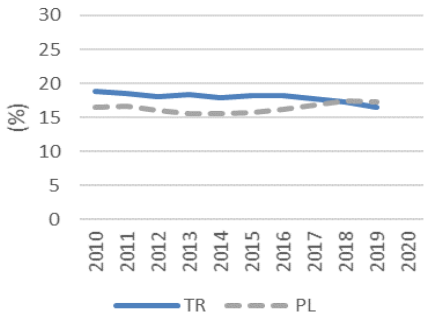


Source: WDI

Source: WDI

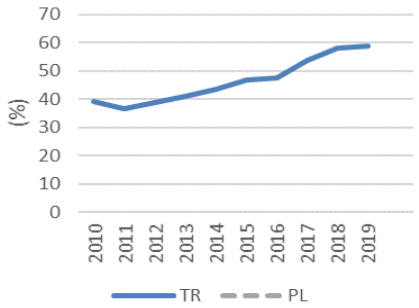
The tax rate is low by international standards and declining over time (**Figure 44**). External debt as a percentage of GNI is still relatively low, but growing over time (data for Poland is not available) (**Figure 45**).

Figure 44: Tax (% GDP)



Source: WDI

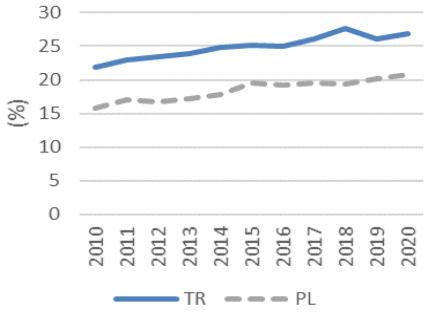
Figure 45: External Debt (%GNI)



Source: WDI

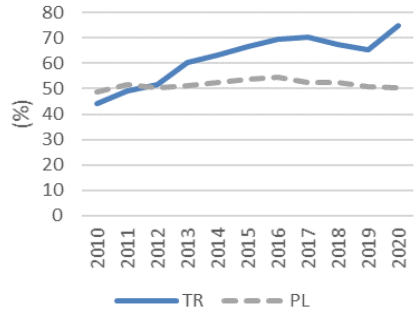
Savings rates (**Figure 46**) and private sector access to credit (**Figure 47**) are both reasonably high by international standards.

Figure 46: Savings (% GDP)



Source: WDI

Figure 47: Domestic Credit – Private (% GDP)

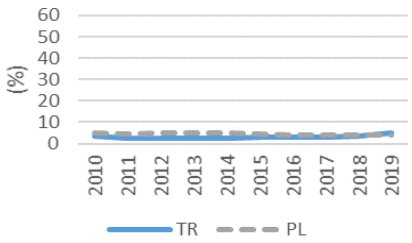


Source: WDI

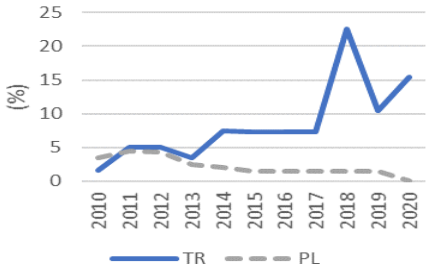
Despite macro-economic instability, NPLs remain low (**Figure 48**), but nominal interest rates were about 15% in 2020 (**Figure 49**).

Figure 48: Non Performing Loans (% GDP)

Figure 49: Central Bank Policy Rate (%)



Source: WDI



Source: IMF

3.2. Structure of the Public Sector

Turkey is a presidential republic and legislative power is vested in the Turkish Grand National Assembly. Turkey has a unitary administration structure, which is highly centralised. Turkey does not have a federal system, and the provinces are subordinate to the central government in Ankara. Provincial and town governors represent local governments'. Turkish municipalities have local legislative bodies for decision-making on municipal issues.

Turkey has a two-tier local government system, comprising 81 provincial level entities and 1 389 municipal-level entities. There has been an on-going decentralisation process since 2004, although in practice, Turkish public administration remains highly centralised. SNGs play a minor role in the provision of public services and investment and they depend heavily on central government funding.

Provincial governments are responsible for economic development, land development, agriculture, environmental protection and planning, health services and social welfare. Municipalities have mandatory and discretionary service provision responsibilities. Mandatory responsibilities include urban infrastructure facilities, environmental and public health issues, urban traffic, parks and recreation, housing, social and cultural services, economic development and construction and school maintenance. Metropolitan municipalities have additional responsibilities, such as urban planning, metropolitan transport master plan and disaster management

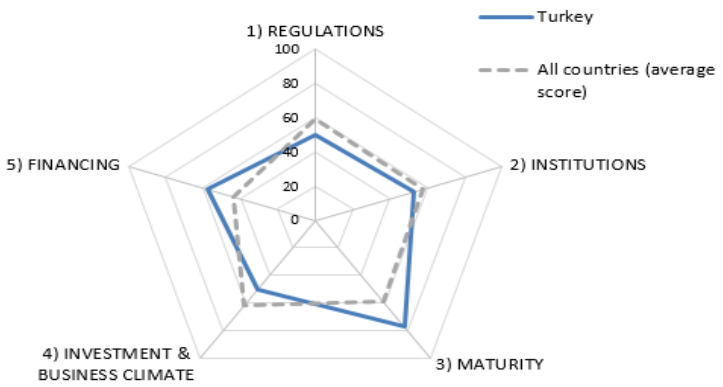
Tax revenue accounted for 4% of GDP and 2% of public tax revenue in 2016, which is well below the OECD average for unitary countries (5% of GDP and 20% of public tax revenue). The primary municipal tax is the property tax on land and buildings. The major component of the intergovernmental transfer scheme is the system of national tax revenue sharing. They consist mainly of formula-based block grants that are predictable, and unconditional transfers. SNGs derive around 10% of their income from user charges and tariffs, in particular in the areas of sewerage, water, road construction and improvement. SNGs are permitted to borrow within the rules set by law. The level of SNG debt is significantly below the OECD average for unitary countries only (15% of GDP and 12% of public debt).

The two most important SNG expenditure items (excluding general public services) are housing and community amenities (mainly drinking water, housing and community development) and economic affairs and transport. SNG spending ratios to GDP and general government expenditure are well below the average for OECD unitary countries (9% of GDP and 29% of public expenditure). Municipalities account for the largest share of SNG expenditure. SNGs play a limited role in public investment.

3.3. Infrastructure and PPPs

PPP has been a primary mechanism for delivering infrastructure in Turkey since 1986. More than 200 projects were developed between 1986 and 2016 at a total value of around US$121.9bn. Under Turkey's health PPP programme, 14 hospitals have reached financial close with a total investment of about US$7.7bn. The legal framework is complex, and there were nine separate laws by 2016, which act as an important constraint. The lack of independent monitoring and evaluation, coupled with a high level of demand guarantees offered by the government raised questions about sustainability. Overall, EIU rated Turkey highly on experience developing projects (maturity) and financial conditions in the country, but scores were lower for institutions, regulations, and investment and business climate (**Figure 50**).

Figure 50: EIU Infra-scope Ratings



Source: EIU

3.4. EBRD Country Strategies

EBRD's country strategy approved in 2012 had the following priorities:

- Increasing availability of risk capital and long term funding to the micro, small and medium-sized (MSMEs) enterprise;
- Enhancing the competitiveness of Turkish industry in a broad range of industrial and service sectors;
- Supporting PSP in renewable energy and efficient power production;
- Promoting reform and supporting a secure and efficient delivery of vital utility services on a non-sovereign basis; and
- Supporting the Turkish government's privatisation programme.

In 2014 a strategy was approved with the following priorities:

- Deepening capital and local currency money markets;
- Scaling up private sector competitiveness through innovation and improved corporate governance;
- Enhancing energy security and sustainability by supporting sector reform, promoting energy efficiency and renewable energy;

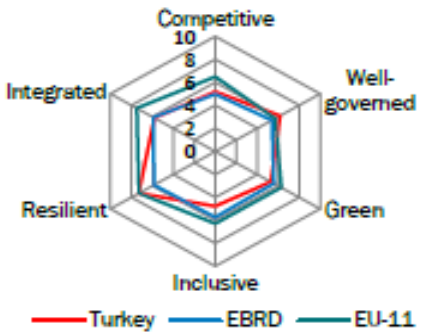
- Improving the quality of infrastructure via commercialisation and private sector participation; and
- Promoting regional and youth inclusion, as well as gender equality, to support long-run growth potential.

In 2019 a new country strategy was approved with the following priorities:

- Strengthen Resilience of the Financial Sector and Develop Domestic Capital and Financial Markets;
- Foster Turkey's Knowledge Economy and Higher Value-Added Activities, and Promote Good Governance;
- Accelerate Turkey's Green Economy Transition and Regional Energy Connectivity
- Promote Economic Inclusion and Gender Equality Through Private Sector Engagement;

Key challenges identified in the strategy included a (geo) political environment marked by the Syrian refugee crisis, an extended state of emergency and constitutional changes strengthening the executive presidency and strained relations with the EU. There was uncertain government commitment to BOT/PPP solutions and weak implementation capacity for municipal, transport and social infrastructure projects. The assessment of ATQs indicated the country had made good progress on Governance and Resilience:

Figure 51: Turkey Country Strategy, 2019-2024



The results framework equated activities with outputs; tracking indicators focused on number and volume metrics with no linkage to outcomes.

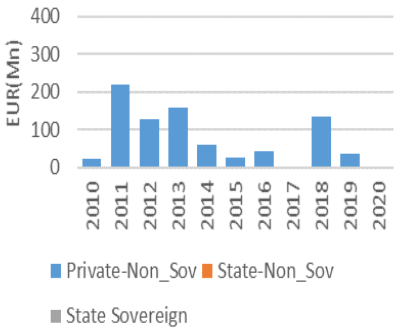
3.5. EBRD Programmes

Transport financing was all private non-sovereign, with largest projects being Turkey Eurasia Tunnel in 2011 (EUR114 million) and Dalman Airport in 2013 (EUR87 million) (**Figure 52**).

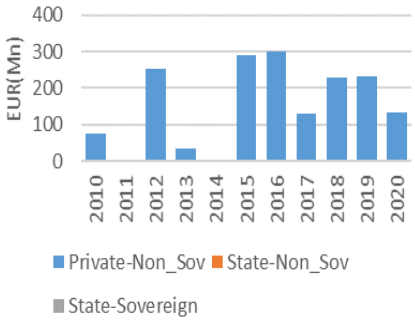
The energy financings related to gas and renewable generation projects using solar, wind and geothermal technologies (**Figure 53**)

Figure 52: Transport ABI (EUR Mn)

Figure 53: Energy ABI (EUR Mn)



Source : EBRD Database



Source : EBRD Database

Most MEI financing was categorised private non-sovereign, including eight hospital PPPs, and laboratory and solid waste PPPs. EBRD supported the development and financing of the hospitals under a Hospital Facilities Management PPP Framework approved in 2014. All sub-projects include the design, construction, equipping, financing and maintenance of integrated healthcare facilities pursuant to 28-year concessions awarded by Turkey's Ministry of Health (MoH). The concessions do not include provision of health care services, which remain the responsibility of the MoH. The PPPs were funded with availability payments paid by MOH and monthly Service Payments for the various support services rendered as part of facilities management (cleaning, catering, laundry, waste, parking, imaging, laboratories and sterilisation)..

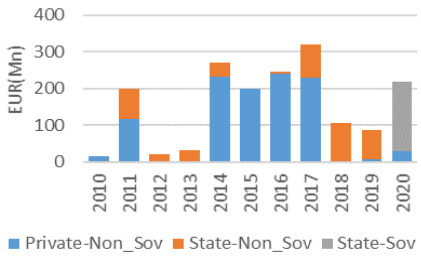
EBRD loans under the Framework could comprise an "A Loan" portion for the Bank's own account and a "B Loan" portion for the account of commercial bank participants, to be determined on a case by case basis. Post signing, technical cooperation (TC) support under the Framework included the development of a VFM Methodology and PPP Contract Implementation and Monitoring capacity development for MOH.

Up to eight sub-projects with a total value of up to EUR 600 million debt or equity for EBRD's own account were approved under the framework. Debt sub-projects under the Framework were expected to include a "B loan" portion to be syndicated to international banks or a parallel commercial loan underwritten by Turkish banks. A loans would have a tenor of up to 18 years tenor, including up to 4 years grace period. B loans were expected up to 15 years tenor, including up to 4 years grace period. Project approvals for each sub-project were not delegated by the Board. Individual project approval documents show projects had a PD of 6, a margin of 4%, and an environmental rating of B.

Of the eight sub-projects, three are completed, operational and well performing, receiving Availability Payments (APs) and Service Payments (SPs). The remaining five sub-projects have been experiencing significant financial distress during the construction period due to construction delays, variation orders, cost increases, funding shortfalls and consequent loan draw-stops. In February 2021 three sub-projects were under the remit of Corporate Recovery. The government has decided to finance the remaining hospital PPP projects using traditional sovereign financing. Many of these problems have arisen due to large currency depreciations of the Turkish Lira.

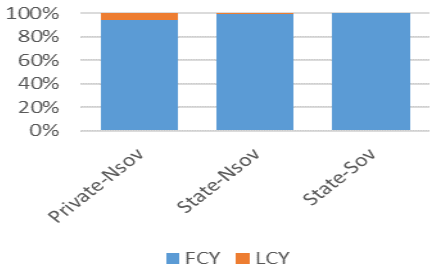
The state non-non-sovereign projects included metros and ferries in the cities of Istanbul and Izmir. The state sovereign financings in 2020 were for buses in Ankara and emergency equipment for Covid 19. (**Figure 54**). LCY financing has been limited in the Turkish infrastructure projects (**Figures 55 and 56**).

Figure 54 : MEI ABI (EUR Mn)



Source : EBRD Database

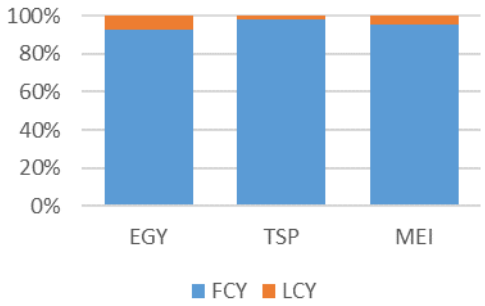
Figure 55 : Infrastructure Finance by Category & Currency (%)



Source : EBRD Database

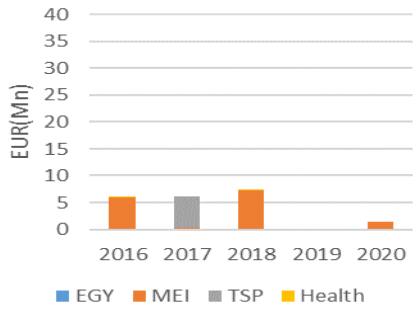
Most TC was allocated to MEI to prepare Istanbul metro, Izmir ferry and metro, and Hatay bus project (**Figure 57**).

Figure 56 : Infrastructure Finance by Sector & Currency (%)



Source : EBRD Database

Figure 57 : Infrastructure TC (EUR Mn)



Source : EBRD Database

3.6. Other MDB Programmes

3.6.1. European Investment Bank

The EIB has been supporting Turkey's development since the mid-1960s. The focus of operations is on financing key transport and urban infrastructure, environmental and agricultural projects, and enhancing access to finance to small businesses. EIB's portfolio of approvals to date totalled EUR30.43 billion, and it was comprised: 44% credit lines; 23% transport; 11% energy; and 23% other.

3.6.2. World Bank Group

WBG's CPF for Turkey covered the period FY18-21, it aligned with the objectives of Turkey's 10th Development Plan launched in 2014, and based on the findings of a WBG SCD finalized in February 2017. The main challenges identified by the SCD related to enhancing the quality of regulatory and accountability

institutions; addressing the impact of geopolitical turmoil in the Middle East; developing capital markets; and mitigating macro-fiscal risks.

The WBG program had three criteria: (i) alignment with the government's Development Plan; (ii) focus on SCD challenges; and (iii) WBG Comparative advantage. The focus areas for the CPF were (i) growth; (ii) inclusion; and (iii) sustainability. The third criteria sustainability mapped on to infrastructure objectives of: (i) Improved reliability of energy supply and generation of green energy; (ii) Increased Sustainability of Infrastructure Assets and Natural Capital; and (iii) Improved sustainability and resilience of cities.

The public sector arm of WBG, IBRD supports policy reforms upstream policy advice and capacity building using through technical assistance and Development Policy Loans (DPLs). This assistance helps establish stronger foundations in national and local governments and paves the way for IFC/MIGA engagement and private sector investment downstream.

IBRD's commitments for the previous country strategy period from 2021 to 2016 averaged USD4.8 billion pa. Infrastructure did not feature prominently in the portfolio, or the proposed CPF, apart from renewable energy. The results framework for the current CPF was based on indicators such as:" Renewable electricity generation as percentage of total generation (%). Baseline: 31.5% in 2015 Target: 33% in 2021". A completion and learning report provides details on progress achieving targets set in the previous CSF. Analysis mainly focused on IBRD, rather than IFC and MIGA.

4. Ukraine

4.1. Overview

Ukraine is the second-largest country in Europe after Russia, which it borders to the east and north-east With a population of 41.4 million, it is the eighth-most populous country in Europe. The nation's capital and largest city is Kyiv. Ukraine is a lower-middle income economy and the 55th-largest in the world by nominal GDP. Despite its size, Ukraine is the poorest country in Europe alongside Moldova, suffering from a very high poverty rate and severe corruption. Approximately 1.1% of Ukrainians lived below the national poverty line in 2019 and unemployment in the country was 9.5% in 2020. The Ukrainian Crisis that started in 2013, when the country suspended preparations for the implementation of an association agreement with the EU, and subsequent conflict in Eastern Ukraine have negatively affected economic performance. Combined with limited structural reform, these events resulted in high levels of inflation from 2014 (**Figure 58**), and devaluation of the currency (**Figure 59**).

Figure 58: CPI (% Change)

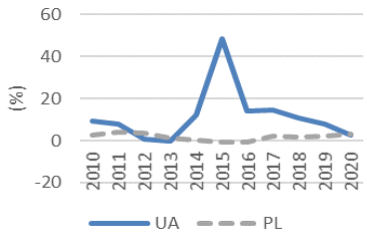
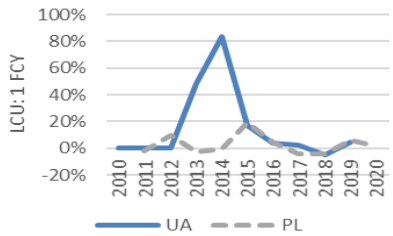


Figure 59: Annual Rate Depreciation (LCY:1USD) (% Change)

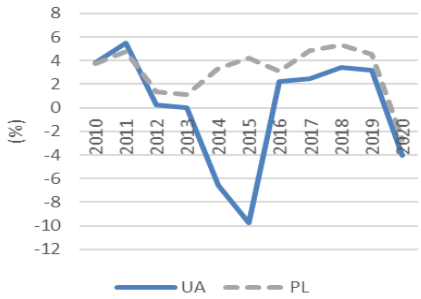


Source: WDI

Source: WDI

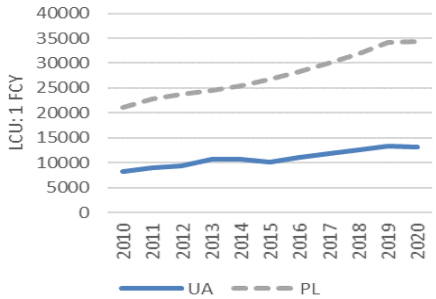
GDP growth fell to -10% in 2015 (**Figure 60**), with knock on effects for GDP per capita (**Figure 61**).

Figure 60: GDP Growth Rate (%)



Source: WDI

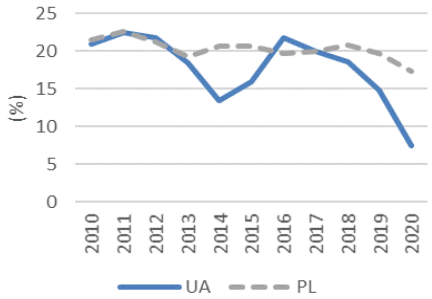
Figure 61: GDP Per Capita PPP



Source: WDI

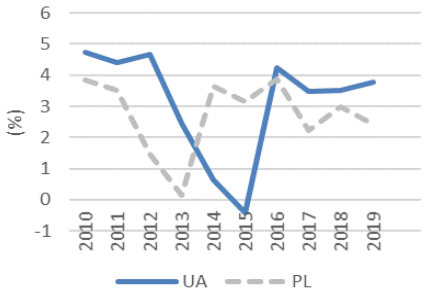
The rate of domestic investment has been steadily declining since 2016 (**Figure 62**). In comparison, FDI has rebounded since 2015, reaching about 4% of GDP pa (**Figure 63**).

Figure 62: Gross Capital Formation (% GDP)



Source: WDI

Figure 63: FDI (% GDP)

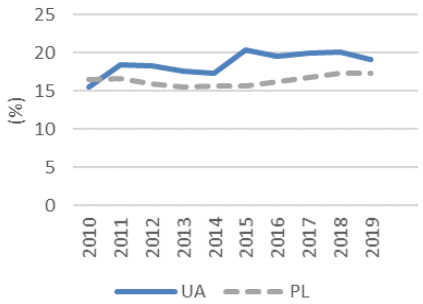


Source: WDI

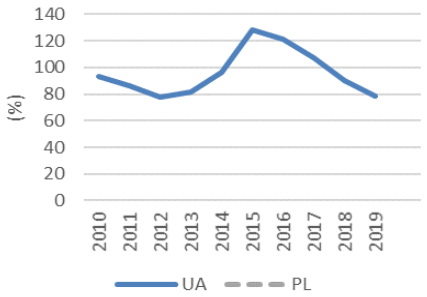
The tax rate is about 18% of GDP, which is similar to other COOs (**Figure 64**). External debt peaked at 120% of GDP in 2015, and started tracking down to more normal levels (data for Poland is not available) (**Figure 65**).

Figure 64: Tax (% GDP)

Figure 65: External Debt (%GNI)



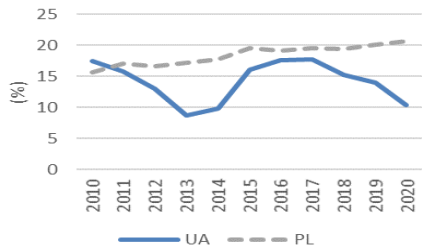
Source: WDI



Source: WDI

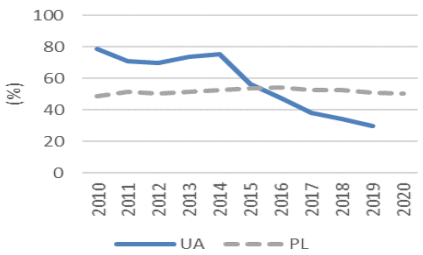
Both savings and availability of domestic credit to private firms are low by international standards (**Figures 66 and 67**).

Figure 66: Savings (% GDP)



Source: WDI

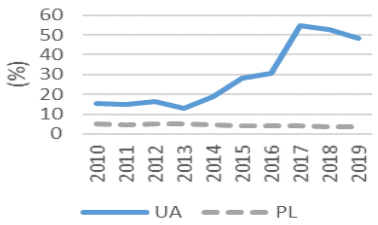
Figure 67: Domestic Credit – Private (% GDP)



Source: WDI

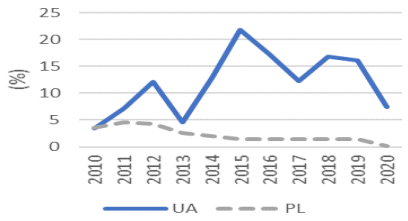
In line with the economic shocks starting in 2013 NPLs are very high (**Figure 68**), although interest rates are starting to revert to more normal levels (**Figure 69**).

Figure 68: Non Performing Loans (% GDP)



Source: WDI

Figure 69: Central Bank Policy Rate (%)



Source: IMF

4.2. Structure of the Public Sector

Ukraine is a unitary republic under a semi-presidential system with separate powers: legislative, executive, and judicial branches. Government expenditure is centralised, and SNGs have control over only about 30% of their resources. Subnational budget is composed of two parts: a general fund funded from taxes, that is

dedicated to current expenditures; and a special fund, composed of non-tax revenues and capital grants, earmarked to capital expenditure, debt repayment, and an Environmental fund.

More than half of SNG revenue in Ukraine comes from central government transfers, well above the OECD average (37.2% of SNG revenue in 2016) and EU28 (44.1%) averages. Local governments in rural areas are the most dependent on central government transfers (up to 75% of SNG revenue), whereas In Kyiv, tax revenue accounted for close to 50% of total revenue in 2015.

SNGs have the power to establish some user charges and fees, but within the strict limits of the complex regulatory system. Tariffs and fees represent 4.9% of SNG revenue in 2016, which remains well below the OECD average (14.9%). SNG property revenues are high by international standards: 5.3% vs 2.0% in the OECD in 2016. They come primarily from property privatisation, and the sale and lease of land, as well as dividends from municipal enterprises. SNGs can only access borrowing to fund investment projects with the authorisation of the central government. Most SNG loans come from the national treasury.

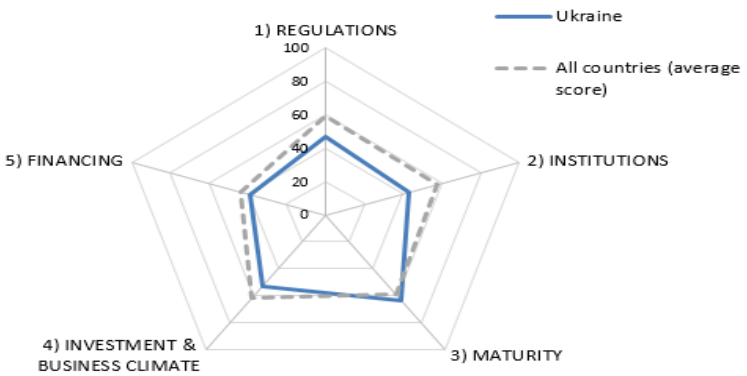
SNG investment accounted for a significant share of total public investment, well above the OECD average (56.9% in 2016). This high level is partly explained by a low level of total public investment (2.2% of GDP in 2016), despite huge investment needs in infrastructure due to a long period of underinvestment, particularly for transport and municipal utilities (water and heating). There is a lack of capacity in the management of public investment at both central and subnational levels.

4.3. Infrastructure and PPPs

The state owns most of Ukraine's infrastructure and national and local governments provide finance. In 1999 a concessions law was developed. A PPP law was introduced in 2010 following the 2008-9 financial crisis, and it was updated in 2015. A PPP department in the Ministry of Economic Development and Trade is responsible for project preparation and either the cabinet of ministers or the relevant regional government approves the projects.

EIU concluded the main challenges are the failure to create a standard regulatory environment via the PPP law and regional authorities lack access to PPP Units to develop projects. Local governments lack the ability to guarantee annual PPP payments under the annual budget cycle. The early termination and compensation provisions are not clear and are likely to be time consuming with uncertain outcomes (**Figure 70**).

Figure 70: EIU Infra-scope Ratings



Source: EIU

4.4. EBRD Country Strategies

The priorities in the 2011 Country Strategy were to provide support:

- Privatisation programme,
- Energy sector in areas such as Nuclear Safety, integrate network with the EU, and improve energy efficiency;
- Integration of transport network with the EU;
- Commercialisation of municipal utilities.

The Ukrainian Crisis negatively affected the programme in 2013. EBRD suspended sovereign operations, which were already under stress due to lack of institutional capacity. During 2015-2017 EBRD implemented a Crisis Response Package.

A new strategy for 2018-2023, set the following priorities:

- Enhance resilience of the financial system by strengthening the banking sector, and in parallel developing capital markets and other non-bank finance
- Promote rule of law, competition and level playing field in the private sector by supporting best practice companies
- Promote privatisation and commercialisation in the public sector to increase competitiveness and foster good governance
- Strengthen energy security through effective regulation, market liberalisation, diversified and increased production, and energy efficiency
- Improve integration by facilitating trade and investment, expanding infrastructure links, and supporting convergence with EU standards.

Key challenges identified in the strategies included political pressures, conflict with Russia, and high prevalence of SOEs were inhibiting economic development and deterring investment. There was a lack of implementation capacity and accountability for public sector projects, inconsistent procurement support, and bureaucratisation of the investment cycle. A weak banking sector and under-developed capital markets limited private sector access to finance. The assessment of ATQs indicated the country was in line with the region, apart from governance:

Figure 71: Ukraine Country Strategy, 2018-2023

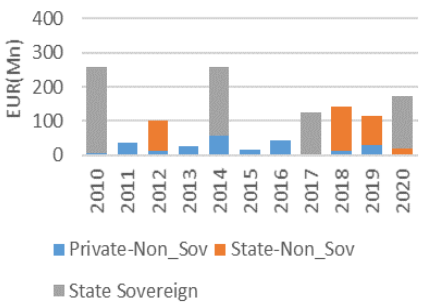
A results framework was included in the most recent strategy, which equated activities with outputs. Tracking indicators were based on number and volume metrics which had no linkage to outcomes.

4.5. EBRD Programmes

All of the infrastructure projects in Ukraine were financed with FCY debt. The transport private non-sovereign projects tended to be small (less than EUR50 million) and diverse (there were 12 projects in sub-sectors such as roads, ports and rail). State Non-sovereign projects were larger (ranging from EUR20-131 million), and a smaller number of projects (5), with rail being the most common sector. The state sovereign projects were less frequent and larger (EUR53 – 250 million), mainly being in projects such as the Pan-European Corridors, Ukraine Road Corridors and rail electrification (**Figure 72**). SI3P is working on a port PPP, but it has not yet reached financial close.

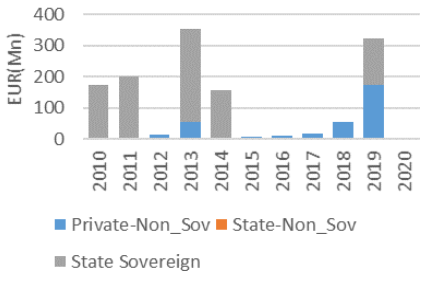
The energy projects followed a similar pattern to transport projects. Private non-sovereign projects ranged from EUR4-30 million, plus one large solar project (Syvash Wind Power Plant with a value of EUR75 million approved in 2019). The majority of the private non-sovereign projects provided finance under Ukraine Sustainable Energy Financing Facility (USEFF), and grant TC from Austrian government (**Figure 73**). The state sovereign projects were less frequent (5) and larger (EUR149 – 300 million) in sub-sectors such as transmission and nuclear and hydro generation.

Figure 72: Transport ABI (EUR Mn)



Source : EBRD Database

Figure 73: Energy ABI (EUR Mn)

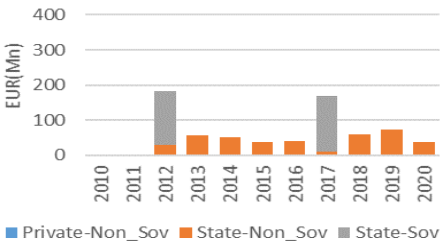


Source : EBRD Database

MEI projects continued the financing pattern in transport, with 33 state non-sovereign projects ranging in size from EUR3-20 million. Most of state non-sovereign projects were approved under the Ukraine Public Transport Framework (UPTF) and benefited from municipal-guaranteed loans, and co-financing from the Clean Technology Fund and the EU Neighbourhood Investment Platform (NIP). There were two state sovereign urban transport metro projects (**Figure 74**).

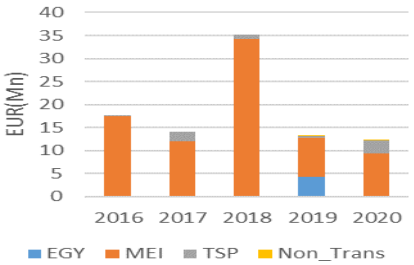
MEI received most of the TC funds **(Figure 75).**

Figure 74 : MEI ABI (EUR Mn)



Source : EBRD Database

Figure 75 : Infrastructure TC (EUR Mn)



Source : EBRD Database

4.6. Other MDB Programmes

4.6.1. European Investment Bank

EIB has worked with Ukraine since 2007, operating in line with the European Neighbourhood Policy (ENP), the Eastern Partnership (EaP) and other EU bilateral agreements. EIB operations focus on financing transport, small and medium-sized enterprises (SMEs), energy efficiency and municipal and social infrastructure. Since the start of activities in Ukraine, EIB has committed more than €1.9 billion to support small and medium companies and €3.6 billion to support the public sector. Since engaging in the country the portfolio allocation has been: 33% transport; 27% credit lines; 18% energy; and 22% other.

4.6.2. World Bank Group

WBG has prepared a CPF for the period 2017-2021. The CPF is aligned with the objectives of the country's development strategy as outlined in the Government Program and Action Plan adopted in April 2017, and WBG's SCD. The SCD identified three key challenges in achieving sustainable recovery and shared prosperity: macroeconomic instability, weak private sector productivity, and ineffective service delivery due to widespread corruption and state capture.

The objective of the WBG CPF in Ukraine during FY17-FY21 is to promote sustained and inclusive economic recovery after nearly a decade of stagnation and two years of economic crisis. The CPF focus areas are: (i) Better Governance, Anticorruption, and Citizen Engagement; (ii) Making Markets Work; (iii) Fiscal and Financial Sustainability; and (iv) Efficient, Effective, and Inclusive Service Delivery.

- Ukraine's governance challenges are among the most important impediments to improving growth prospects and unlocking the potential of the private sector. There is a need to continue reforms such as effective implementation of anticorruption laws and implementation of the new public financial

management reform strategy, and the competition policy framework. The first prong of the strategy involves providing targeted support for building core institutions and systems that strengthen transparency and accountability across the public sector. The second prong of the strategy involves advancing reforms to disempower vested interests.

- Making markets work and unlocking the potential of the private sector, will be pursued through institutional reform and key investments. Areas of assistance will be improving the quality of infrastructure services, particularly in energy and transport, institutional reform that will help crowd in private investment, and land reform.
- Fiscal and Financial Stability will be pursued through the use of DPLs and DPFs (budget support) to help address tax and pension reform, and strengthening financial sector through recapitalisation of banks and resolution of non-performing loans (NPLs), and provision of long term finance such as through IFC.
- WBG is working at both the national and sub-national level to improve service delivery. The main priorities under this category will be to increase the efficiency and quality of health services and increase the targeting of social assistance.

The current IBRD portfolio—eight investment operations worth about US$2.25 billion— faced major implementation challenges. Procurement bottlenecks, lack of capacity of project implementation units (PIUs), allegations of corruption, and other issues had slowed implementation and disbursements. The current committed portfolio of IFC was US$695 million. Projects in manufacturing, agribusiness and services accounted for 89% of IFC's outstanding portfolio, followed by infrastructure with 7%, financial markets with 3 percent, and the remainder in telecoms/technology (1%). MIGA had US$134.34 million of gross political risk guarantee exposure in a total of six operations of which three are in the manufacturing sector (US$43.8 million) and three in the financial sector (US$90.6 million). Due to uncertainty about progress on reform, it was difficult to forecast future financing volumes. Advisory services was expected to be an increasingly important component of the future programme.

The lessons learned section noted that World Bank Group activities had the biggest impact when they addressed policy and institutional issues. Ukraine's investment needs are large but the expected benefits are unlikely to materialize unless policy and institutional issues are addressed up front. The World Bank Group's Advisory Services and Analytics (ASA) remains among the most important products for achieving development results.

4.6.3. Global Infrastructure Facility

The Global Infrastructure Facility (GIF) in partnership with the World Bank and International Finance Corporation (IFC) is supporting the Ukraine's Ministry of Infrastructure (MIU) and the national road agency Ukravtodor to:

i) the develop a road asset management model under a program to rehabilitate, upgrade, and maintain Ukraine's core road network; and

ii) identify a pipeline of pilot projects at the pre-feasibility stage to be structured under the program.

Road infrastructure handles 37% of the country's international trade value. About, 90% of its road network is in poor condition and in need of current and capital repairs. Ukraine has dedicated $200 million per year

on average to road repair and maintenance in the last decade, but to fund the repairs of its core network of approximately 23,000 kilometres (km) the country would need an estimated $6.8 billion of investment over the next three to five years.

The program's business model is centred on the existing Road Fund and proposes an availability payment-based PPP to engage the private sector and facilitate quality road network upgrades and long-term maintenance through private investment. The program is expected to include performance-based availability (or maintenance) and safety performance payments to incentivize maintenance of the road and encourage the operator to meet service level agreements. In October 2020, the MIU and Ukravtodor presented Ukraine's "Road PPP Program: Partnering for Better Roads" across a three-phased program, supporting the economic development of Ukraine through high-quality and safe highways.

The program's concept originated from the recommendations of GIF's Project Readiness Assessment (PRA) of the L'viv-Krakovets Highway to adopt a network-wide approach with brownfield solutions to attract private investment for the upgrade and maintenance of the existing network. The PRA showed that construction costs of EUR250 million would require a subsidy of EUR330 million if the highway were procured as a greenfield toll-based PPP. This project structure would be unattractive to private investors due to high costs and low traffic levels. A program of brownfield updates would represent a more sustainable and bankable solution to deliver an adequate road network by maximizing economic benefits and minimizing costs to Ukraine's economy. GIF is working with the IFC and the World Bank to support MIU and Ukravtodor with the structuring of the first pilot transactions under the program and to ensure the long-term sustainability of the program.[23]