Tokyo Fiscal Forum 2018

IMF Support to Strengthening Infrastructure Governance: Public Investment Management Assessment (PIMA)

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Tokyo, June 4, 2018
Massive infrastructure investment needs across all economies to support sustainable and equitable growth

- Advanced economies to maintain growth
- Many emerging market and developing economies to address infrastructure bottlenecks
- Low income and developing countries to achieve Sustainable Development Goals (SDGs)
- Asian countries to address infrastructure bottlenecks and achieve SDGs
Background: Massive Investment Needs

Nearly $100 trillion needed by 2040 globally

$26 trillion by 2030 to resolve a serious infrastructure bottlenecks in Asia

$14.7 trillion – Power
$8.4 trillion – Transport
$2.3 trillion – Telecommunications
$0.8 trillion – Water and sanitation
Background: Public capital stocks have declined

... begun to recover in emerging and developing countries
but remains low advanced countries
not yet recovered in Asia

Source: IMF staff estimates
Background: Disparities in Infrastructure Access & Quality

Perceptions of Infrastructure Quality

Measures of Infrastructure Access

Notes:
- Left hand axis: roads as km per 1,000 persons; education infrastructure as secondary teachers per 1,000 persons; health infrastructure as hospital beds per 1,000 persons; and electricity production as kWh per 1,000 persons.
- Right hand axis: access to water is measured as percent of population.

Source: World Development Indicators (2017)
Background: Large Efficiency Losses in Public Investment

Public investment efficiency scores

Source: IMF staff estimates
Meeting Infrastructure Needs: Solutions?

Spend more?
- Revenue
- Borrowing
- PPPs
- Asset class

Spend better?
- Efficiency
IMF: Fiscal Governance Assessment tools

Fiscal Stress Test
- Fiscal solvency
- Government liquidity
- Financing burden

Fiscal Transparency
- Fiscal Reporting
- Fiscal forecasting & budgeting
- Fiscal risks analysis & management
- Resource Revenue Management

PPP Fiscal Risks Assessment Model
- Estimate PPP fiscal impact (deficit, debt, contingent liabilities)
- Aligned with international standards

Public Investment Management Assessment
- Planning
- Allocating
- Implementing

Balance Sheet Approach
- Long-term macro-fiscal projections
- Broader measures of fiscal performance (e.g., net worth)
Infrastructure Governance: IMF PIMA framework

**PLANNING**
1. Fiscal principles or rules
2. National & Sectoral Plans
3. Coordination between Entities
4. Project Appraisal
5. Alternative Infrastructure Provision

**IMPLEMENTATION**
11. Procurement
12. Availability of Funding
13. Portfolio Management & Oversight
14. Management of Project Implementation
15. Monitoring of Public Assets

**ALLOCATION**
6. Multi-year budgeting
7. Budget Comprehensiveness & Unity
8. Maintenance Funding
9. Budgeting for Investment
10. Project Selection

Note: Based on 2018 Updated PIMA framework
PIMA: Application of framework

Notes:
AFR: Africa
APD: Asia and Pacific
EUR: Europe
MCD: Middle Est and Central Asia
WHD: Western Hemisphere
PIMA findings:
Significant weaknesses in institutional design

Note: based on the 2015 PIMA Framework
PIMA findings: Countries are better in designing PIM institutions than in implementing them effectively.

Note: based on the 2015 PIMA Framework.
PIMA: Examples of benchmarking exercise

Public Investment by function

Public Capital Stock

Measures of Infrastructure Access

Public Investment Efficiency

Source: PIMA reports for Botswana, Kosovo, Mali, Ireland
PIMA: Summary Indicators and comparison with peers
**PIMA: Example of action plan**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Responsible Agency</th>
</tr>
</thead>
</table>
| 1. Implement and publish the national strategy and consolidate and cost sector strategies | - Finalize national strategy  
- Take stock of all sector strategies  
- Develop framework for costing of sector strategies | - Consolidate sector strategies and cost them  
- Extend the pipeline of projects and integrate with national strategy | - Continue consolidate sector strategies and cost them | MoF (Budget Department), MEI, OSP, BOs |
| 2. Increase transparency of budget documentation by including PPPs and POE investments and the fiscal risks related to them | - Include an annex in the 2017 budget for PPPs and related risks  
- Include an annex in the 2017 budget for public investments in POEs | - Include a statement of contingent liabilities related to PPPs and POEs in the 2016 financial statements  
- Develop IPSAS-based accounting and reporting standards for PPPs | - Apply IPSAS-based accounting and reporting standards for PPPs in 2017 financial statements | MoF (Budget Department, Treasury), PPP Unit, POE Unit in MED |
| 3. Include on-going project obligations versus fiscal space for new projects, and project total cost and duration in the budget documentation | - Design of revised format for Table 3.2 and 4.2 and include in 2017 budget documentation  
- Enforce reporting of multi-annual commitments as required in the LPFMA  
- Disclose multi-annual commitments in 2017 budget  
- Present an analysis of fiscal space for new projects in 2017 budget | - Disclose multi-annual commitments in an annex of the financial statements 2016  
- Monitor multi-annual commitments through KFMIS | | MoF (Budget Department, Treasury) BOs |

**Source:** PIMA report for Kosovo
PIMA: facilitates coordination and follow-up
A country example

PIMA recommendations on reform priorities:

1. Multiyear budgeting
2. Project appraisal
3. Project selection
4. Protection of investment
5. Availability of funding
6. Transparency of execution
7. Bring pre-financing back to normal budget procedures

IMF FAD including JSA funded TA
IMF regional TA center
World Bank
EU
Summary: PIMA & Better Infrastructure Governance

- **Comprehensive**
  - Macro-fiscal framework
  - Investment planning
  - Medium-term budgeting
  - Project management

- **Practical**
  - Focus on key reforms with prioritized recommendations
  - Tailored to country context
  - Sequenced prioritized action plan

- **Quantified**
  - Summary charts
  - Peer comparison
  - Distinguishes between policy design and implementation

- **Coordination-oriented**
  - Catalyst for donor/partner support
  - Improve coordination among development partners to achieve results
New PFRAM Diagnostic Tool Now Available (April 2016)
FAD and CARTAC Host Regional Workshop on Managing the Fiscal Impact of PPPs (April 2016)
Closing Efficiency Gaps Means Big Gains for Public Investment (June 2015)
Aiming High (June 2015)
The Time is Right for an Infrastructure Push (Sept 2014)
More Efficient Public Investment a Mideast, Central Asia Priority (Nov 2014)

Why Public Investment Matters

Public investment supports the delivery of key public services through the construction of schools, hospitals, public housing, and other social infrastructure. Public investment also connects citizens and firms to economic opportunities through the provision of economic infrastructure hubs such as airport and seaports and networks which support telecommunications, transport, and electricity production and transmission.

Through the provision of both social and economic infrastructure, public investment and can serve as an important catalyst for economic growth. A significant body of theoretical and empirical research underscores the positive relationship between investment in high-quality public infrastructure and economy-wide productivity. In the October 2014 World Economic Outlook, the IMF found that, for a sample of advanced economies, a 1 percentage point of GDP increase in investment spending would increase the level of output by about 0.4 percent in the same year and by 1.5 percent after four years.
Thank you!
PIMA Methodology

- 3 phases of public investment management cycle, 5 institutions for each phase
- 3 dimensions for each institution, 45 questions overall

- The PIMA looks both at Design and Effectiveness

- Score is assessed at dimension level:
  - 0 = not met (red)
  - 5 = partly met (yellow)
  - 10 = fully met (green)

- Score of each institution is calculated as the mean of scores of its three dimensions
Example of PIMA questionnaire

A. Planning Sustainable Levels of Public Investment

| 1. Fiscal targets and rules: Does the government have fiscal institutions to support fiscal sustainability and to facilitate medium-term planning for public investment? |
|---|---|---|---|
| 1.a. Is there a target or limit for government to ensure debt sustainability? | There is no target or limit to ensure debt sustainability. | There is at least one target or limit to ensure central government debt sustainability. | There is at least one target or limit to ensure general government debt sustainability. |
| 1.b. Is fiscal policy guided by one or more permanent fiscal rules? | There are no permanent fiscal rules. | There is at least one permanent fiscal rule applicable to central government. | There is at least one permanent fiscal rule applicable to central government, and at least one comparable rule applicable to a major additional component of general government, such as subnational government (SNG). |
| 1.c. Is there a medium-term fiscal framework (MTFF) to align budget preparation with fiscal policy? | There is no MTFF prepared prior to budget preparation. | There is an MTFF prepared prior to budget preparation but it is limited to fiscal aggregates, such as expenditure, revenue, the deficit, or total borrowing. | There is an MTFF prepared prior to budget preparation, which includes fiscal aggregates and allows distinctions between recurrent and capital spending, and ongoing and new projects. |
## Example of PIMA summary assessment

<table>
<thead>
<tr>
<th>Phase/Institution</th>
<th>Institutional Design</th>
<th>Effectiveness</th>
<th>Reform Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Planning</strong></td>
<td><strong>High</strong>: There are permanent legal limits for general government fiscal aggregates.</td>
<td><strong>Medium</strong>: Fiscal policy is insufficiently predictable. The expenditure ceiling has been breached 3 years out of 4.</td>
<td>Medium</td>
</tr>
<tr>
<td>1  Fiscal principles or rules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2  National and sectoral plans</td>
<td><strong>Low</strong>: The only national and sectoral strategies are not comprehensive and only cover new initiatives.</td>
<td><strong>Low</strong>: The strategies’ definitions of public investment objectives are not consistent with efficient investment.</td>
<td>High</td>
</tr>
<tr>
<td>3  Coordination between entities</td>
<td><strong>Medium</strong>: Capital transfers from CG to SNGs are on a project-by-project basis, but with a high degree of co-ordination.</td>
<td><strong>Medium</strong>: Significant reporting implicit contingent liabilities of PCs (20.6 percent GDP) and PPAs (33.7 percent)</td>
<td>Low</td>
</tr>
<tr>
<td>4  Project appraisal</td>
<td><strong>Low</strong>: Projects not funded by donors are not subject to a standard appraisal process or methodology.</td>
<td><strong>Low</strong>: The new PIM methodology has not yet been implemented.</td>
<td>High</td>
</tr>
<tr>
<td>5  Alternative infrastructure financing</td>
<td><strong>Medium</strong>: There is limited or no competition in most infrastructure markets. A PPP Law has been approved</td>
<td><strong>Medium</strong>: The PPP regulatory framework is not yet complete.</td>
<td>High</td>
</tr>
<tr>
<td>6  Multi-year budgeting</td>
<td><strong>Medium</strong>: Multi-year capital ceilings are not identified separately, and total construction costs are not published.</td>
<td><strong>Low</strong>: Total construction costs beyond the BDD framework for major projects are not actively provided or updated in the system.</td>
<td>Medium</td>
</tr>
<tr>
<td>7  Budget comprehensiveness and unity</td>
<td><strong>Medium</strong>: Investments undertaken through extra-budgetary entities without disclosure or legislative authorization.</td>
<td><strong>Medium</strong>: Investments outside of the budget process are not insignificant.</td>
<td>Low</td>
</tr>
<tr>
<td>8  Budgeting for investment</td>
<td><strong>Medium</strong>: There are no mechanisms to give priority to on-going capital projects in the budget process</td>
<td><strong>Medium</strong>: informally, ministries inform MOF of on-going capital project expenditures for future budget years</td>
<td>Medium</td>
</tr>
<tr>
<td>9  Maintenance funding</td>
<td><strong>Low</strong>: No standard methodology for maintenance requirements or to track maintenance funding.</td>
<td><strong>Medium</strong>: Maintenance in the roads sector has a methodology, which has led to increased maintenance budgets</td>
<td>High</td>
</tr>
<tr>
<td>10 Project selection</td>
<td><strong>Low</strong>: No standard project selection procedures and there is no project pipeline in place</td>
<td><strong>Low</strong>: there is no evidence that the new PIM selection procedures are getting ready to be implemented soon.</td>
<td>High</td>
</tr>
<tr>
<td><strong>B. Allocation</strong></td>
<td><strong>High</strong>: procurement system is open and transparent. E-procurement system enables monitoring and tracking of complaints.</td>
<td><strong>Medium</strong>: Complaint review board not independent and analytical reports can be improved.</td>
<td>Medium</td>
</tr>
<tr>
<td>11 Procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Availability of funding</td>
<td><strong>High</strong>: Flexible commitment rules and good cash management for domestic and donor funds</td>
<td><strong>High</strong>: No case in recent years of payments being delayed due to lack of funds</td>
<td>Low</td>
</tr>
<tr>
<td>13 Portfolio management and oversight</td>
<td><strong>Medium</strong>: Physical and financial monitoring not performed systematically; no ex post reviews; flexible re-allocation.</td>
<td><strong>Medium</strong>: Project reallocations of all types (incl. econ class) were 43 percent of MRDI’s capital budget in 2016</td>
<td>High</td>
</tr>
<tr>
<td>14 Project implementation</td>
<td><strong>Low</strong>: No implementation plans prepared; no guidance on project adjustments; ex-post audits irregular.</td>
<td><strong>Low</strong>: No individual project audits were completed by SAO during 2015-2017</td>
<td>High</td>
</tr>
<tr>
<td>15 Management of public assets</td>
<td><strong>Medium</strong>: Assets registered but without revaluation; non-financial assets and depreciation in financial statements.</td>
<td><strong>Medium</strong>: SAO verifies ministry asset records on sample basis</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>C. Implementation</strong></td>
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