Public Investment Management:

Investing to Invest: Promoting Public Investment Efficiency

Jay-Hyung Kim,
World Bank, PRMPS
Rio de Janeiro, Brazil
May 6-7, 2013

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1. Motivation: Why Public Investment Management (PIM) Matters?

- **A broader belief:** Resources allocated to public investment translate into an equivalent value of public capital stock, which, by lowering the cost of production or distribution, benefits the private sector and affects the overall growth process. This effect is typically measured by the rate of economic or social return from public investment.
- **In practice:** This rate of return will depend very much on the effectiveness of the management of the public investments, both in the budgeting and execution of the investment projects and in the subsequent operation and maintenance of the public asset created by public investment.
- **The 2007–12 global economic slowdown brought the spotlight on PIM policy as an instrument to revive economic activity: all countries need to continue efforts for better PIM to get the highest value for money and the greatest growth impact.**
  - Fiscal stimulus plans and post-crisis environment: reliance on public investment
  - Enhance value for money by creation and preservation of economically and socially productive fixed capital assets

(An Econometric Estimation)

$$Y = A \cdot F(K, L)$$

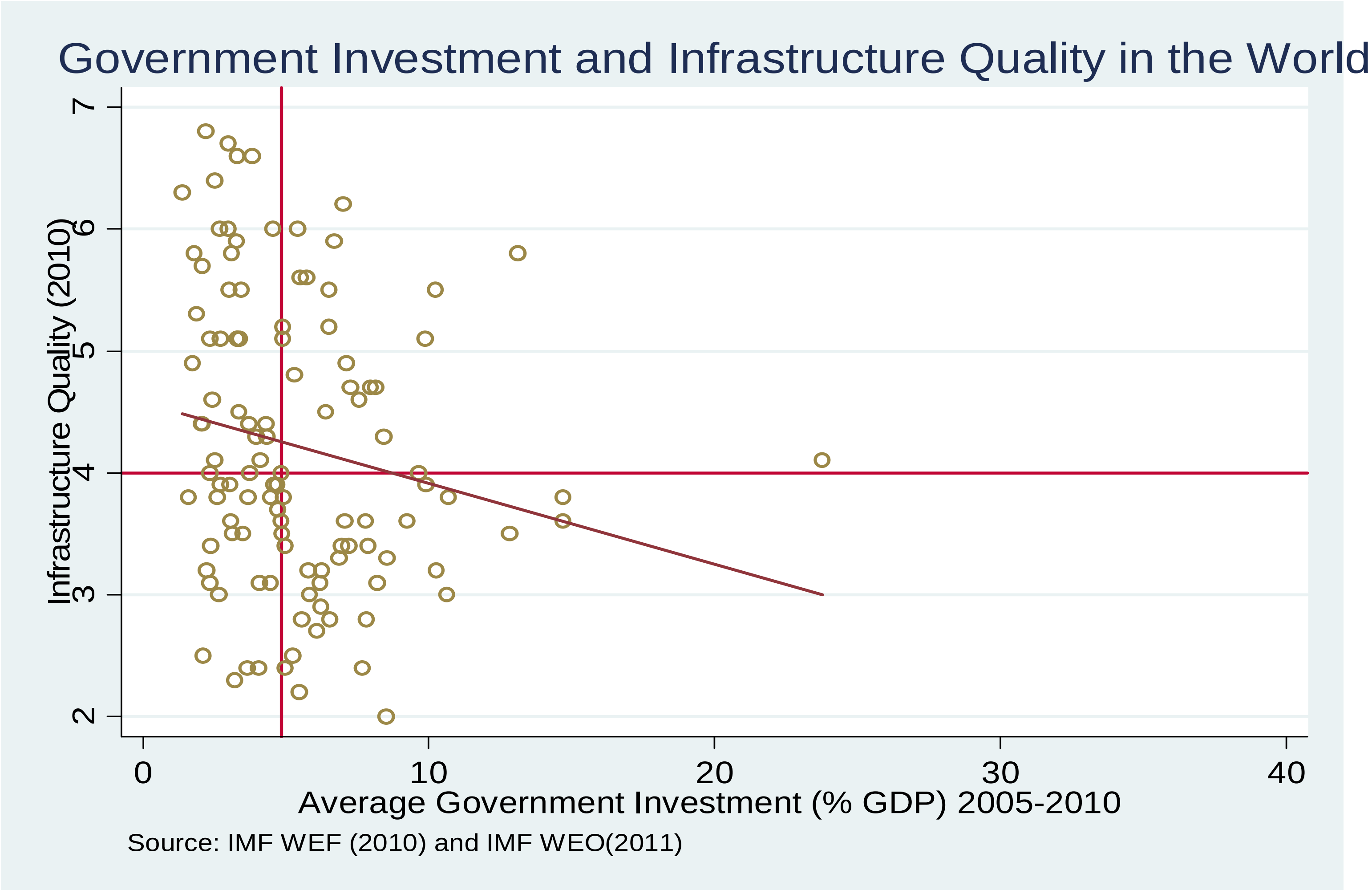
where K : stock of private capital
L : labor force
A : an index representing total factor productivity

$$Y = A^{*} \cdot F(K, L, G)$$

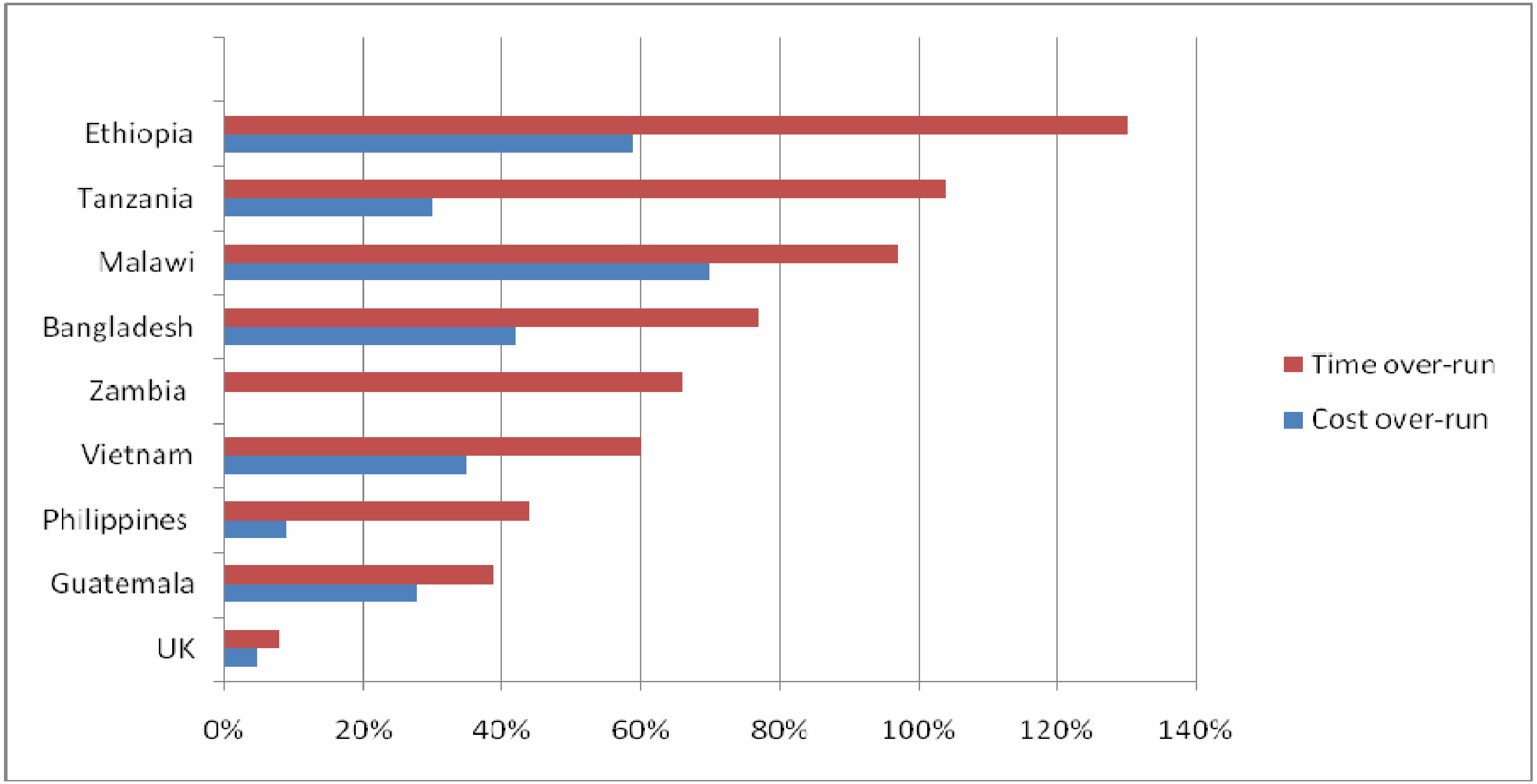
where A* : total factor productivity purged of the influence of the government capital stock.
G : government capital stock

$$lnY = lnA^{*} + a \cdot lnK + b \cdot lnL + c \cdot lnG$$

(Effectiveness Problem: Diminishing Returns?)



(Cost and time overruns can be significant)



Source: CoST (2011), IMED for Bangladesh

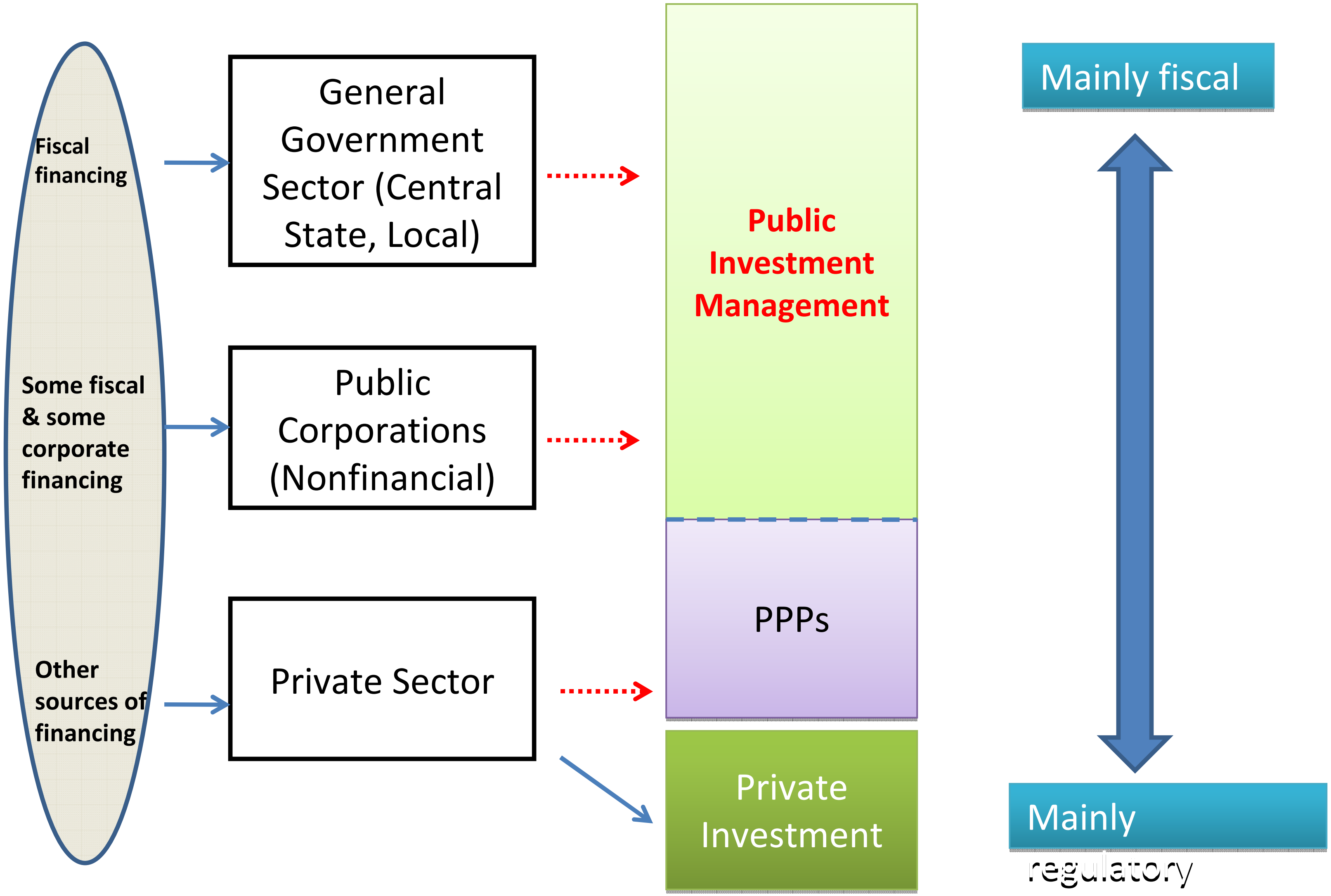
2. Challenges in PIM

- For better PIM, challenges to ensure:
  - An investment choice is justified as a welfare-improving public policy;
  - The investment is undertaken through an allocation of risk that is more likely to ensure efficient and effective implementation of the project;
  - There is efficient and sustainable operation of the asset created by public investment; and
  - There is a process of learning to improve future project selection, implementation, and operation.

(PIM Diagnosis is so tricky)

- Lumpy investments: transparency?
- Multi-year nature: ownership?
- Multi-sector: technical capacities?
- Cross-cutting nature: champions?
- Localized and visible benefits: politicization?
- Public and private sectors: regulatory capacity?

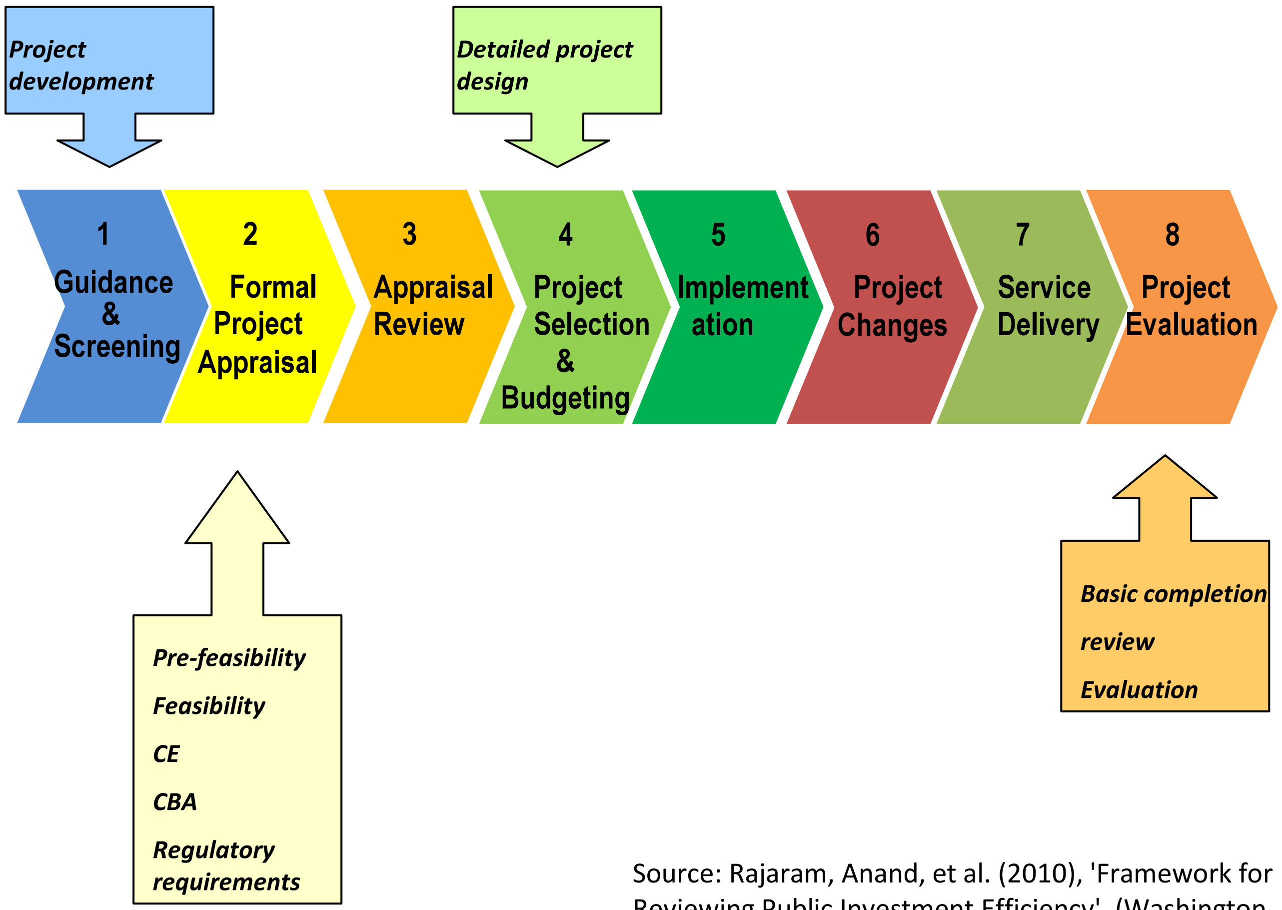
(A closer look at the complex agenda)



(Rationale for going forward)

- **Country starting points are very different**
  - Public investment ranging from an average of 1%-36% GDP (2005-2010)
  - Natural resources
  - Aid-dependent settings
  - Advanced economies
- **A complex efficiency problem**, therefore:
- Public investments can **justify fiscal space, but only if**:
  - *Good decisions on investment choices are made*
  - *Assets are efficiently created, operated and maintained*

3. Eight "Must-Haves" for PIM: A Diagnostic Framework



Source: Rajaram, Anand, et al. (2010), 'Framework for Reviewing Public Investment Efficiency', (Washington, DC: World Bank Policy Working Paper, No. 5397 (August)), 17.

(Eight "Must-Haves" for PIM)

- ***Step 1: Strategic Guidance and Preliminary Screening:*** National and/or sector strategy documents are specific enough, and have sufficient coherence and authority to actually guide public investment, and are used systematically to screen new projects (with at least some projects dropped at the preliminary screening stage). Sector strategies are fully costed, and are closely integrated and consistent with medium term budgets.
- ***Step 2: Project Appraisal:*** Project development follows a standard and well-defined set of procedures, and projects are appraised using the full range of techniques as appropriate. There are comprehensive central guidelines on project appraisal, including specific detailed guidance on the appraisal of PPPs.
- ***Step 3: Independent Appraisal Review:*** The risk of line ministries "cooking the numbers" to ensure that a project passes appraisal is limited by an independent review of the project. This is a key feature of all four of these countries. In Korea, upon request from the Ministry of Strategy and Finance, the Public and Private Infrastructure Investment Management Center (PIMAC), a semiautonomous agency, undertakes prefeasibility studies of large projects independent of the sponsoring ministry.
- ***Step 4: Project Selection and Budgeting:*** In general, only projects that have been subject to thorough appraisal, and have been independently reviewed, are selected for funding in the budget. Multi-year budget authority supports effective project implementation.

(Eight "Must-Haves" for PIM)

- ***Step 5: Project Implementation:*** There is a strong focus on managing the total project costs over the life of each project. Clear roles and responsibilities are in place for project implementation, with regular reporting on financial and non-financial progress and close monitoring by the CFA. Sound procurement systems are in place and are consistently implemented, with advanced techniques for allocating risks between government and contractor
- ***Step 6: Project Adjustment:*** A distinctive feature of these advanced PIM systems is that specific mechanisms are in place to trigger a review of a project's continued justification if there are material changes to project costs, schedule, or expected benefits.
- ***Step 7: Facility Operation and Maintenance:*** Comprehensive and reliable asset registers are maintained and are subject to external audit. In the UK, full accrual balance sheets are in place across the central government, and the Gateway process focuses specifically on readiness for service (Gateway 4). In Chile, there is systematic recording and checking of completed capital assets, and a register records the name of the responsible official for each asset.
- ***Step 8: Basic Completion Review and Evaluation:*** All advanced countries put significant effort into ex post review. Investment projects are subject to audit by the supreme audit institution, including value-for-money audits.

(PIM-PEFA Indicator Drill-down tool)

Credibility of the Budget	PIM -1	Aggregate capital expenditure out-turn compared to original budget
	PIM -2	Composition of capital expenditure out-turn compared to original budget
	PIM -3	Aggregate revenue out-turn compared to original budget
	PIM -4	Stock and monitoring of capital expenditure payment arrears
Comprehensiveness and Transparency	PIM -5	Classification of the budget
	PIM -6	Comprehensiveness of information included in budget documentation
	PIM -7	Extent of unreported capital spending
	PIM -8	PIM-related inter-governmental fiscal relations
	PIM -9	Management of fiscal risks from capital spending outside central government
	PIM -10	Public access to key information on capital spending
Policy-Based Budgeting	PIM -11	Investment guidance, project development, and preliminary screening
	PIM -12	Formal project appraisal
	PIM -13	Independent review of appraisal
	PIM -14	Orderliness and participation in the annual budget process
	PIM -15	Multi-year perspective
	PIM -16	Project selection and budgeting
Predictability and Control in Budget Execution	PIM -17	Project implementation
	PIM -18	Predictability in the availability of funds
	PIM -19	Procurement
	PIM -20	Effectiveness of internal controls and audit for capital spending
	PIM -21	Project adjustment
	PIM -22	Facility operation
Accounting, Recording, and Reporting	PIM -23	Basic completion review and evaluation
	PIM -24	Quality and timeliness of in-year budget reports
	PIM -25	Quality and timeliness of annual financial statements
External scrutiny and audit	PIM -26	Scope, nature and follow-up of external audit
	PIM -27	Legislative scrutiny of capital spending in the annual budget
	PIM-28	Legislative scrutiny of external audit reports
Donor practice	PIM D-1	Financial information provided by donors
	PIM D-2	Proportion of aid that is managed by use of national procedures

(Country Cases Facing Various Challenges in Eight "Must-Haves" of PIM) (1=green, 5=red)

Institutional Features	Chile	Ireland	Korea	Brazil	Belarus	China	Vietnam	Nigeria
Investment guidance & preliminary screening								
Formal project appraisal								
Independent review of appraisal								
Project selection and budgeting								
Implementation								
Adjustment for changes in project circumstances								
Facility operation								
Evaluation								

4. Approaches to PIM Reform:
(In Advanced PIM systems)

- "Center of excellence"
- Strengthening appraisal
  - Establishing clear expectations of new project proposals
  - Building capacity across government in the techniques of project appraisal
  - Independent reviews
- Demand-side strengthening
- Transparency

4. Approaches to PIM Reform: (In Developing Countries)

- Strengthening project planning
  - Strategic guidance
  - Medium-term orientation
  - Project preparation
  - Project appraisal (cost-benefit analysis, other appraisal analyses)
- Procurement reform
- Internal and external audit

4. Approaches to PIM Reform:
(In Aid-dependent Countries)

- Strengthening project implementation
- Centralized capacity for procurement reform
- “Contracting out” of capacity
- Rationalizing and reducing the number of public investment units
- Improving quality of national strategic plans

4. Approaches to PIM reform: Trade-offs and Sequence?

	Well executed	Poorly executed
Good projects	A	C
Poor projects	B	D

5. Lessons Learned

- Ownership of assessment is important.
  - Often, but not always MoF at the center of process
  - Develops the framework for investment decision and has oversight control of public investment
- Clarity of roles and responsibilities is crucial for effective PIM.
  - Coordination across sectors and levels of government
- The role of central guidelines are a particularly critical aspect of a well functioning PIM.
- Monitoring is important for early remedial action.
  - Financial Management Information System (FMIS)
  - Public Transparency & Accountability

5. Lessons Learned

- PIM reforms are incentive compatible.
  - Based on a sound understanding of and tailored to fit individual country trajectories, circumstances and practices
  - Technically feasible, relying on good enough practice
  - Carefully designed and sequenced
- Well functioning PEM and budgeting system, SOE governance and debt management system is also important.

(A PIM Assessment: An Example)

A PIM assessment of a country would comprise:

1. An institutional mapping
   a) Trends in public investment spending
   b) Who are the key stakeholders?
   c) What are the different PIM modalities?
   d) What are the rules and procedures for PIM?
2. A gap analysis against the PIM performance indicators
3. Quantitative indicators of PIM system performance
4. Discussion of key cross-cutting issues that impact on PIM system functioning
5. Identify key binding constraints on the performance of the PIM system at the margin
6. Identify priority areas for reform, drawing on both the technical PIM system analysis and the political economy and wider PFM system indicators. This should be followed by a discussion of key operational entry points for engagement.

6. The Bank's "Investing to Invest" Agenda

Analytics and Diagnostics	Tools	Policy Dialogue	Operational Assistance
Diagnostic Framework Framework for assessing PIM "should-have" features **Global Synthesis** Thematic analysis and country cases	**PIMI** Cross-country PIM index **PIM Drill-down** Country-specific indicator assessment **PIM for PPP** A Unified Framework	**Identifying needs, validation, peer to peer learning** **Conferences** Seoul, Hanoi, Brazil, Washington D.C.	**Diagnostic operations** **Technical assistance operations**

Thank You