Understanding Fiscal Costs and Fiscal Risks from PPPs

STRENGTHENING GOVERNANCE OF PUBLIC INFRASTRUCTURE

NOVEMBER 12-15, 2019

Isabel Rial
Fiscal Affairs Department

Outline

01 **What are PPPs?**
Definition, main features

02 **Why we do PPPs?**
Good and bad reasons governments do PPPs

03 **Why we worry about PPPs?**
Fiscal implications of PPPs

04 **How can we manage fiscal implications of PPPs?**

05 **PFRAM 2.0**
Estimating and reporting fiscal costs and risks of PPPs in gov. accounts

Worldwide rising infrastructure needs

Fiscal policy options

More traditional public investment	Increase efficiency of public investment	More reliance on private sector participation
• Fiscal sustainability concerns • Constrains by fiscal rules	• Through better public investment management (PIM) framework • Requires long maturing period	• Public-Private Partnerships (PPPs) • “Perception” of fiscal space

What are PPPs?

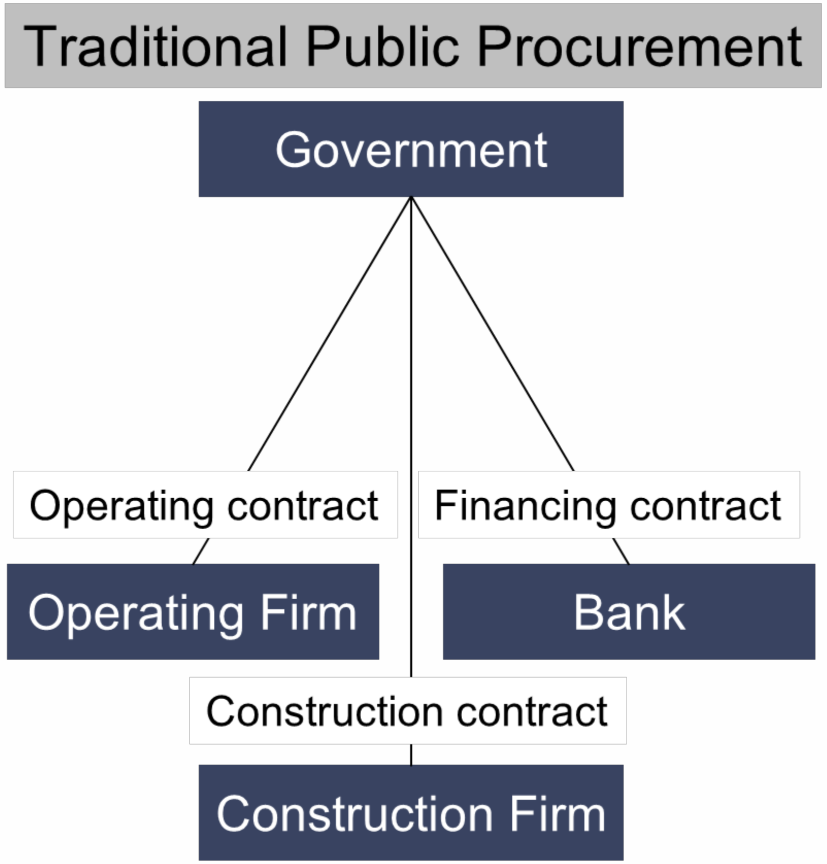
PPPs are long-term contracts where the private sector supplies infrastructure assets and services that traditionally have been provided by the government

Main features of PPP contracts

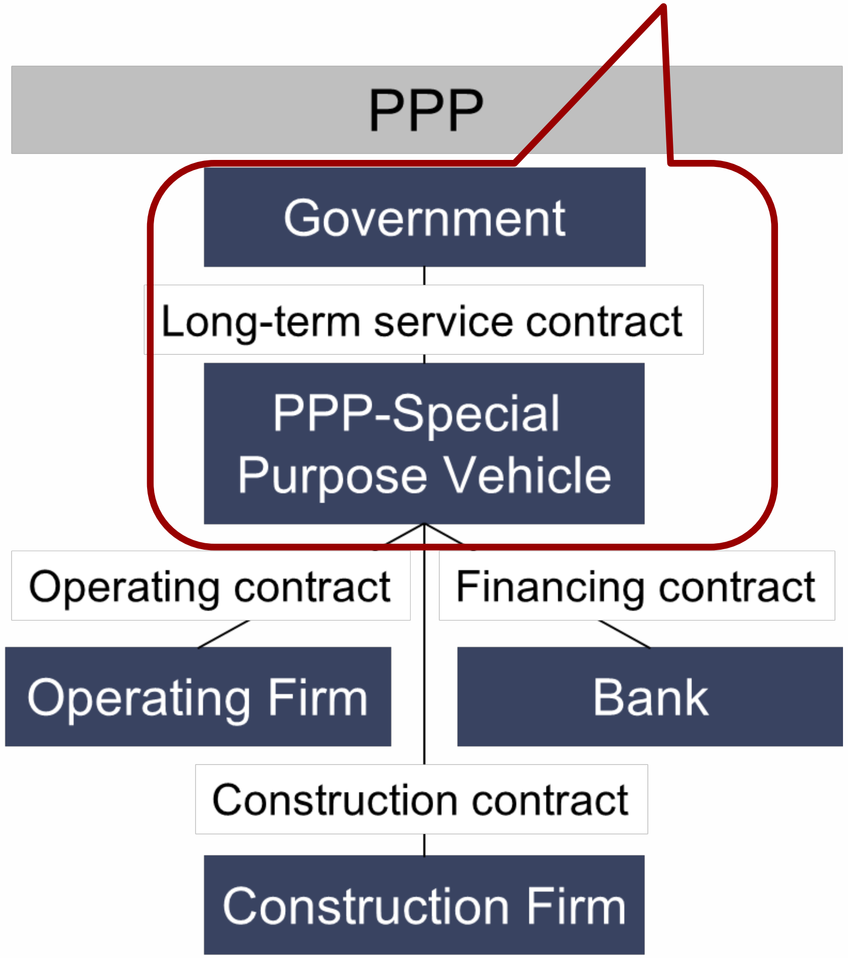
- **Long term contracts** (25, 30, or more years, are common)
- Provision of public **infrastructure assets and services**
- **Private execution** and **financing** (private capital-at-risk)
- **Partial risk transfer** to private sector
- **Performance-based contracts** link payments to quantity/quality of services

PPPs vs. traditional public procurement

Multiple contracts, different lengths



One long-term contract



Why we do PPPs?

Potential benefits from PPPs

The private sector can offer better value for money—same quality of services at lower costs or higher quality at same cost—because:

- its drive, motivation, and creativity
- the combination of creating assets and delivering services
- efficiency gain mostly linked to internalization of maintenance strategy
- higher quality makes it easier to introduce user fees

PPPs cannot solve all issues in public infrastructure, but under the right circumstances may be effective in:

- containing cost overruns and delays
- improving project design and quality of service
- guaranteeing proper and timely maintenance

Why we do PPPs?

Potential benefits from PPPs

Governments can abstract from detailed management, and focus on outputs and results

- Yet, performance-based contract require the government to have the capacity to check that outputs and results are in line with contracts over the whole life-cycle of the project (not only during construction)
- Significant interface risks can happen when there is a public entity operating a privately managed facility

PPPs can help government to smooth the lumpy nature of financing infrastructure projects

- Yet, need to distinguish between **"financing"** and **"funding"** of PPP projects
- And this can come at a cost…

Distinguishing Funding vs. Financing of PPPs

How the private finance the construction and operation of the asset?

Financing PPPs

It is expected that the private partner brings in the financing of the project

3 main options for the private to get financing:

- **Debt**
- **Equity**
- **Government support**
  - Guarantees
  - Subsidies
  - Equity injections
  - Tax amnesties
  - Others

Who ultimately pays for the project?

Funding PPPs

The private partner never funds the project (at least, willingly…)

3 possibilities of funding:

- **Government-funded PPPs**
  - Government pays during operation (fixed or variable)
  - Government financial liability and fixed asset
- **User-funded PPPs**
  - Users of services pay fees (fixed or variable)
  - Government liability (non-financial) and fixed asset
  - Fee-adjustment mechanisms
- **Combination**

Why we do PPPs?

Potential drawbacks from PPPs

PPPs tend to be more expensive than traditional procurement

- Financial cost of private capital can be significantly higher than the cost of government debt
- Administrative costs are much higher in PPPs (e.g., procurement costs, fees, etc.)

PPPs require a long-term commitment of contracting authorities to manage fiscal costs and risks arising from the contract

- Contracting authorities should have the capacity to manage the contract, including risks

Why we do PPPs?

Potential drawbacks from PPPs

PPPs contracts allow for reducing explicitly the project's fiscal cost by increasing its fiscal risks

- As long-term contracts, PPPs may be seen as a mechanism for exchanging fiscal "costs" for fiscal "risks", or vice-versa
- Governments may transfer a significant volume of risks to private operators, paying the corresponding risk premium…
- …or pay a lower direct cost, hiding risks in the contract

Can PPPs create fiscal space?

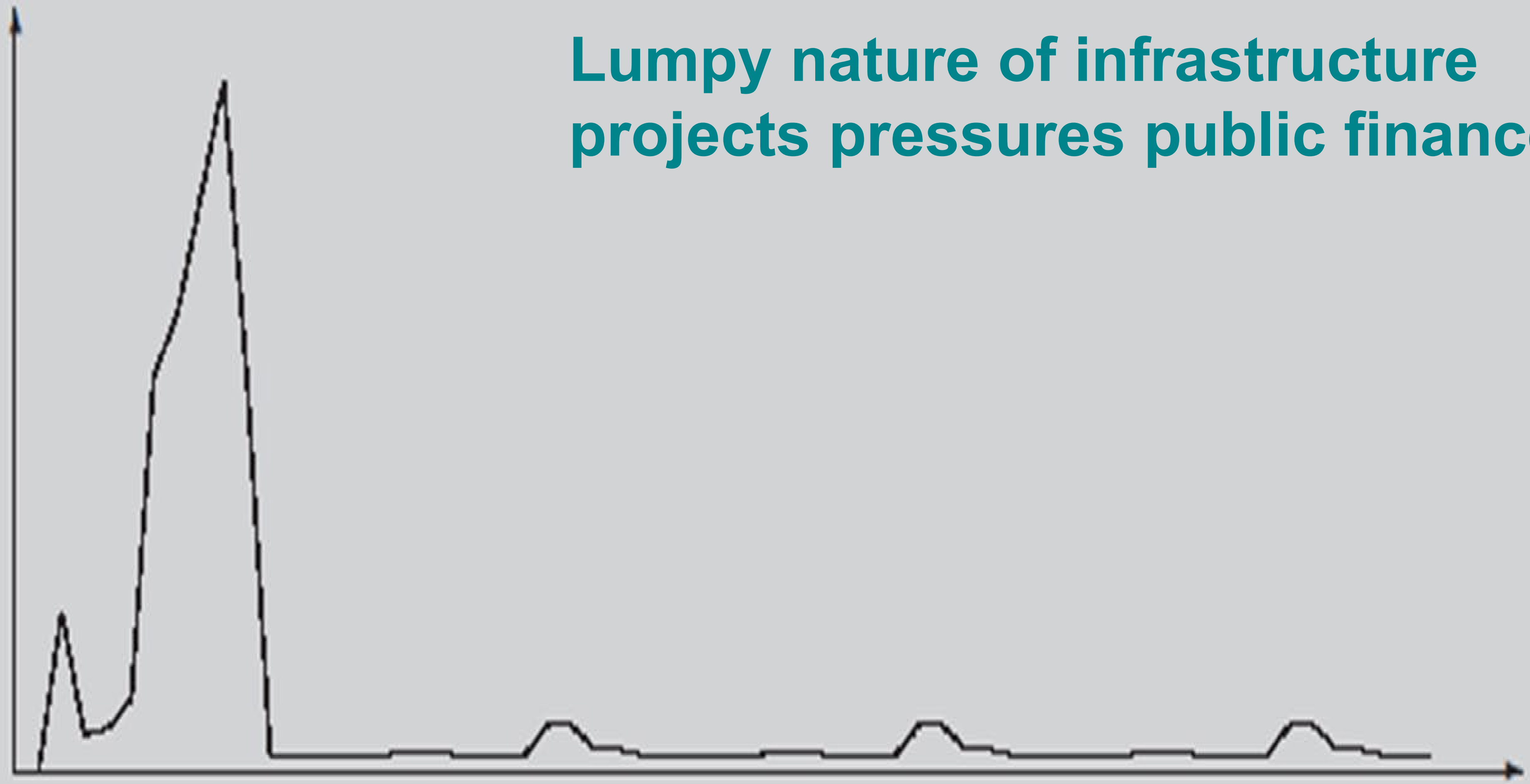
PPPs do not create fiscal space per se…

…Only "good" PPP projects "may" create space "if" efficiency gains are achieved and larger than high financial and transaction costs

The PPP "bias"

- **Perception** of **"infrastructure for free"** due to:
  - **Lack of integration of PPPs in budget process** (off-budget), medium-term fiscal framework and debt sustainability analysis
  - Focus on PPP **fiscal impact on cash basis**

Whole-life costing of an infrastructure project

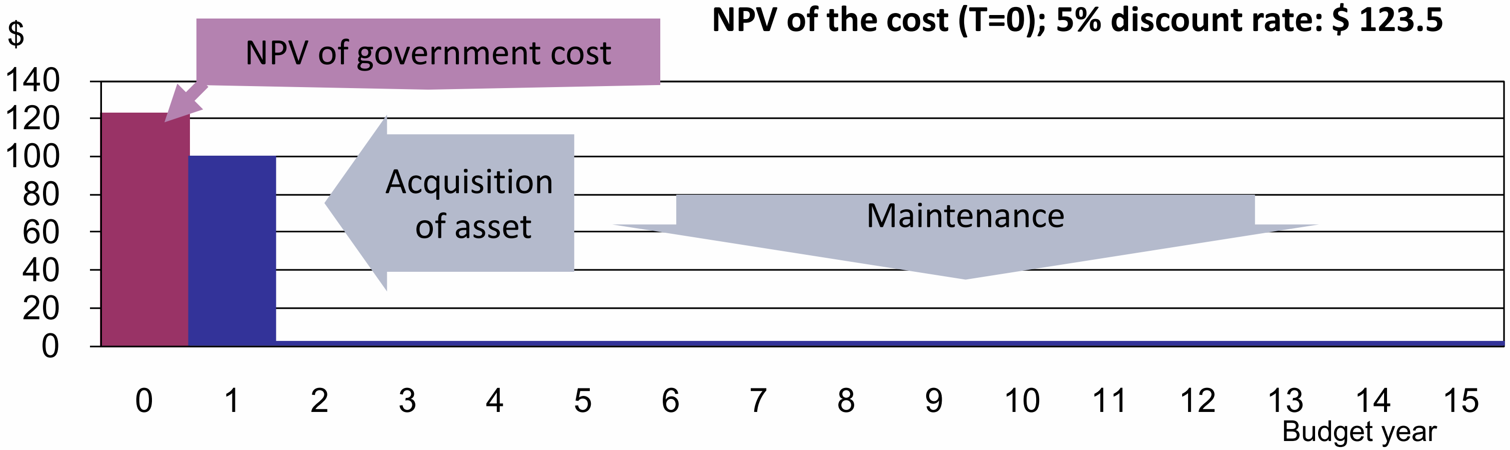


Lumpy nature of infrastructure projects pressures public finances

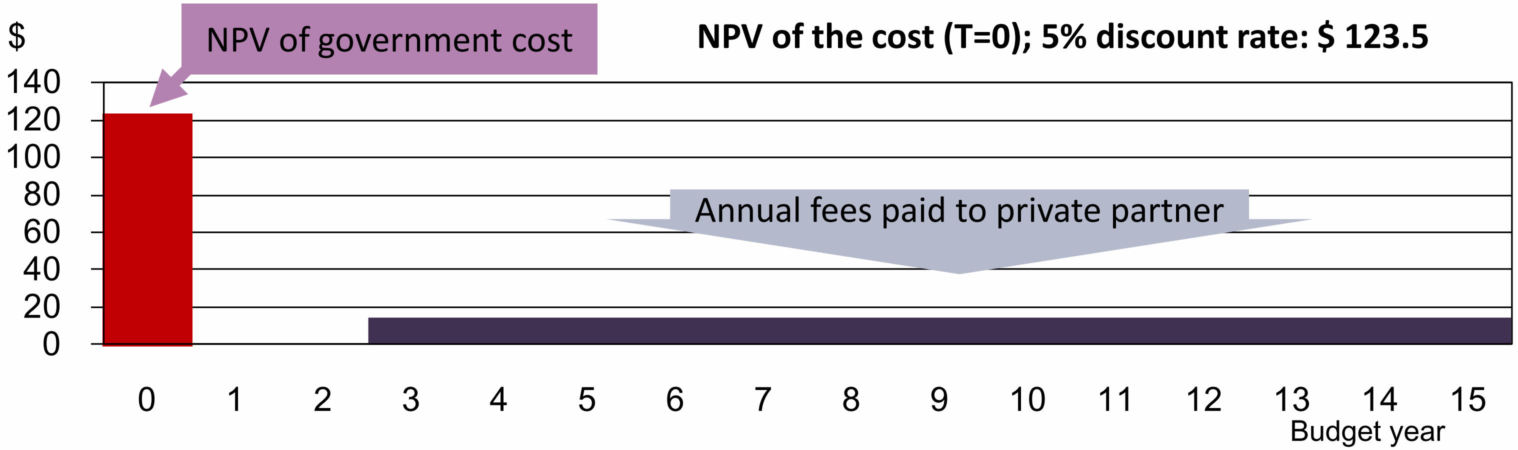
Perception of “infrastructure for free”

Cash flow vs. Net Present Value (NPV)

Traditional procurement



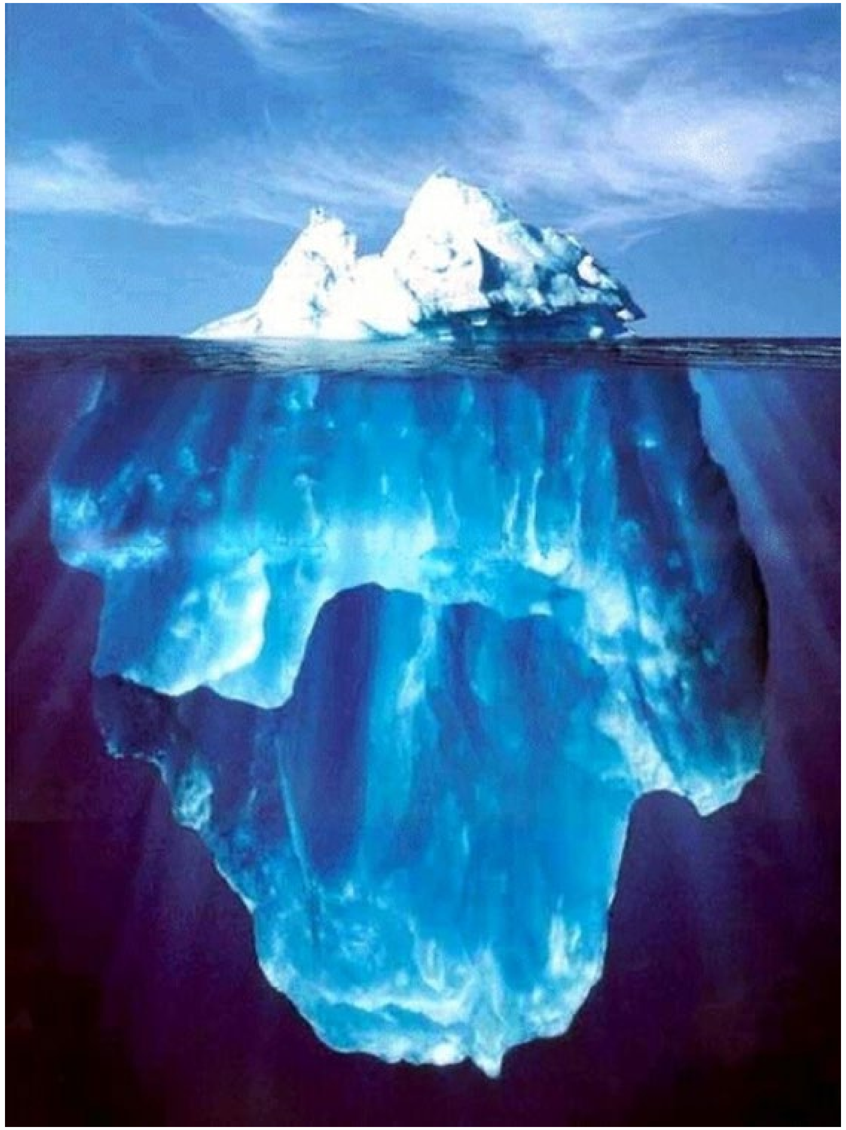
PPP



Why we worry about PPPs?

PPPs

- May threaten integrity of budget process if not integrated, obscuring efforts towards fiscal discipline
- Reduce budget flexibility by committing public funds in long-term contracts
- Create firm and contingent liabilities for the government, even if treated off-budget
- If not properly managed, they might undermine macroeconomic stability
- Renegotiations are common and frequent, and tend to favor private-sector operators



What can go wrong?

Phases of a PPP	Challenges
Project selection	• Prioritization • Ensuring Viability and Affordability
Project design / Tender	• Clear and comprehensive definition of requested services
Contract design	• Ensuring efficient allocation of risks and appropriate reward for private partner
Competitive selection of private partner	• Getting interest from enough competent private sector companies / consortia
Project implementation	• Ensuring implementation of investment and performance during operation phase as contracted; including renegotiations

International experience shows that…

Weak monitoring capacity across the public sector

- Weak role of the Ministry of Finance (i.e., budgetary authority) as the gate-keeper of public finances

Renegotiations are common, frequent, and tend to favor private-sector operators

- Automatic pass-through to tariffs of increases in cost; delays and decreases in private sector investment, etc.

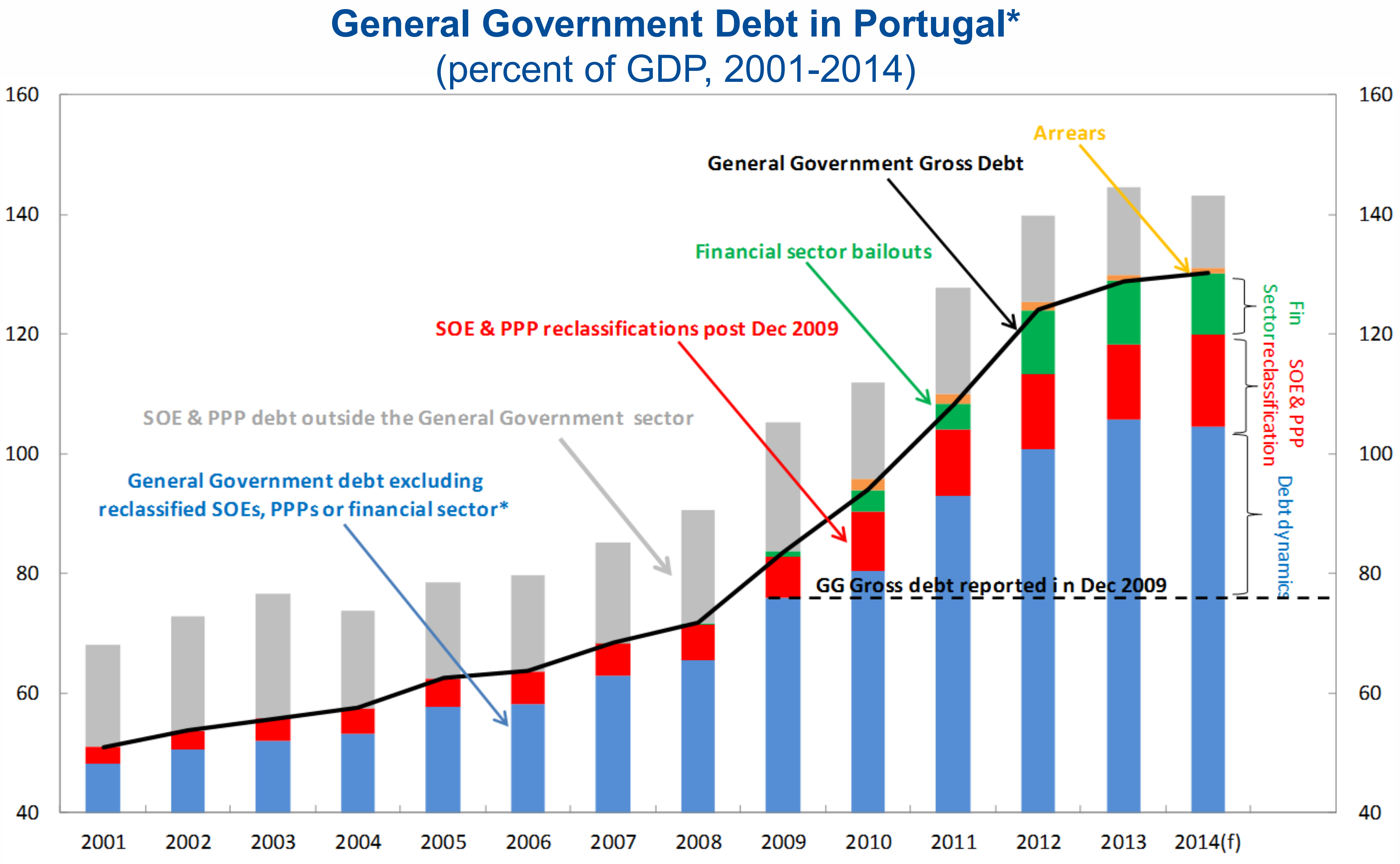
Lack of integration of PPPs in budgetary process

- PPP budgetary bias
- Annual appropriation mechanism not appropriate for PPPs
- Poor information on contingent liabilities

Lack of transparency in fiscal reporting

- PPPs gradually pushed outside the general government
- State-owned enterprises, parastatals, etc.

Mistakes can be costly



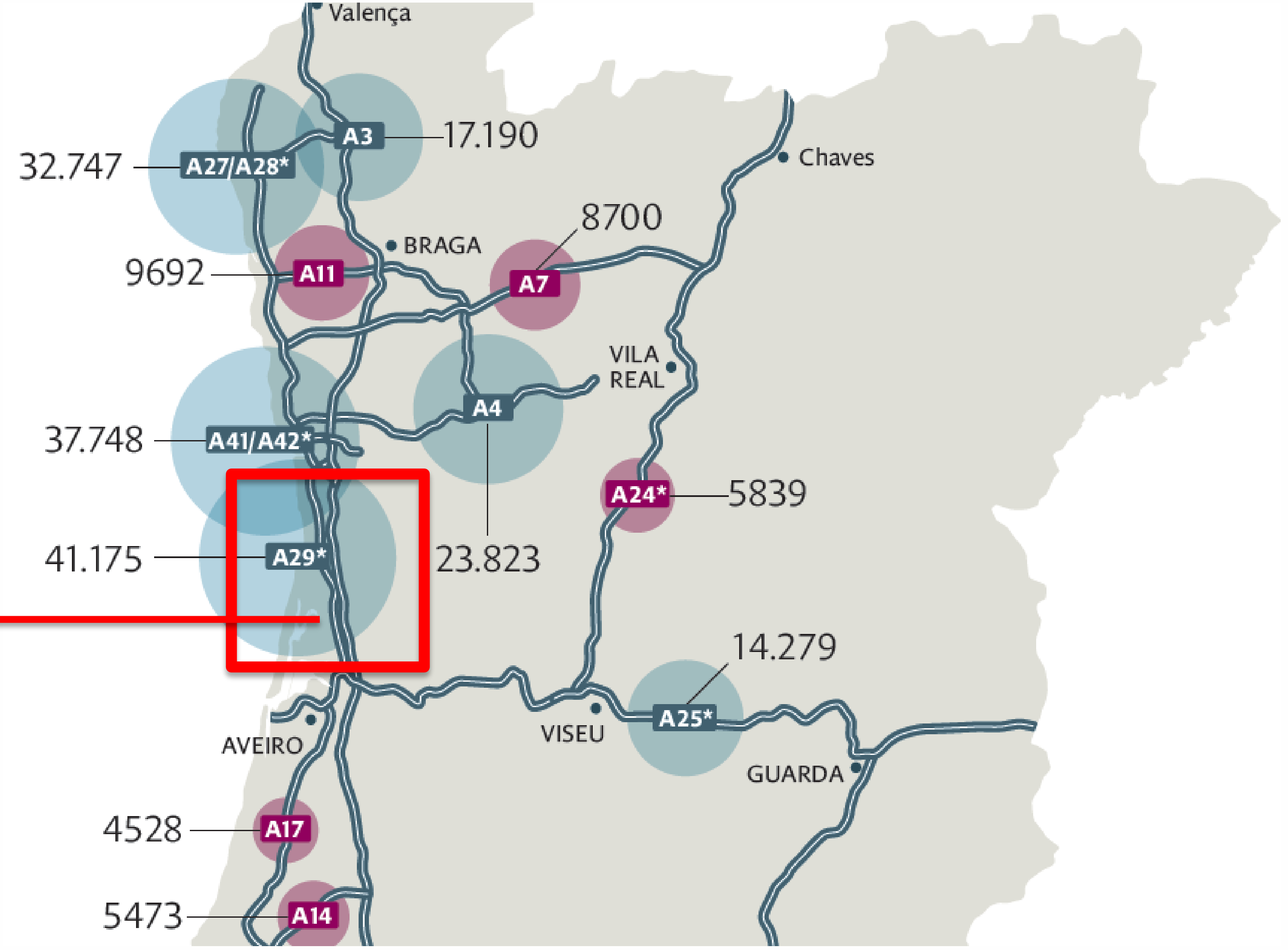
Sources: Staff estimates

*Only includes Central Government SOE debt pre 2007

Mistakes can be costly

Portugal

Parallel Highways



Source: World Bank Institute (2013)

Mistakes can be costly

Spain: "Ghost" Airports

Spain has more international airports for commercial flights than any other country in Europe: 48 public and 2 private

20 of those airports handle fewer than 100,000 passengers/year

Ciudad Real airport

Cost €1,100m; 4,000m runway; the first private international airport in Spain; capacity: 2,500,000 passengers/year; demand in 2010: 33,520; closed in April 2012 after three years in operation

Pamplona-Noáin airport

Cost €50m; capacity for 1,100,000 passengers/year; demand in 2010: 291,553

Source: World Bank Institute (2013)

Mistakes can be costly

UK: despite more than 30 years of experience..

- Treasury building: contract stipulated fixed cost increase, inflation
- Underground: complexity, renegotiation, high monitoring costs

What can governments do to manage PPPs?

Success in PPPs = efficiency gains + mitigation of fiscal risks

Governments can manage fiscal risks through

- **Good projects:** robust investment prioritization procedures (PIMAs)
- **Good institutions**: strong public investment management (PIM) frameworks to handle PPPs efficiently (PIMAs)
- **Good laws**: comprehensive legal framework provisions that govern overall processes of project selection, implementation, and management (PIMAs)
- **Good fiscal accounting and reporting**: strong decision making process to mitigate and/or phase fiscal risks and achieve full and transparent disclosure of fiscal risks (PIMAs, PFRAM, FTE, BSA)
  - GFSM 2014 and PSDG 2011, IPSAS 32, Fiscal Risk Statement

Good PPP accounting and reporting

New standard for PPPs, “IPSAS 32” since Oct. 2011

If the government controls the PPP-related asset

- the asset and related liability are regarded as belonging to the government, regardless whether it is funded by government or by user
- Includes government-funded and user-funded PPPs (concessions)

The issue

It puts virtually all PPPs on government’s balance sheet!!

- Large impact on headline fiscal indicators (i.e., debt and deficit)
- In particular, during construction fiscal impact is similar to traditional procurement, so eliminates PPP bias

PUBLIC SECTOR

IPSAS 32—SERVICE CONCESSION ARRANGEMENTS: GRANTOR

Acknowledgment

This International Public Sector Accounting Standard (IPSAS) sets out the accounting requirements of the grantor in a service concession arrangement. It is adapted from Interpretation 12 (IFRIC 12), *Service Concession Arrangements*, developed by the International Financial Reporting Interpretations Committee and published by the International Accounting Standards Board (IASB). IFRIC 12 sets out the accounting requirements of the operator in a service concession arrangement. This IPSAS also contains extracts from Interpretation 29 (SIC-29), *Service Concession Arrangements: Disclosures*, developed by the Standing Interpretations Committee and published by the IASB. Extracts from IFRIC 12 and SIC-29 are reproduced in this publication of the International Public Sector Accounting Standards Board (IPSASB) of the International Federation of Accountants (IFAC) with the permission of the International Financial Reporting Standards (IFRS) Foundation.

The approved text of the International Financial Reporting Standards (IFRSs) is that published by the IASB in the English language, and copies may be obtained directly from IFRS Publications Department, First Floor, 30 Cannon Street, London EC4M 6XH, United Kingdom.

E-mail: publications@ifrs.org

Internet: www.ifrs.org

IFRSs, IASs, Exposure Drafts, and other publications of the IASB are copyright of the IFRS Foundation.

“IFRS,” “IAS,” “IASB,” “IFRS Foundation,” “International Accounting Standards,” and “International Financial Reporting Standards” are trademarks of the IFRS Foundation and should not be used without the approval of the IFRS Foundation.

http://www.ifac.org/system/files/publications/files/B8%20IPSAS_32.pdf

Good PPP accounting and reporting

Accounting during the whole life-cycle of a PPP project, assets controlled by government

CONSTRUCTION

Recognition of assets and liabilities

OPERATION

Maintenance

Depreciation

Payment for services

Payment of financial charges

Debt amortization

END OF CONTRACT

Legal transfer of asset to government

Main takeaways

PPPs entail both opportunities and challenges

- They **can be more efficient** than traditional public procurement...**but also entail large fiscal risks**
- These **risks are not "theoretical"**
- They **are complex to design and implement**
  - Complex and powerful incentive mechanism, financing schemes and complex contract
  - Require developing public sector capacity
  - Presents high transaction costs (structuring, procurement, contract management, possible renegotiations, termination management)

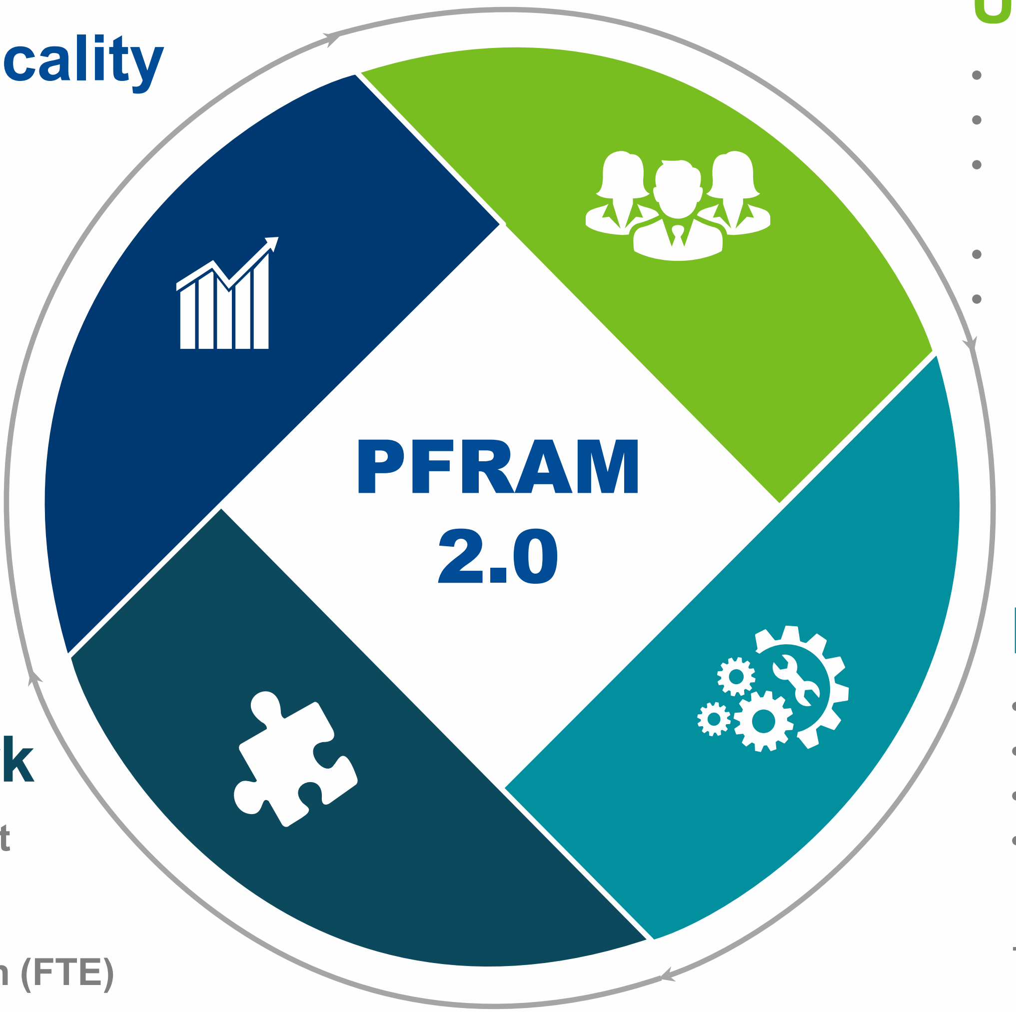
Governments can take action to manage fiscal risks

- Strong PIM frameworks and strategies, including managing fiscal risks are key to success
- IMF/WB developed analytical tools to support countries on PPPs

PPP Fiscal Risk Assessment Model—PFRAM 2.0

Focused on macro-criticality

- Estimates fiscal costs and fiscal risk of PPPs (impact on deficit and debt)
- Sensitivity analysis to macro shocks (e.g. GDP, inflation, nominal exchange rate)
- Simulates contract termination
- Estimates fiscal risk matrix



User friendly

- No need to be a PPP expert
- Excel based tool, easy to navigate
- Multiple ways to enter data (e.g., user forms, questionnaire)
- Inputs: macroeconomic and project data
- Outputs: automatically generated

Flexible approach

- One project / portfolio
- Existing project / project idea
- Cash / accrual accounting basis
- Central gov. /subnational / SOEs

Integrated to IMF's work

- Public Investment Management Assessment (PIMA)
- Balance Sheet Analysis (BSA)
- Fiscal Transparency Evaluation (FTE)
- Fiscal Stress Test (FST)
- Debt Sustainability Analysis (DSA)

User friendly

Accessible

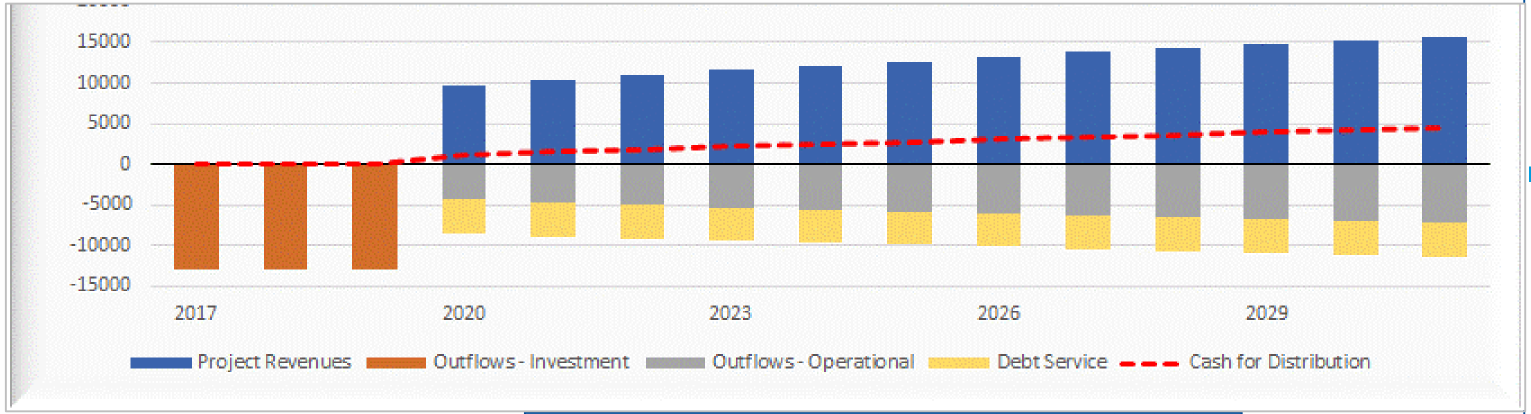
- **Excel file**
  - Easy to navigate
  - Easy to share
  - Facilitates training activities
- **Various options to input data**
  - *User forms*
    - A systematic way to identify and input relevant data following prompts
  - *Direct entry*
    - In the file once expertise is developed

Input—Output Model

- **Generate a portfolio**
  - Up to 30 projects
- **Input macroeconomic data**
  - *Historic* data
    - (GDP, Inflation, Nominal Exchange Rate, Fiscal Deficit, Gross Public Debt)
  - *Projections* for the contract period (long-term)
- **Input project data**
  - Contract specific (financial model)
  - Fiscal risks
- **Outputs automatically generated**

Flexible Approach

Project cash flows



Government financial statements: accrual + cash

Table 1. Central Government Income Statement (accrual)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Whole contract
Revenues	0	0	0	0	0	0	0	0	0	0	0
Interest received	.	0	0	0	0	0	0	0	0	0	
Capital transfers											
Other											
Expenses											
Use of goods and services											
Consumption of fixed capital											
Interest payments											
Other											
Net operating balance (NOB)											
Net acquisition of nonfi											
(+) Acquisitions											
(-) Disposals											
Net lending/borrowing (NLB)											
Change in Financial Assets											
Cash											
Loans											
Other											
Change in Liabilities											
Loans											
Other											
Memo items:											

Table 2. Central Government Balance Sheet (accrual)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Net worth	0	-32	-167	-295	-414	-525	-627	-720	-809	-888
Nonfinancial assets	525	1,050	994	938	882	826	770	824	768	713
Fixed assets	525	1,050	994	938	882	826	770	824	768	713
Others										
Net financial worth										
Financial Assets										
Cash										
Loans										
Other										
Liabilities										
Loans										
Other										
Memo items:										
Gross debt										

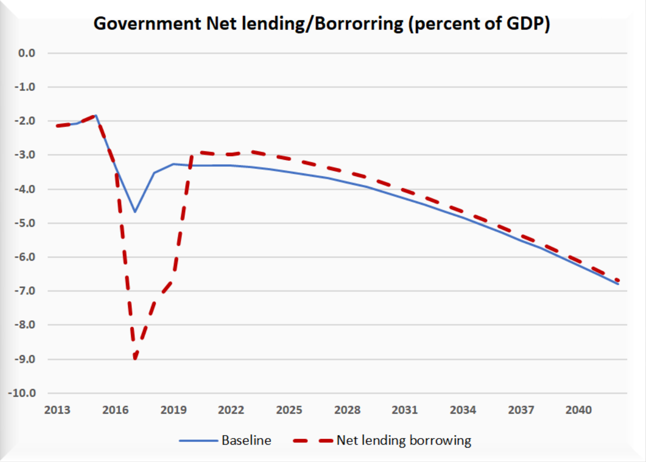
Table 3. Central Government Statement of Sources and Uses of Cash

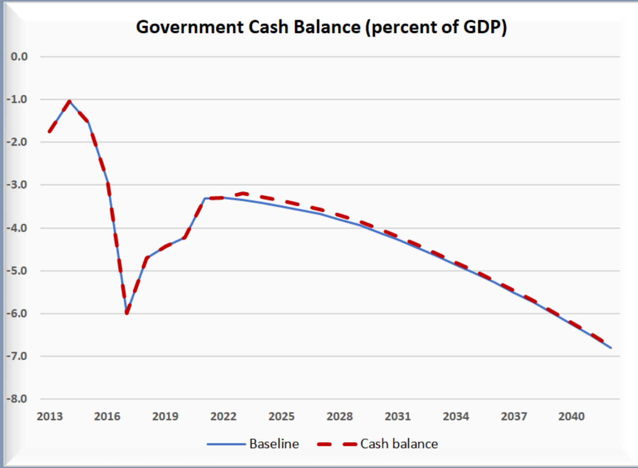
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Whole contract
Cash inflows due to operating activities	0	0	0	0	0	0	0	0	0	0	0
Interest received											
Capital transfers											
Other											
Cash outflows due to operating acativities	0	0	200	200	200	200	200	200	200	200	1600
Use of goods and services	0	0	200	200	200	200	200	200	200	200	
Interest payments											
Other											
Net cash outflows due to operating activities	0	0	-200	-200	-200	-200	-200	-200	-200	-200	-1600
Net cash outflows due to acq. of nonfin. asssets	0	0	0	0	0	0	0	0	0	0	0
(+) Acquisitions											
(-) Disposals											
Cash balance /deficit	0	0	-200	-200	-200	-200	-200	-200	-200	-200	-1600
Change in financial asset (excluding cash)	0	0	0	0	0	0	0	0	0	0	0
Loans											
Other											
Change in Liabilities	0	0	0	0	0	0	0	0	0	0	0
Loans											
Other											

- **Assess project from 2 standpoints**
  - Private partner (commercial viability)
  - Government (fiscal sustainability)
- **Multiple analytical uses**
  - One project vs. portfolio (aggregation)
  - Existing project vs. project idea
  - One project under alternative designs
- **Cash & accrual accounting basis**
  - Project cash flow
  - Government Income statement
  - Government Balance sheet
  - Government Cash statement
- **All levels of government**
  - Central, subnational, public enterprises

Focus on Macro-criticality

Impact on Government Deficit (accrual and cash)

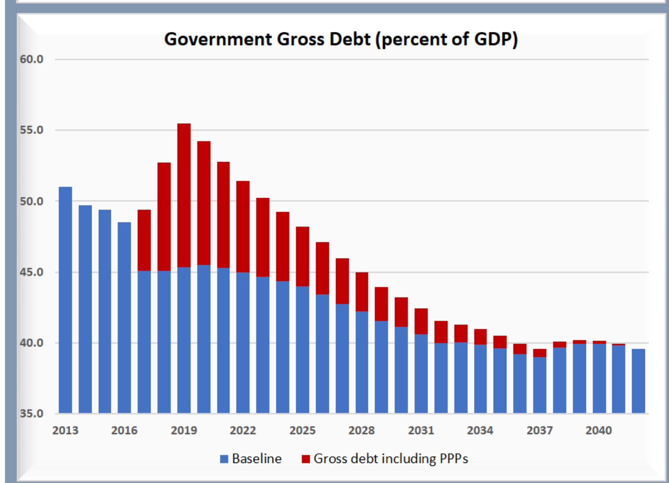


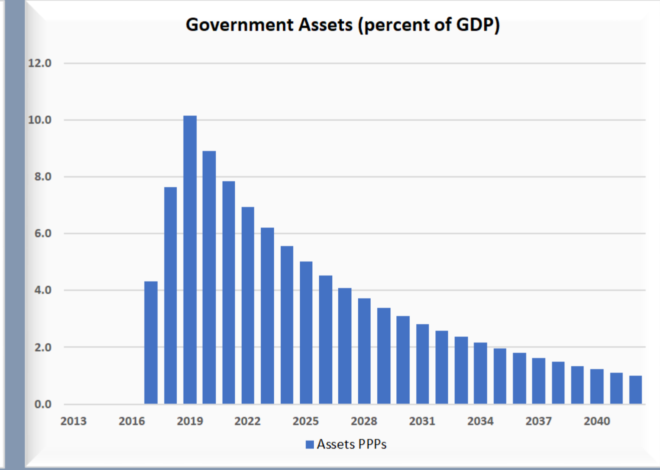


Assessment of project fiscal risks

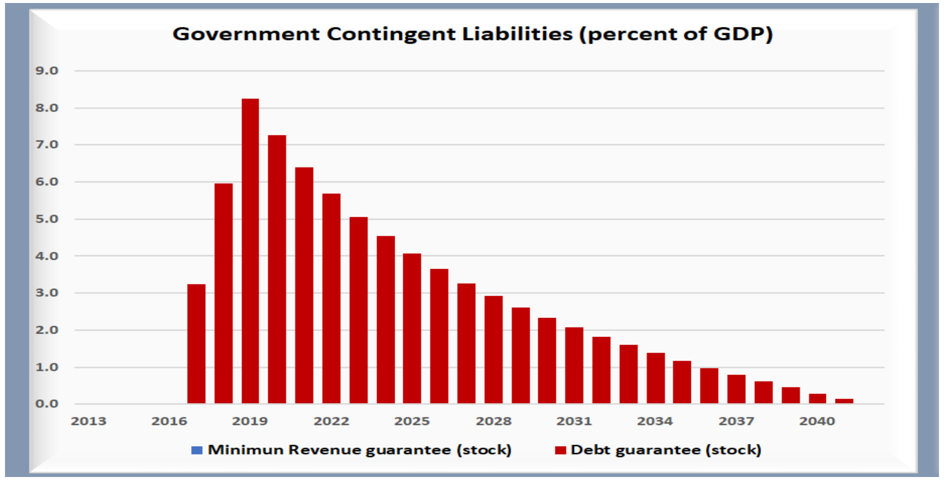
FISCAL RISKS	LIKELIHOOD	FISCAL IMPACT	RATING Likelihood*Impact	MITIGATION	PRIORITY Rating*Mitigation
1 Governance risks	Medium	Low	Low	NO	Medium priority
2 Construction risks	Medium	Medium	Medium	NO	High priority
3 Demand risks	Low	Medium	Low	YES	Low priority
4 Operational and performance risks	Low	Medium	Low	YES	Low priority
5 Financial risks	Medium	Medium	Medium	YES	Medium priority
6 Force majeure	Low	High	Medium	YES	Medium priority
7 Material adverse government actions	Low	High	Medium	YES	Medium priority
8 Change in law	Low	Medium	Low	YES	Low priority
9 Rebalancing of financial equilibrium	Low	Medium	Low	YES	Low priority
10 Renegotiation	Medium	Medium	Medium	YES	Medium priority
11 Contract termination	Low	High	Medium	NO	High priority

Impact on Government Gross Debt….





… and contingent liabilities



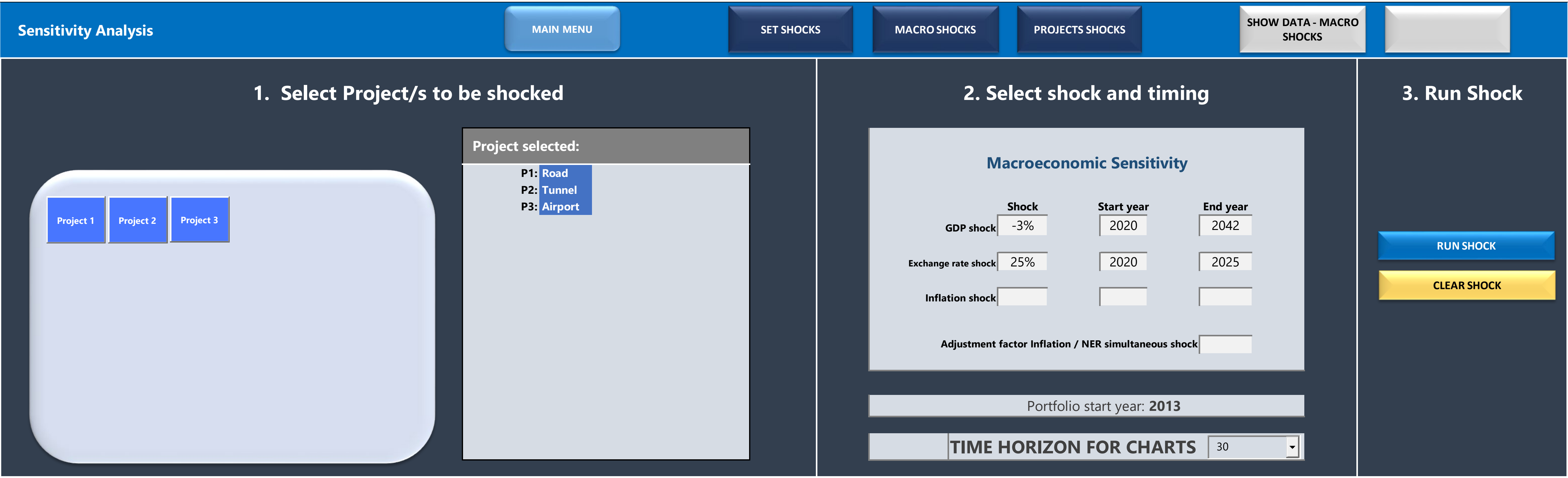
Focus on Macro-criticality

Assessment of project fiscal risks

	FISCAL RISKS	LIKELIHOOD	FISCAL IMPACT	RATING Likelihood*Impact	MITIGATION	PRIORITY Rating*Mitigation
1	Governance risks	Medium	Low	Low	NO	Medium priority
2	Construction risks	Medium	Medium	Medium	NO	High priority
3	Demand risks	Low	Medium	Low	YES	Low priority
4	Operational and performance risks	Low	Medium	Low	YES	Low priority
5	Financial risks	Medium	Medium	Medium	YES	Medium priority
6	Force majeure	Low	High	Medium	YES	Medium priority
7	Material adverse government actions	Low	High	Medium	YES	Medium priority
8	Change in law	Low	Medium	Low	YES	Low priority
9	Rebalancing of financial equilibrium	Low	Medium	Low	YES	Low priority
10	Renegotiation	Medium	Medium	Medium	YES	Medium priority
11	Contract termination	Low	High	Medium	NO	High priority

Focus on Macro-criticality

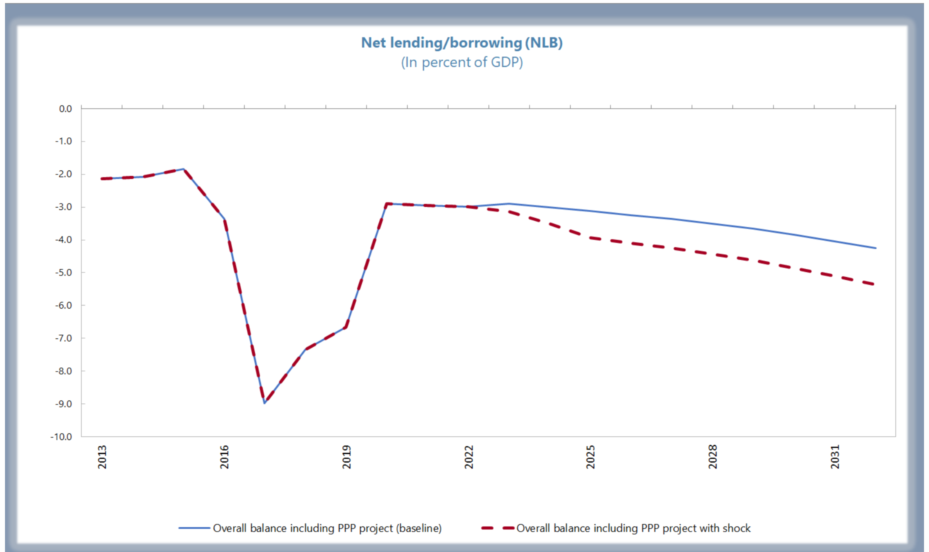
Sensitivity analysis supports fiscal risk management

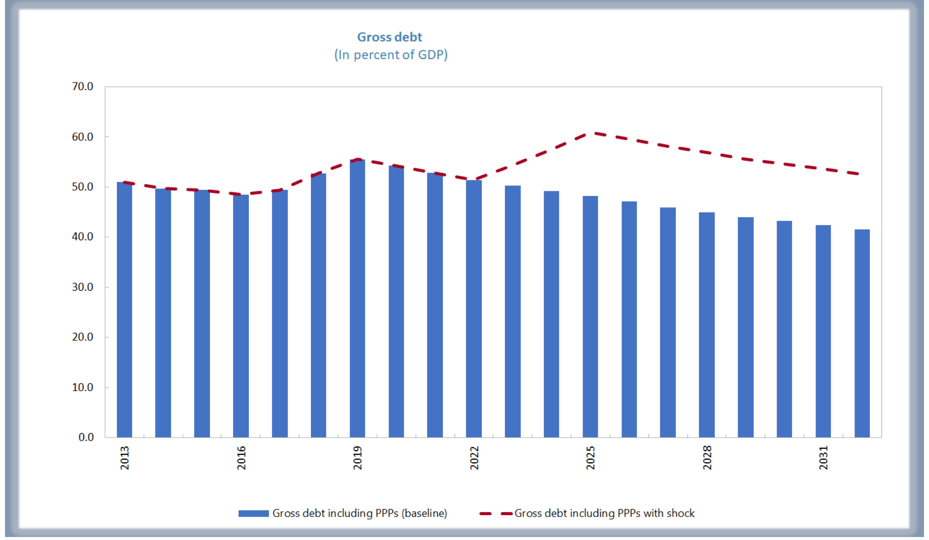


- **Select project**: one project, a set, entire portfolio
- **Select macro variable, timing and magnitude of the shock** (GDP, inflation, nominal exchange rate)
- **Compare results relative to baseline**

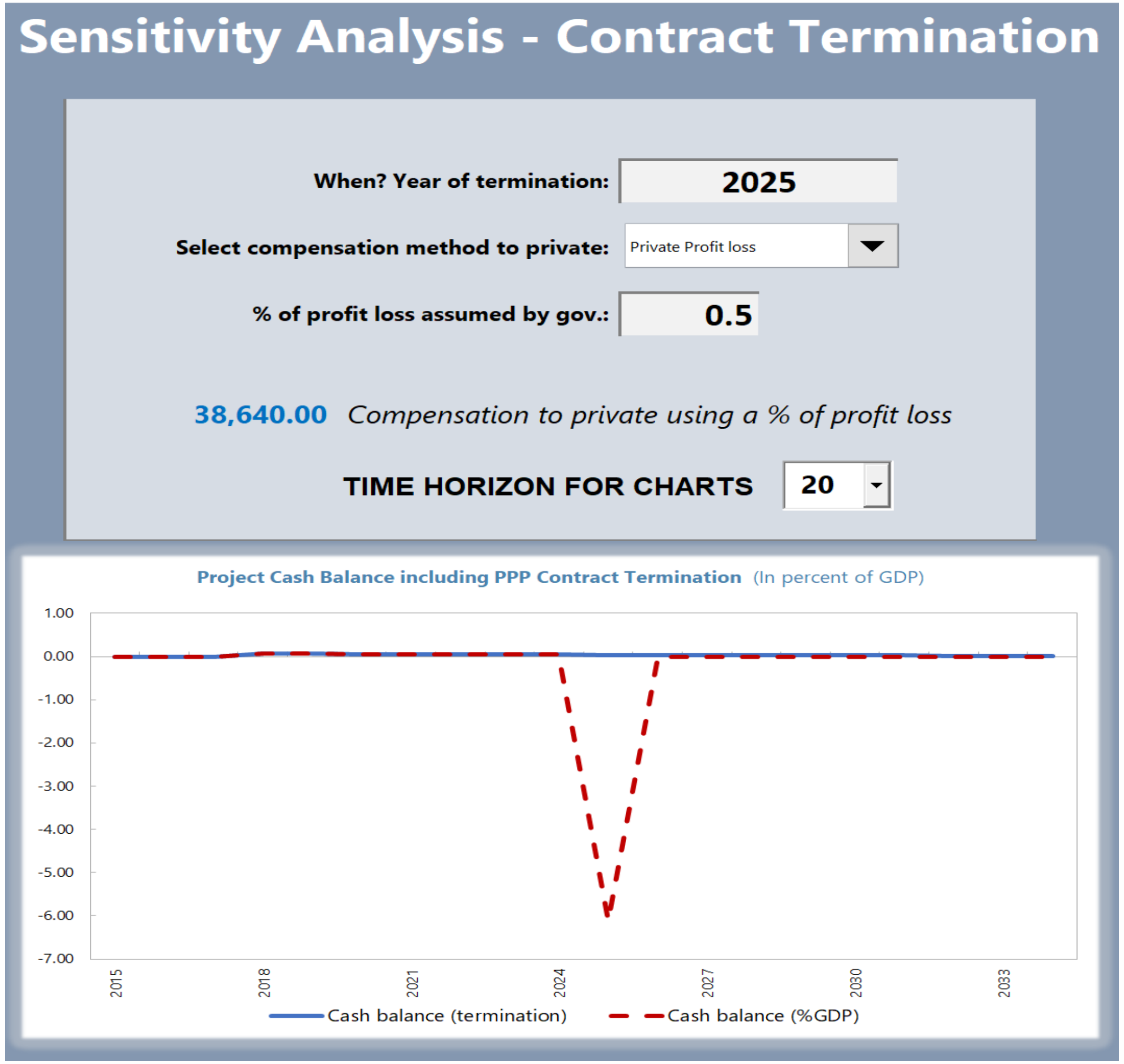
Focus on Macro-criticality

E.g., Comparing the impact of GDP shock relative to the baseline

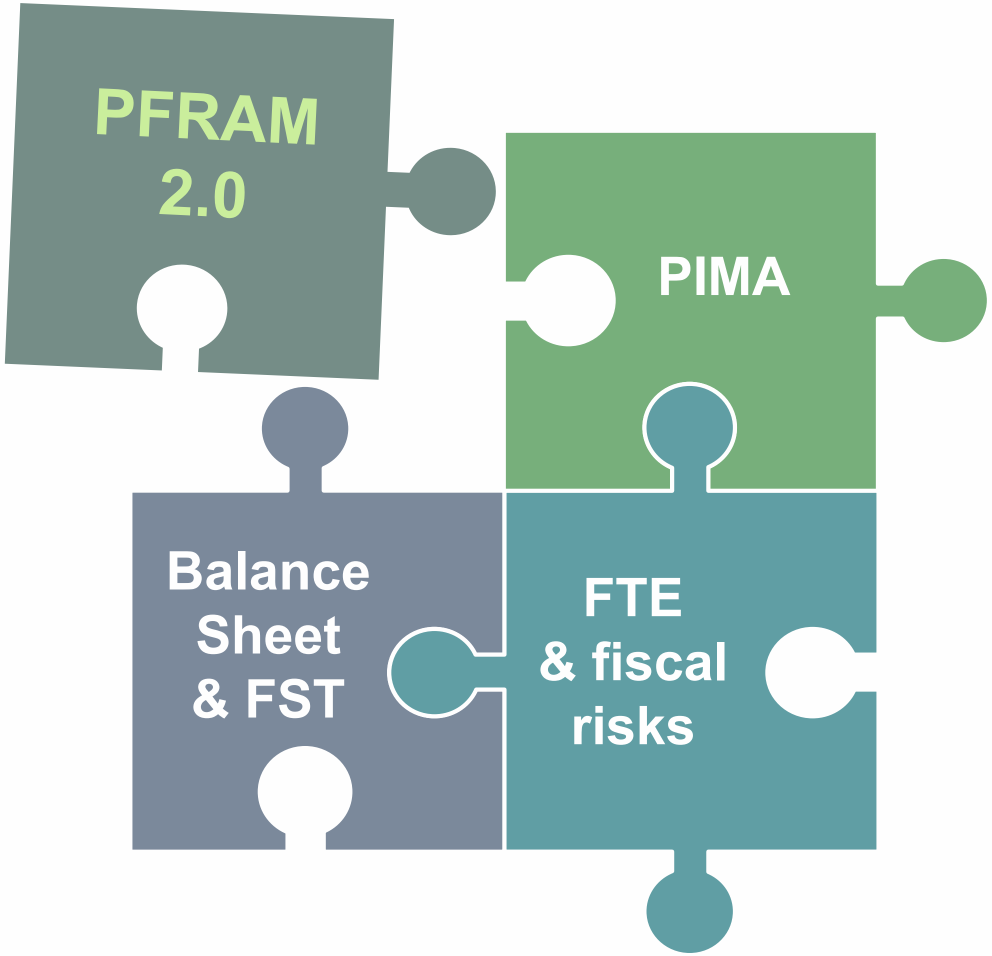




E.g., Simulating a contract termination



Integrated to IMF's analytical work



PFRAM 2.0 is used

- **Independently**
  - **Country CD**
    - Assessing fiscal risks, impact of PPP projects (e.g., Albania, Montenegro, Serbia)
  - **Training**
    - Modular training materials
      - Portfolio 8 projects
      - 1 to 5 days workshops
      - WB various activities
- **Supporting other IMF's analytical tools**
  - PIMAs (PPP component)
  - FTEs and fiscal risks (PPP component)
  - Balance sheet analysis and Fiscal Stress Testing

Thanks for your attention!

www.imf.org/publicinvestment